CASE STUDY ON WOMEN AND CLIMATE RESILIENT AGRICULTURE Table of Contents

1.Introduction

1.1Purpose

1.2 Methods

2. Global and WCA results framework relevant to rural women and climate change resilience

- 3. UN Women Flagship programmes
- 4. WCA Portfolio on related climate change resilience initiatives
- 5. Evaluation framework for gender sensitive climate smart agriculture (CSA)
- 6. Findings
- 6.1 Knowledge generation and evidence
- 6.2 Capacity building
- 6.3 Policy influence
- 6.4 Women's access to resources
- 6.5 Gender approach
- 6.6 Monitoring, evaluation and learning (MEL)
- 6.7 Partnerships
- 6.8 Innovation and sustainability
- 7. Conclusions and way forward
- 8. Recommendations

CASE STUDY ON WOMEN AND CLIMATE RESILIENT AGRICULTURE

1.Introduction

1.1Purpose

As part of the thematic evaluation on UN Women's contribution to women's economic empowerment in West and Central Africa, the case study aims to provide a more indepth assessment of results in relation to increasing women's income through enhanced agricultural productivity, value added processing of agricultural products and greater access to markets and value chains in the context of climate resilience measures. The case study explores what effective models and strategies have emerged in recent years that could be upscaled and replicated for women's economic empowerment and sustainable climate smart agriculture.

1.2.Methods

- 1. Key informant interviews, focus group discussions;
- 2. Analysis of social media, events, project implementation and publications;
- 3. Impact stories with women farmers;
- 4. Analysis of UN Women's contribution towards results and sustainability;
- 5. Assessment of UN Women's capacity building approach;
- 6. Review of UN Women's partnerships;
- 7. Examination of UN Women's resource mobilisation efforts;
- 8. Formulation of recommendations.

2. Global and WCA results framework relevant to rural women and climate change resilience

Among the five outcomes of UN Women's strategic plan 2018-2021 Integrated Results and Resources framework, Outcome 3 concerns women's economic empowerment with corresponding outputs and output indicators that include rural women gaining access to productive resources and engaging in sustainable agriculture (see table below).

UN Women: Strateg	ic plan 2018-2021 Integrated Results and Resources framework
Outcome (3)	Women have income security, decent work and economic autonomy.
Outcome indictors	"Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex (SDG indicator 5.a.1 (a))
	Share of women among owners or rights- bearers of agricultural land, by type of tenure. (SDG indicator 5.a.1 (b).)
Output (10)	More rural women secure access to productive resources and engage in sustainable agriculture
Output indicators	Number of new and/or improved gender-responsive policies on land developed and/or being implemented with the support of UN- Women
	Global target of 100 policies by 2021
	Number of rural women supported to gain access, use and/or control of productive resources by UN-Women
	Global target of 390,000 rural women by 2021
	Number of countries that use the Buy from Women Platform to connect women farmers to information, markets and/or finance
	Global target 15 countries by 2021
WCA Output indicator	Women's Economic Empowerment through Climate-Resilient Agriculture

In the four-year Strategic Note issued in 2018, the WCA Regional Office considered the impact area of "Women's economic empowerment" as its most important priority, focusing on income security, decent work and economic autonomy.

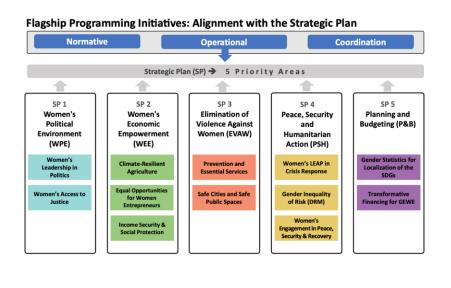
Moving forward, during the next UN Women strategic planning period 2022-25

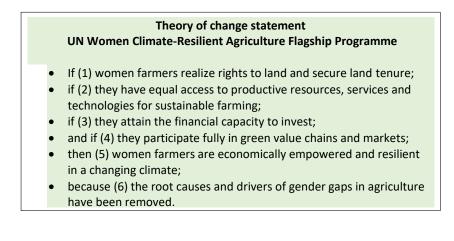
the WCARO focuses more on efforts to develop normative frameworks and gender-responsive laws, policies, and institutions in West and Central Africa Region to support women's income security, decent work, and

economic autonomy.¹ Starting in 2022 WCARO is undertaking two major regional programmes one of which is *Women in climate resilience agriculture value chains programme contributes to socio-economic and climate resilience.* The other is on affirmative procurement.

3. UN Women Flagship programmes

Since 2015 UN Women has developed twelve Flagship Programming Initiatives (FPIs) to further deepen coherent and coordinated programming and achieve transformative results for gender equality and women's empowerment, as shown below. One of these is on Climate-Resilient Agriculture under Women's Economic Empowerment.





UN Women Climate Resilient Agriculture Flagship Programme
Outcomes Indicators

¹ Development results framework (DRF)- Un Women WCA-RO Country Office- SN Report 2022

Women's land tenure security is	Share of women among agricultural land owners by age and
increased	location.
inci cascu	iocation.
	Legal framework includes special measures to guarantee
	women's equal rights to land ownership and control.
Women smallholder productivity in	Value of production per labour unit by sex
changing climate in- creased and	
physical burden of agricultural work	
reduced	Average daily time spent of agricultural work by sex
Financing barriers removed and	% change in loans to women small-holder farmers
women's capacity to invest in climate-	
resilient agriculture increased	
8	% change in women using financial services
rtunities for women farmers to move up th	vomen's participation in cooperatives
chain promoted	
	nen farmers with access to extension services

WCARO set out to implement three flagship programmes in the following sectors²: agriculture, energy, extractive industries and infrastructure for the purposes of anchoring its Country Offices' work.

A 2021 WCARO publication³ reports that UN Women has worked with its partners since 2017 to promote women's economic empowerment and improve climate resilience in West and Central Africa through its flagship programme 'Women's Empowerment through Climate-Resilient Agriculture Value Chains'. The programme combines programmatic action and policy advocacy and reform to address the structural barriers limiting women's participation in agriculture value chains, with a focus on improving women's access to land, finance, skills and technology for climate resilience, as well as women's access to markets.

The *Women in Climate-Resilient Agriculture Value Chains* programme is operational in seven countries⁴ in West and Central Africa, implemented in collaboration with UN agencies such as the Food and Agricultural Organization (FAO), World Food Programme (WFP), United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP) and United Nations Capital Development Fund (UNCDF), government partners at the national and regional level, financial institutions, civil society organizations, and women producer associations and cooperatives as the cornerstone of the programme. This flagship initiative is financially supported by a variety of institutional and private sector donors (see table below).

4. WCA Portfolio on related climate change resilience initiatives

Initiatives to empower rural women in the face of climate change varied in approaches, time frames and budgets. Some initiatives were conducted under short time frames (12-18 months) with smaller budgets (less than 400,000 USD), while others involved implementing large scale projects over longer periods (3-5 years) with more significant budgets (1-4 million USD). An overview of the portfolio in WCA is provided in the infographic and table below. More detail on specific country and regional initiatives will be provided in the reporting on results later on in this case study.

Overview: Case study on women and climate resilient agriculture in WCA

 $^{^2}$ From the review of the region's economic empowerment programmes, agriculture is the main sector of WEE implementation. Exceptionally, Cameroon's "Gender and Road" programme is part of an infrastructure programme but its outputs are not related to infrastructure construction.

³ UN Women WCARO, Empowering Women through Climate-Resilient Agriculture in West and Central Africa: Key Results of UN Women's Flagship Programme https://africa.unwomen.org/en/digital-library/publications/2021/03/women-in-climate-resilient-agriculture-in-wca

⁴ Central African Republic, Ivory Coast, Liberia, Mali, Niger, Nigeria, Senegal

Key strategies for implementation	Countries and region
> Mobilization of women in communities to enhance agricultural productivity and product processing for markets and to introduce climate resilient measures.	Central African Republic, Ivory CoastLiberia, Mali, Niger, Nigeria, SenegalWest and Central African Regional Office
> Support to formation of women's autonomous groups, cooperatives and village	Budget and time frame
savings associations. Capacity building approaches integrating literacy, numeracy,	Approximately 20,400,000 USD 2017-2022
digitalization, accounting, land rights, technical skills in agricultural production,	Funded by
processing and climate mitigation, gender based violence, and women's participation and leadership.	AfDB, BNP Paribas, Mali Climate Fund (funded by Norway and Sweden), Italy, Korea, Luxembourg, Norway, Standard Bank, UN Peace Building Fund, UN Multi-
> Advocacy for policy change and implementation on land rights for women,	Partner Trust Fund
digital technologies, and climate change mitigation and resilience.	Target groups
> Partnerships, particularly with FAO and WFP.	Women farmers, community elders, local and national authorities, civil society organizations, rural women's organizations

Country	Title	Donor	Budget	Timeframe
	Renforcement du relèvement et de			
	réintégration des femmes et des filles			Nov 2019-
	grâce à une agriculture résiliente au changement climatique pour instaurer			Aug 2021
	la paix et la réconciliation en RCA		\$	7 tug 2021
CAF	après conflit	PBF	994,960	
	•••	•		
	Empowering Women in Agriculture		\$	DEC 2019 -
CIV	through Access to ICT	AfDB	462,240	SEP 2021
	Prise en compte du genre dans le projet		\$	
	de développement des chaines de	CMR/AfDB	357,220	2019-2023
CMR	valeurs agricoles		,	l
	Global Joint Programme on			
	Accelerating Progress towards the	#10405 TAD	•	
LBR	Economic Empowerment of Rural	"12435 TAR- Multi danar"	\$ 500,000.00	2010 2022
LBK	Women (JP RWEE) - Next Phase	Multi donor"	500,000.00	2019-2022
	Digital solutions to improve women		•	1 2022
LBR ⁵	smallholder farmers resilience to	Orange	\$	Jan. 2022-
LBK	natural disasters	Foundation	429,116	Dec. 23
			\$	[
MLI	AGRIFED (Segou) (Sahel Alliance)	Luxembourg	4,166,262	2017-2022
		0		2017-June
				2019
			\$ 846,	May 23-
MLI	CEMALI (Climat et energie) extension	Fonds Climat	342	Dec.23
	Appui à l'amélioration des moyens			
	d'existence durable d'atténuation et			
	d'adaptation des Communautés de Pêche face aux changements		\$	24.4.21-
MLI	climatiques (PACP	Luxembourg	\$ 1,030,344	24.4.21- 23.4.24
WILI	chinauques (1 ACI	Luxembourg	1,030,344	23.4.24

⁵ There is another project in Liberia, funded by the Alibaba Foundation US (Nimbus), through the US Nat. Committee and the SPOTLIGHT component alternative livelihoods ZOEs

Country	Title	Donor	Budget	Timeframe
	IELD- WEE Capacity building and			
	value chains with UNCDF, UNDP,	UNICODE	\$	26/07/2021
MLI	UN Women Projet " Restauration des écosystemes	UNCDF	150 000	au 25/7/2024
	sahelien à travers des activités agro			
	sylvo pastorales et aquacoles pour			
	renforcer la résilience des populations			
MLI	dansla région de Toumboutou "		\$ 882883	
	Investing in agricultural productive			
	capacities of both rural women and			
	rural young men in Niger to reduce		¢	
NER	migration generated by drought and climate change– Zinder region	Govt of Italy	\$ 1,683,502	1/5/2019
NEK	chinate change- Zinder region	Gove of hary	1,085,502	1/3/2019
	Joint project WFP-FAO: Promoting			
	agricultural and environmental-friendly			
	livelihoods while maintaining food and			
	nutrition security among conflict			
	affected populations of Borno State,		<u>^</u>	
NGA	through a combination of productive support measures and social transfers	Govt of EU	\$ 1,024,677	1/1/2018
NGA	Restoring and promoting sustainable	GOVEDIEU	1,024,077	1/1/2018
	agriculture-based livelihoods for food	FAO (Joint		
	security, employment, and nutrition	FAO-UNW-	\$	
NGA	improvement in Borno State	WFP)	673,157	1/9/2018
	The Economic Empowerment of			
NGA	Women in Africa through Climate		\$	Jan 2019-
NGA	Smart Agriculture	Standard Bank	3,000,000	Dec 2022
	Projet d'Appui aux Femmes dans	1		
	l'Agriculture et le Développement		\$	Dec 2018-
SEN	Durable-PAF/AgriFeD	BNP Paribas	3.000.000	Dec 2010-
	Women in Climate Smart Agriculture	Gov. Iles	\$	
SEN	in Senegal	Baleares	150,000	May-22
	Gender & Green Transition in West	Govt of	\$	1/9/2022-
WCA	and Central Africa	France	581,290	1/9/23-
	Digital solutions to improve women smallholder farmers resilience to		¢	22.1.22
WCA	smallholder farmers resilience to natural disasters	Norway	\$ 429,116	23.1.22- 31.12.23
WCA	naturai disasters	inoiway	429,110	31.12.23
TOT				20 55 0 00 -
TOTAL	Approximate budget 2017-2022			20 550 995

TOTAL Approximate budget 2017-2022

20,550,995

٦

5. Evaluation framework for gender sensitive climate smart agriculture (CSA)

Definitions CRA and CSA⁶

Definitions CKA and CSA			Climate resilient agriculture		CSA is 'agriculture that	
ſ			comprises different		sustainably increases	
	Climate resilient agriculture		approaches such as CSA		productivity, enhances	
	(CRA) is about the ability of an		(climate-smart agriculture),		resilience, reduces	
	agricultural system to		that focuses on:		greenhouse gases (GHG),	
	maintain viability in the face of		sustainable increases to		and enhances	
	climate variability and		agricultural productivity		achievement of national	
	extremes. This is achieved		and incomes, adapting and		food security and	
	through improving people's		building resilience to		development goals'	
	capacity for resilience through	_	climate change, and			
		tya (reducing greenhouse gas	ge M	FAO	
		Clir	emissions.	mate		
	agricultural practices.	<u>/10.</u> d Mi		esili		гa
- 1		1:00		La col		1

Ingreent contrasjocan-writer totation under different treatment systems. *Chimate Tosk Mathagement* 32, 100204. doi: 10.1016/j.crm.2021.100284
 Box 2: Lipper, L., Thornton, P., Campbell, B. M., Baedeker, T., Braimoh, A., Bwalya, M., et al. (2014). Climate-smart agriculture for food security. *Nat. Clim. Chang.* 4, 1068–1072. doi: 10.1038/nclimate2437

Women farmers in West and Central Africa are key players in agricultural production and food security. They represent more than 70 per cent of the agricultural workforce in many parts of the region. Yet, their access to resources, land, agricultural extension services, finance and agribusiness value chains, as well as their role in decision making is limited compared to men.

As the planet warms and negative climate events increase in frequency and intensity, the impact is not gender neutral, often leaving women more vulnerable to climate shocks and disasters, exacerbating existing gender inequalities. On the other hand, women are not just victims of climate changes but can be empowered to contribute to making mitigation and resilience measures work effectively based on their experience, insights and labour. This is especially the case where there is significant out-migration of male family members due to civil unrest and conflicts and job seeking in towns.

UN Women's Theory of Change for its Climate-Resilient Agriculture Flagship Programme suggests that if there was gender equality for women farmers then this would contribute to the resilience of their households and communities to climate change. Combined with women's application of climate resilient farming techniques their resilience and that of their families and communities would be further strengthened.

Implementation of *gender sensitive* CSA practices are increasingly recognised as contributing to the resilience of farming communities as a whole to climate changes that destroy crops and livelihoods. For such practices to be effective, they need to address the structural gender inequality barriers faced by women farmers. In order to augment their incomes and productivity, these include reducing their unpaid workloads, using technology to track weather conditions and for labour saving, adapted agro-ecological production methods, adding value through processing and marketing agricultural products, engagement in value chains, crop and stock insurance, adopting improved, climate-resilient agricultural inputs, access and management of water resources, finance and securing land rights for women farmers. In addition, increased productivity and access to resources for women farmers benefits families and communities in terms of food security and improved nutritional, health and educational outcomes. Moreover, women's leadership and participation in decision making on CSA planning at the plot, community and district levels is crucial to realise these benefits.

Ensuring that the CSA measures underway in West and Central Africa are gender sensitive, and therefore more effective, means working with rural and women their communities to ensure their inclusion, build their knowledge capacity and empower them to contribute their ideas for the implementation of the CSA measures. CSA measures are mainly about agriculture, but farming is often combined with raising of livestock and fisheries management, as illustrated in the adjacent box.

Climate smart measures

1. Water management and collection, solar pumps and irrigation.

2. Weather warning systems and weather insurance.

3. High-yielding, stress-tolerant and drought resistant varieties and seed banks.

4. Mitigating greenhouse gas emissions through composting, cover cropping, conversion and diversity in agriculture, alternative or non-fertiliser usage, no or minimum till, adapting livestock, fisheries and aquaculture management practices in relation to feeding, manure, culling and pastures, as well as switching to more adaptive livestock species or breeds.

5. Financial services, market information, off-farm risk management.

 CSA policies and plans at plot, community, district and national levels.

Source: WB and FAO

The framework for this case study drew upon existing frameworks appricable to gender equanty and gender mainstreaming in climate resilient agriculture policies and community interventions, in particular *Expanding Opportunities: A Framework for Gender and Socially-Inclusive Climate Resilient Agriculture* in Frontiers in Climate Journal, December 2021 as well as several UN Women, FAO and IFAD policy and research papers (see bibliography).

These together with UN Women's *Strategic Plan 2018-2021 Integrated Results and Resources framework* and its Flagship Programme on Climate Resilient Agriculture provided the basis for the evaluation framework to assess UN Women's contribution to attaining gender sensitive CSA results with a set of evaluation questions specific to climate smart agriculture (see below).

Component	Questions
Knowledge generation and	What were the specific climate resilient approaches introduced by
evidence	UN Women in its programming and project design and
	implementation? Did they reflect and build on existing knowledge?
	Was UN Women able to build evidence on the gender gaps and differences in the adoption of climate-resilient approaches and how did women benefit from these?
	To what extent were knowledge products shared and utilised?
Capacity building	How and to what extent was the capacity of women farmers built to increase productivity in the context of climate change? How was the capacity of women farmers built to add value through processing of agricultural products?

	How and to what extent did UN Women build the capacity of local institutions and services and communities to close gender gaps in climate smart interventions?	
Policy influence	How did UN Women advocate for the inclusion of WEE in climate and agricultural policies at local and national levels?	In line with the theory of change (TOC)
	How did UN Women promote the participation and leadership of women in policy making on climate change?	reconstructed for this thematic
	How was UN Women able to promote finance and investment with a gender lens?	evaluation on women's economic
	What were the results?	
Women's access to resources	Did UN Women facilitate access of women farmers to resources and decision-making through its climate resilient interventions?	empowerment in WCA, the overall objective is that
	Were women farmers able to add value to their products and participate in agricultural supply chains?	that an enabling environment will
	Did women farmers have increased access to markets for their agricultural products?	empower women economically to enhance returns
	Did women farmers have their time burdens reduced?	on their agricultural and
Gender approach	Did UN Women adopt a gender accommodative approach addressing constraints facing women farmers and/or a transformative approach influencing changes in traditional gender norms in agriculture?	entrepreneurial labour through:
	How and to what extent is UN Women supporting gender mainstreaming in climate smart agriculture policy and community interventions?	1. <i>Local and</i> <i>national policies</i> to remove
	To what extent were marginalised women included in these efforts?	barriers to
Partnerships	How did partnerships contribute to the effectiveness of CSA interventions?	women's access
Innovation & sustainability	What innovations and approaches could be replicated and scaled up?	to land, financing

tools and markets and to provide increased social protection, as well as ensuring that local, national and international climate decisions reflect the gendered impacts of and solutions to climate change;

- 2. Partnerships to support and equip women farmers and women-led businesses and their organisations with awareness on their rights, technical knowledge and skills and to facilitate their participation and representation in local and national networks and agencies;
- 3. Generation and sharing of knowledge with policy makers and grass roots organizations on approaches, policy options, models, innovations, capacity building and strategies for women's economic empowerment.

Project documents and reports, evaluation reports, knowledge products and a staff survey related to the initiatives on women in agriculture in the WCA region, together with interviews and focus groups discussions with stakeholders provided the inputs for this case study. Also consulted were the recent global UN Women corporate evaluations on its flagship programmes and on Innovation in UN Women's programmes (see bibliography for list of documents consulted).

The interviewees and focus groups reached out to rights holders and beneficiaries of UN Women's efforts on women in agriculture, as well as the duty bearers through online and in person modalities as indicated in the table below.

Table Breakdown of participants interviewed and consulted

Beneficiaries	CSOs	UN	Governments-	COs	WCARO	Donors
		partners	Local & national			
21	26	7	22	21	5	2

6. FINDINGS

Knowledge generation	What were the specific climate resilient approaches
and evidence and	introduced by UN Women in its programming and project
knowledge sharing	design and implementation? Did they reflect and build on
	existing knowledge?

	Was UN Women able to build evidence on the gender gaps and differences in the adoption of climate-resilient approaches and how did women benefit from these? To what extent were knowledge products shared and utilised?
FINDING 1	At global and WCA regional levels UN Women has been proactive in identifying gender issues in relation to climate resilent approaches and green jobs transition and generating relevant knowledge products through research partnerships. These have been shared on the website but systematic collection on the use of these is limited.

UN Women at the global level has continued to generate knowledge and evidence through its flagship programme on climate resilient agriculture launched in 2015 and narrative impact stories are highly visible on its website. A number of publications address gender issues in climate change, climate resilient agriculture and mainstreaming gender into climate action (see bibliography). More recently, there has been a focus on the transition to green economies and the expected creation of many "green jobs". Identification of the measures to be put in place for women to obtain a fair share of these new green jobs have been put forward by UN Women.

In addition, in 2022 UN Women contributed to the preparations for the 66th session of the CSW7 on the priority theme of Achieving gender equality and the empowerment of all women and girls in the context of climate change, environmental and disaster risk reduction policies and programmes. It organised an expert group virtual meeting8 on 11-14 October 2021 for which a concept paper, plus 23 background and expert papers were commissioned. In addition, 6 observer papers were submitted by UN entities including one by UN Women on Measuring the nexus between gender equality and women's empowerment and the environment, including climate change and disaster risk reduction. The conclusions and recommendations of the CSW session, the above-mentioned papers and the report with recommendations provide a rich source of knowledge and analysis for UN Women programming and project design. These documents underline the linkages between normative frameworks for women's rights and climate agreements and frameworks, as well as analysis of the structural barriers to gender equality in the context of climate change, such as access to resources and unpaid/care work, migration and displacement, violence against women, conflict, food insecurity and agriculture, and finance and investments.

The WCARO is proactive in generating knowledge and evidence on gender issues related to CSA and green jobs through support to and interaction with country level agricultural projects, partnerships at the WCARO and Africa regional levels and by commissioning research. For example, UN Women WCARO and ECOWAS have signed an agreement in December 2022 to collaborate on advocacy, capacity building and information exchange on gender and the green transition in West Africa, and to support ECOWAS Member States in the development and implementation of strategies and action plans for gender equality and the green economy. The agreement was followed up at a regional workshop in February 2023. It brought together policymakers of the ECOWAS Member States, women organizations, CSOs, researchers and the private sector from 15 countries to initiate political dialogue around a Roadmap for "the implementation of the ECOWAS outcome document on gender, climate change and disaster risk reduction in the West African region.

The WCARO collaborated with UNISS and AfDB on two regional surveys of women engaged in cross border trading, looking from medium to large women owned businesses. This is an important issue in countries of the region where women produce agricultural products in climate affected communities for sale across borders, but they can face major difficulties with customs regulations and customs agents affecting their gains and physical security.

In 2021, WCARO produced a study on Green Jobs for Women in Africa together with the African Natural Resources Centre that was published by UN Women and the African Development Bank Group. The study applies a gender lens to job creation in the green transition. It assesses opportunities for women's

⁷ https://documents-dds-ny.un.org/doc/UNDOC/LTD/N22/303/59/PDF/N2230359.pdf?OpenElement ⁸ https://www.unwomen.org/sites/default/files/2021-12/CSW66%20EGM%20report_final.pdf

participation in green jobs in key sectors driving growth in African economies, explores obstacles limiting women's access to those jobs, and identifies ways to overcome these obstacles and promote job opportunities for women.

The study lays out the broad picture and recommends "that more in-depth sectoral analysis and country-level research be carried out. The collection of gender -disaggregated data on employment and types of jobs in subsectors with green jobs potential will be important to inform and direct the attention of policymakers. Equally important will be national-level consultations among policymakers and stakeholders with the participation of representative women's organizations". The green economy is one "that results in improved human wellbeing and social equity, while significantly reducing environmental risks and ecological scarcities.

WCARO produced a report in 2021 on Empowering Women Through Climate-Resilient Agriculture in West and Central Africa" Key Results of UN Women's Flagship Programme.⁹ The report captures a range of climate resilient measures taught to women farmers across a number of countries (CAR, Cote d'Ivoire, DRC, Liberia, Mali, Niger, Nigeria and Senegal). In many cases these were delivered in partnership with FAO (FAO's Farmer Field School Approach) and/or Ministries of Agriculture which have the technical expertise on crop, stock and fishery management.

Through the various UN Women women's economic empowerment programmes¹⁰ in the different countries, the specific climate resilent measures introduced to women farmers included:

- Soil restoration techniques, the introduction of potato and winter onion production, alternating crop systems, mechanical land tillage;
- The use of organic fertilizers, natural pesticides and bio-pesticides using local products (pepper, tobacco, soap) and the use of composting techniques;
- How to develop climate-adapted seeds and high yielding, short-cycled seeds (e.g. rice) and to establish seed multiplication plots for high quality seed production;
- Organic and resilient practices and technologies in specific sectors shea , rice;
- Water management, motorized and solar-powered irrigation systems, solar water pumps;
- New energy-efficient technologies processing machines for onions, fonio and fish and solar

streetlamps and renewable energies to power rice transformation units.

These measures on climate resilient agriculture illustrate that UN Women was able to build on and deliver existing knowledge on climate smart agricultural practices through its partnership with entities having the required technical knowledge. UN Women's added value was its ability to facilitate the introduction of this knowledge base to women farmers, to provide ongoing support and to build and strengthen their organizations and cooperatives for their sustainable economic empowerment. Thus, further knowledge was generated on integrated approaches to mobilising and supporting the organisation of women farmers at community level to apply climate smart techniques and improve their livelihoods, combined with other initiatives to reduce gender inequalities, such as access to land ownership, engaging men and elders, and addressing gender-based violence.

The above implementation practice of the flagship programmes in WCA has contributed to generating evidence on the gender gaps and differences in the adoption of climate-resilient approaches. In addition, the many publications commissioned and published by UN Women at global and regional level (Sub-Sahara

⁹The report is based on a desk review of project reports and interviews with beneficiaries, implementing partners and programme officers.

https://africa.unwomen.org/sites/default/files/Field%20Office%20Africa/Attachments/Publications/2021/Women%2 0in%20Climate%20Resilient%20Agriculture%20in%20WCA.pdf

¹⁰ Empowering Women Through Climate-Resilient Agriculture in West and Central Africa" Key Results of UN Women's Flagship Programme, 2021 <u>https://africa.unwomen.org/sites/default/files/Field%20Office%20Africa/Attachments/Publications/2021/Women%2</u> <u>0in%20Climate%20Resilient%20Agriculture%20in%20WCA.pdf</u>

Africa and WCA) provide comprehensive analysis on the differential gender impacts of climate change and shed light on the specific role of women in mitigating the effects of climate change on their agricultural activities. This body of knowledge¹¹ is complemented by the research work of UN sister agencies such as FAO, WFP and UNDP as well as the global and regional development banks.

Most of the knowledge products consisted of research studies, advocacy briefs, training modules and several policy related knowledge products were produced in partnership with other organizations. Social media efforts supported visibility of the products and events. However, there is no systematic information collected on the use of knowledge products, which would help to build a better understanding of which products are the most useful and how they are being used. The Regional Office does not have a knowledge management position, but the WCARO WEE unit focuses on producing, utilizing, and sharing knowledge. In addition, the team has an innovation specialist. Synergies are on knowledge products are leveraged by the WCARO with partners on WEE at the regional level and in support to country level interventions (e.g. Niger, Mali, Senegal, Nigeria). New partnership initiatives at the regional level (e.g. ECOWAS) on knowledge products and sharing are forward looking in relation to green jobs in Africa.

UN Women has served as a critical conduit for technical knowledge on climate resilient practices to be imparted to women farmers in agricultural communities in WCA at the same time as assisting them to know their rights and to organise themselves in autonomous and productive groups and cooperatives.

The knowledge products are available and are being shared in the WCA region. It is not always clear how and to what extent they are being utilised by the COs in the design and implementation of initiatives.

Documenting the experience of the partnership strategy that combines technical and substantive knowledge on climate resilient measures with community organising and rights awareness perhaps could serve as a blueprint and guide for the design of future joint programming and partnerships and resource mobilisation. This could include identifying what worked and what did not work.

The Agrifed project in Mali aimed to improve the living conditions of 25,000 beneficiaries by 2021, using an *incremental, joint-production approach and partnership perspective to implement the programme's lines of action, particularly with regard to the women's access to improved equipment and technologies.* The main crops covered by the project are shallots, onions, potatoes and shea. The programme includes food security and nutrition elements. This has led to the involvement of other important UN agencies, such as FAO and WFP. Their involvement is in line with the UN policy objective of acting as one, i.e. "One UN". UN Women then developed implementing partnerships at the field level, with partners including AMEDD, CAEB, GAAS Mali and IRD/Blumont from civil society side and government partners such as AGETIC and IER.

UN Women country offices have generated less knowledge and produced publications relevant to gender and CSA that could be found on the UN Women website. However Liberia CO produced a *Study on key aspects of land registration and cadastral legislation in Liberia*, November 2021 and a BFW Baseline Study FINAL REPORT 08-21-19¹². along with a brief <u>Rural Women in Mobile</u> <u>Banking in Liberia - Flyer vf.pdf</u>. Mali also produced the <u>UN-Women-impact-story-Mali-Climate-smart-agriculture-improves-livelihoods-of-rural-women-en.pdf</u>.

General information can be found in a few Annual Reports. Some of the COs asked for support to be able to produce research specific to their countries rather than relying on global or regional documents or studies from other countries¹³.

¹¹ Knowledge products have been generated through the Innovation Norway funded D4RWRD Project, including case studies, web articles, and infographics, (<u>D4RWRD KM Products</u>)

The results and invotative approach of the project were also presented through several international conferences and webinar, including the Financial Inclusion Week 2022 (https://financialinclusionweek.org/2022-event) ..
 ¹² See also UN-Women-impact-story-Mali-Climate-smart-agriculture-improves-livelihoods-of-rural-women-en.pdf

See also UN-Women-impact-story-Mali-Climate-smart-agriculture-improves-livelihoods-of-rural-women-en.pd
 <u>- Rural Women in Mobile Banking in Liberia - Flyer vf.pdf</u>

¹³ As mentioned elsewhere, the lack of structured country and regional websites, platforms and links limit the sharing of more knowledge and research products within UN Women, as well as for country and regional audiences.

Capacity building	How and to what extent was the capacity of women farmers built to increase productivity in the context of climate change? How was the capacity of women farmers built to add value through processing of agricultural products? How and to what extent did UN Women build the capacity of local institutions and services and communities to close gender gaps in climate smart interventions?
FINDING 2	Training programmes delivered under the flagship projects reached significant numbers of women beneficiaries that in many cases led to increases in productivity. Capacity of local institutions was also built but to a more limited extent and there is a challenge to sustain and replicate ongoing capacity building programes to impact a larger number of communities.

Region wide, WCARO reports that more than 4800 women understand their rights to land as a result of awareness raising and training sessions in rural communities. Furthermore, more than 17,000 women are applying climate resilient agricultural production techniques across the region as an outcome of the capacity building programmes.¹⁴

Women farmers were assisted by UN Women and its partners to learn about how to develop new agricultural products and fetch higher profit margins across value chains. These included: development of cassava flour, farina and pasta in Liberia, fortified rice, soap and instant flour in Senegal, new cassava-based products such as soap, bread, waffles, donuts, flour, pasta and biscuits in DRC, cosmetic products from the transformation of shea nuts in Côte d'Ivoire and Nigeria.

Women farmers also gained knowledge on requirements for certification of their products and procurement processes for access to contracts, for example on food quality traceability and food safety, international packaging standards, disinfection, food safety and food preservation techniques.

The climate resilient initiatives under UN Women projects in the region resulted in building the capacity of women farmers in several ways:

1. Awareness on rights to land ownership generally and exercise of these rights through enhanced

knowledge of existing laws and regulations favourable to women farmers.

2. Improved knowledge of agricultural practices resilient to climate change, through theoretical and practical training;

3. Learning on processing of valued added agricultural products for markets and value chain opportunities.

4. Using new technologies and digital solutions for CSA and access to buyers.

<u>Capacity building for women farmers</u> In addition, the flagship projects on CSA built the capacity of local institutions resulting in measures to close gender gaps in CSA interventions, for example local development councils in northern Senegal.

Central African Republic

Capacity building for 1200 women farmers at community level for engaging in small enterprises and providing food products for markets with the help of credits and savings clubs. Niger

Annual reports WCARA and Country reports

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¹⁴ Empowering Women Through Climate-Resilient Agriculture in West and Central Africa" Key Results of UN Women's Flagship Programme, 2021 <u>https://africa.unwomen.org/sites/default/files/Field%200ffice%20Africa/Attachments/Publications/2021/Women%2</u>

Zinder region: Training of 300 women farmers on bio pesticides, composting and agricultural production. Another 200 women received training on peanut processing, development of irrigation systems and product flow. Further 200 women were trained on fertiliser and agricultural inputs Senegal

700 women mastered agricultural practices resilient to climate change and 500 using rice varieties tolerant to climate stress. Strengthened the capacities of women seed producers on the technical aspects of seed production, the organization of the seed value chain, seed legislation and seed storage and conservation techniques, marketing, labelling, processing of cereals and contractual sales mechanisms.

In addition, the flagship projects on CSA built the capacity of local institutions resulting in measures to close gender gaps in CSA interventions, for example local development councils in northern Senegal.

Another example that is worth mentioning is that, as part of the D4RWRD project in Senegal and Mali, UN Women has adopted innovative approaches and partnerships, including with UNCDF, to build the capacity of service providers to close gender gaps in climate smart interventions. In Senegal, it supported the CNAAS to develop an audio- and mobile-enabled training programme, accessible to rural women in local languages via any type of mobile phone, that targeted 1730 women farmers in Senegal to strengthen their skills and uptake of agriculture insurance. In Mali, it supported private sector insurtech start-up OKO to adopt gender-responsive services and products to provide access to tailored crop insurance for the first time to 1100 women farmers in Mali to protect their crops against losses due to drought and floods.

A similar approach is adopted in Liberia where UN Women is working with Orange to improve their capacity to include women in their business model, for instance by capacitating women to work as mobile money agents, to increase access to the financial services and income opportunities for women as part of the JP RWEE.

A few examples:
Central African Republic
Capacity building for 1200 women farmers at community level for engaging in small enterprises and providing food products for markets with the help of credits and savings clubs.
Niger
Zinder region: Training of 300 women farmers on bio pesticides, composting and agricultural production. Another 200 women received training on peanut processing, development of irrigation systems and product flow. Further 200 women were trained on fertiliser and agricultural inputs.
Senegal
700 women mastered agricultural practices resilient to climate change and 500 using rice varieties tolerant to climate stress. Strengthened the capacities of women seed producers on the technical aspects of seed production, the organization of the seed value chain, seed legislation and seed storage and conservation techniques, marketing, labelling, processing of cereals and contractual sales mechanisms.

Feedback reported from a midterm evaluation of the Agrifed project in Senegal indicated that women beneficiaries considered that the training enabled them to better assert themselves as main players in the seed value chain alongside men, to increase their capacity to produce and sell seeds within and beyond their group.

In a number of the programmes in the region, women beneficiaries consulted reported training programmes were too short and did not reach larger numbers of women in their organizations or communities due to insufficient budget allocations and the long lead time to set up activities (recruitment of experts, trainers and bureaucratic procedures). This resulted in activities being too intensive and squeezed into short time frames due to requirements for project completion. With the same budget, preference was expressed for training sessions to be spread over longer intermittent periods to allow time for proper participation, absorption of knowledge and application of knowledge in their day to day agricultural activities. In some instances, difficulties were experienced in financing arrangements for participation in workshops, given UN Women rules about dispensing cash to participants. This resulted in women having to fund their own transport and participation and wait to be reimbursed via electronic transfers by UN Women for which there were delays and challenges when women did not have their own bank accounts.

Another issue raised was the need to include in training programmes, training on maintenance of equipment and hardware, for example on the upkeep and maintenance of drones used in agriculture for surveying fields and crops.

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Women farmers' or women's rural membership organizations raised some concerns about UN Women working through CSO implementing partners to deliver components of the climate resilient initiatives and capacity building. These organizations would like to be able to receive the funds contracted to CSOs to build the capacity of their own organizations and organise the delivery of capacity building for their numerous members. On the other hand, CSOs are appreciative of the support UN Women has given over time to build their own capacities and are keen to assist rural women's organizations. Independent and autonomous membership organizations are key for reaching large numbers of rural women, but often lack physical (equipment) and knowledge capacity for the standards of proposal design and development and monitoring, evaluation and reporting required by the UN system in general. This issue could benefit from an internal reflection in UN Women on long term strategic approaches for building the capacity of rural women's organizations. An example of efforts to strengthen such organisations is the BFW project setting up an information system on the profile of Senegalese women farmers in its network (REFAN), which is a powerful decision-making support tool for the benefit of the organization and its technical and financial partners. In Liberia, UN Women provided assistance to the National Rural Women's Organization by providing office furniture and equipment as well as training workshops. In Senegal, the approach adopted by UN Women through the AgriFeD project consisted in having a network of women farmers (REFAN) act as both the main project beneficiary and one of the main implementing partners. This works because REFAN is relatively strong and because there is another partner that "accompanies" REFAN as part of the project, the ARD Saint-Louis (a government body), facilitating its capacity building.

The women beneficiaries of the capacity building components on climate resilience of the various country projects reported income gains through increased agricultural productivity and learning how to process higher value agricultural products for markets (see section on women's access to resources).

In some countries of the WCA region, WEE capacity building activities on CSA take place as part of broader programmes, for example in the context of peace building in Central Africa Republic, cross border trade for agricultural produce in Liberia, migration and displacement in Niger and alternative livelihoods for FGM traditional practitioners in Liberia.

Outside of flagship projects, UN Women was able to deliver some capacity building support to women farmers. For example, in Central African Republic, women farmer groups in the region of Sibut received practical training through workshops on the transformation and conservation of agricultural products.

However, the positive results achieved are still fragile and there is a need to consolidate and extend interventions to reach a critical mass of women. For example, the network of women farmers (REFAN) in the north of Senegal comprises 16,000 members and is active in 6 (out of 23) departments located along the Senegal River valley departments. While the programme intervened in all 6 departments only 6,000 members have directly and indirectly benefitted from the Agrifed programme.

In addition, follow-up training is needed over time. The introduction of awareness raising and training for women and men on solutions in a rural context to alleviate women's unpaid care work burden (the 3 Rs -recognising, reducing, redistributing unpaid work) during the Agrifed project led to three regions incorporating 3 Rs measures into local development plans. Integrating the concept of the 3 Rs into the flagship climate resilience project reflected an innovative and integrated strategy. Out of 38 communes 13 were impacted by the project.

Policy influence	How did UN Women advocate for the inclusion of WEE in climate and agricultural policies at local and national levels? How did UN Women promote the participation and leadership of women in policy making on climate change?					
	How was UN Women able to promote finance and investment with a gender lens? What were the results?					
FINDING 3	There are strong advocacy efforts to influence regional level policy making with an increasing focus on green jobs transition. However, there are fewer initiatives by UN Women at country level to influence the mainstreaming of gender and women's participation in designing and implementing national climate and agricultural policies.					

There is a shift from the last UN Women strategic period of 2018-2021 to a focus on policy influence and change for the 2022-2025 period, policies that would provide an enabling environment for rural women and women entrepreneurs to improve their livelihoods. For CSA there is an increasing focus on green value chains.

Stakeholders consulted in a number of countries underlined that the content of policy initiatives needs to reflect the learning from UN Women's community level interventions and the specific gender issues arising at the local level. Furthermore, participation of women community groups and organizations in policy debates needs to be assured. UN Women has successfully engaged with agricultural communities in many of the WCA countries and is in a good position to influence policy change.

To promote finance and investment, there are several instances in the region:

- Through the AgriFeD programme, a line of credit was granted in Senegal for women rice producers of EUR 500,000 signed with BICIS bank.

- Through the AgriFeD programme, a USD 300,000 guarantee was signed in Mali, with the Development Bank of Mali (MDB) for women agri-entrepreneurs and partnership with the BNDA (Banque Nationale de Développement Agricole) that allowed to negotiate preferential interest fees of 8% instead of 12% for women in the transformation of agricultural products.

- in Central African Republic, a USD100,000 Guarantee Fund was established for women.

- The D4RWRD Project facilitated access to crop insurance for rural women in Mali and Senegal through partnership with national and private sector insurance providers.

- The 3R Programme facilitated access to health insurance for rural women and their families in Senegal through a dialogue with Senegal's CMU (Couverture Maladie Universelle) National Agency

- In a recent development, Niger entered a partnership with the African Solidarity Fund (ASF) to set up a guarantee fund that will be leveraged by various commercial banks to provide tailored lines of credit for women entrepreneurs in the agriculture, green and blue economy sectors.

Regional level

In the context of green economy transition, the WCARO is advocating for the right policies to be put in place to address structural obstacles– from skills mismatches to unpaid care work, to barriers of entry in male dominated sectors such as energy or green infrastructure. It notes that many of the short-term opportunities for women in the green economy are in agriculture, but the final result of this transition cannot be one in which "women move from working in agriculture in poor conditions to working in agriculture in poor conditions using bio-fertilizers." WCARO's vision is to leverage the green transition so that more women and girls leapfrog to decent, quality, high-productivity green jobs as energy efficiency advisors, renewable engineers, or drivers of clean buses across West African cities during the next decades.

The WCARO disseminated policy messages of the UN Women report "Green Jobs for Women" and supported high policy discussion in CSW66th pre-consultative regional consultations with ECOWAS, CEEAC, AU.



"Achieving gender equality and the empowerment of all women and girls in the context of climate change, environmental and disaster risk reduction policies and programmes"

Commission on the Status of Women (CSW66 2022)

As a result of intense advocacy and policy dialogue on the topic of women's participation in the green economy, the Ministers of Gender of ECOWAS, adopted a Roadmap for the Implementation of the CSW 66th Session Agreed Conclusions on the priority theme '*Achieving gender equality and the empowerment of all women and girls in the context of climate change, environmental and disaster risk reduction policies, and programmes'* (2022).¹⁵

A majority of women will continue to work in agricultural communities, often in remote locations. As custodians of the land they can play a vital role in biodiversity. Improving their conditions and methods of work and their income should still be a priority for UN Women in parallel with the advocacy efforts on green jobs transition. This would require combining on the ground interventions with relevant policy changes to create an enabling environment and to support women farmers as active agents to bring their traditional knowledge into decision-making processes at the community and district levels.

Local level

Advocacy and legal literacy activities on women's land rights targeted women farmers, traditional leaders and local authorities. In Senegal, Mali, CAR and Nigeria, more than 300 traditional leaders and local and national government officials, including members of land commissions, were trained in gender-responsive land governance. Since the programme started, more than 4,800 women have been reached through communications campaigns across the region on women's land rights, including community meetings, radio programmes and the distribution of flyers.

Examples of UN Women policy influence in WCA
Burkina Faso
UN Women supported the Government of Burkina Faso in integrating gender
dimension in Low Emissions Development Strategy in collaboration with Global
Green Growth Institute in 2022
Central Africa Republic
The CO developed gender responsive local land charters ("Charte relative à l'accès des
femmes au foncier rural") for several municipalities on climate policy
Liberia
Findings and recommendation from UN Women's Liberian study on land registration
and cadastral legislation informed its 2022 and 2023 annual work plans in support of
the gender-responsive implementation the new Land Rights Act.
Mali
A circular letter outlining supplementary instructions on Gender-Responsive
Budgeting 2022;
Niger
A gender-responsive National Economic and Social Development Plan (PDES 2022-
2026)
Senegal
Integration of care provisions in the new Local Development Plans in 6 municipalities
for recognising, reducing and redistributing unpaid care work (Saint Louis)
Sierra Leone
IN Woman through a WEE community product was able to influence a new woman's

UN Women through a WEE community product was able to influence a new women's cooperative national policy and UN Women is popularising the policy.

¹⁵ https://documents-dds-ny.un.org/doc/UNDOC/LTD/N22/303/59/PDF/N2230359.pdf?OpenElement

Women's access to resources	Did UN Women facilitate access of women farmers to resources and decision-making through its climate resilient interventions?		
	Were women farmers able to add value to their products and participate in agricultural supply chains?		
	Did women farmers have increased access to markets for their agricultural products?		
	Did women farmers have their time burdens reduced?		
FINDING 4	The flagship programmes contributed to significant changes for the women farmer beneficiaries in terms of increased access to land, finance, markets and increased productivity and income. In some instances, land management and ownership systems were strengthened in favour of women farmers. While sustainable financing has reached a limited number of women, it can have a catalytic effect as the financial institutions learn to develop financial products/services tailored to the needs of women.		

According to WCARO the evidence emerging from the flagship programme, after four years of implementation shows a positive impact on women's lives and empowerment, with women beneficiaries interviewed stating they were better off. The WCARO publication¹⁶ reports that the flagship programmes in WCA resulted in a significant number of women gaining access to resources such as land, finance and markets:

Women's Land rights

In terms of land rights, 3500 women in the region were able to access la nd for agricultural investment and there were gender responsive land governance processes in four countries with the involvement of more than 300 traditional leaders.

Increasing women's land ownership and tenure security can further increase their productive capacity and enable them to access finance to absorb climate-smart agriculture innovations. While there has been progress to legislate women's access to land in the WCA region, in practice they have little control over land management. About 30 per cent of women own land alone or jointly and 14.6% of women claim sole ownership of land. UN Women contributed to the recognition of land rights and land access for women in five countries. Stakeholders interviewed for the evaluation confirmed the following:

Central African Republic
There is no land management legislation and women often farm on family plots and have no control over land utilization. In the event of a relationship separation all production remains in the husband's hand. UN Women has advocated with customary leaders, administrative authorities and men to change customs that regulate access to land. As part of the programme in CAR traditional leaders and local authorities have allocated over 500 hectares of land for women farm associations in 2 prefectures.
Cameroon
75 women's groups were organised to access land ownership in agriculture accompanied by microfinance credits, training, support and technology.
Liberia
UN Women supported the drafting and passing of the Land Rights Act (2018) one of the most advanced laws on land rights in Africa. As a result women can participate in land management and own land privately jointly and/or collectively irrespective of whether they are married or not.
Mali

¹⁶ 2 Empowering Women Through Climate-Resilient Agriculture in West and Central Africa "Key Results of UN Women's Flagship Programme, 2021 Women often have temporary land use rights which are easily taken away from them. To address this, women often form associations and are allocated land for their collective use. Building on this practice UN Women contributed to the passing of Mali's Agricultural Land Law (2017) which requires 15 per cent of public land to be allocated to women's associations.

Senegal

UN Women supported the implementation of key legislation such as the circular of the Ministry of Agriculture and Rural Development (MAER) to reduce gender inequalities in agricultural activities. The circular establishes quotas for women's access to technology (for instance 20 per cent of subsidized fertilizers; 10 per cent of subsidized tractors 40 per cent of funding and 20 per cent of agricultural research projects) and water (15 per cent for surface water and 20 per cent for groundwater allocation to women).

Nigeria

UN Women supported the review of the agricultural policy of two states Niger and Ebonyi. As a result, in Ebonyi State the revised policy guarantees women the same rights as men to access and own land and make decisions in terms of acquisitions use and disposal of land. The policy also promotes women farmer's access to state-developed irrigated land and post-harvest infrastructure as well as credit and extension services.

In parallel to improving legislation UN Women contributed to closing the gap between land law and practice in West and Central Africa and enhancing women's understanding of their land inheritance and marital property rights. As a result, almost 13,500 women have been allocated land in the context of the programme (4424 women farmers in the shea and cassava value chains in Côte d'Ivoire 1250 women members of agricultural cooperatives in CAR and 7662 women members of agricultural cooperatives in Mali). Fourteen communities in Senegal, CAR and Mali have implemented gender-responsive land governance processes (see Box below).

Gender-responsive land governance charters in Senegal, Mali and Central African Republic

The Women in Climate-Resilient Agriculture programme supported the development of Gender-Responsive Land Governance Charters in Senegal, Central African Republic and Mali. In close collaboration with local authorities, women and community leaders, the charters are a participatory land governance instrument by which communities identify problems and opportunities to access land and identify mechanisms to unlock bottlenecks and include them in a Land Action Plan. The charters address barriers that women face in securing access to land and introduce mediation processes, with women's participation, for the settlement of land disputes. Gender-responsive land charters have been developed in seven communes in Senegal and five communes in Mali, and two processes are ongoing in Central African Republic. Examples of some of the actions included in land action plans include: the exemption/reduction of demarcation fees for women; the introduction of quotas for women's representation in the municipal council land commission; and financing of market gardening areas to enable women farmers to farm throughout the year instead of farming only during the rainy season. Engagement with traditional leaders has been essential in the process. Following dialogue between women and traditional leaders on the problems and consequences of limited access to land, local leaders now insist that women participate in municipal council meetings discussing land rights redistribution as part of inheritance processes, in an effort to ensure that women's land rights are duly respected.

Source: UN Women Flagship Programme, Empowering Women Through Climate-Resilient Agriculture in West and Central Africa: Key Results of UN Women's Flagship Programme, 2021

Access to finance

In the past, women were unable to access finance because of their limited collateral and the low availability of financial products adapted to their needs. Under the flagship programme, UN Women played a role of intermediary between financial institutions and women's cooperatives to facilitate the development of financial solutions that work for women farmers. Since 2017, more than 3,700 women farmers have accessed finance for value chain investments as part of the flagship programme. Results are presented in the table below.

Mali A US\$300,000 guarantee fund was set up with the Development Bank of Mali (BDM) to finance women farmers and women-led agribusinesses. In addition, 19 women's groups accessed a credit line from the National Bank for Agriculture Development to cover production costs, and one of the cooperatives (Sébougou women's cooperative) obtained US\$130,000 for a 3-year investment.

CAR

The programme has developed a partnership AFPEC (Women's Association for the Promotion of Savings and Credit), a micro-credit institution that works in collaboration with the company Express Union. Through the partnership, the programme has created a US\$100,000 Guarantee Fund for women, and 1,250 women farmers were able to access this fund to engage in incomegenerating activities or to increase their productivity.

Senegal,

Through a partnership with BICIS, a commercial bank, a credit line of EUR 500,000 was approved in 2019 to support the transformation and marketing rice production activities of the Women's Rice Producers Network of the North (REFAN). Over some months, UN Women, BICIS and REFAN worked together to arrive at the right combination of financial offer and derisking mechanisms that could meet REFAN needs and BICIS procedures. The loan has allowed REFAN to overhaul its transformation unit and get better conditions for acquiring inputs by buying in bulk. Investments in women's financial literacy and the provision of training and information on agricultural insurance and business development were also part of the programme.

Nigeria More than 30 coo

More than 30 cooperatives supported by the programme in the Borno and Ebonyi states have been able to directly engage with financial institutions and secure facilitated access to financial services for their members.

The above table shows that the programme was able to mobilise credit for a certain number of women farmers and their organisations in the region. However, this is not the case for all UN Women initiatives. For example, in Central African Republic, the flagship project helped establish an institutional credit savings system as well as built up financial management capacity allowing women to continue in their new small initiatives. However, the majority of the women are illiterate and having a group organization is not always sufficient collateral to access more credit.

Liberia did not have a flagship project on CSA but was part of a multi-year and multi-country Joint Programme on Accelerating the Progress towards the Economic Empowerment of Rural Women JP RWEE in partnership with FAO and WFP and funded by the UNDP UN Multi Partner Trust Fund. It resulted in building up many village savings and loans associations (VSLAs) that help women farmers in agricultural communities to invest in agricultural value chain development, for example in cassava and rice production. It has been a challenge for these VSLAs to go beyond their own savings and social funds to access finance and credit for more ambitious investments. This project that spanned an implementation period of 2014 to 2021 did not include climate change in its design and implementation despite being focused on women in agriculture. The JP RWEE programme has a mobile money component, working with Orange to capacitate women to work as mobile money agents, leading to increased access to digital financial services for women, as well as income opportunities. A final evaluation report recommended that the JP RWEE should mainstream and prioritize climate change across all activities, with a focus on capitalizing on the role that women play in leadership and advocacy on climate change to strengthen preparedness and recovery to climate related disasters. Currently, the programme is no longer funded. However, as part of the livelihood component of the SPOTLIGHT programme on EVAW, UN Women is providing alternative livelihood support to female FGM practitioners through investments in Climate Smart Agriculture and access to loan and savings systems through VSLAs.

In Sierra Leone, a WEE community-based pilot project funded by Netherlands started in 2020-21 in six remote agricultural communities mainly in the northern part of the country where government agricultural subsidies and extension services do not reach. Of the 5600 people participating in the project, most are women farmers. In addition to improving agricultural production the project assists women to gain access to regional markets and helps establish business centres and micro and small women led enterprises as well as working with banks for their access to finance. It strives to form and register women in cooperatives which enables their access to tools and seeds for agriculture. The longer-term aim is to form a national federation of cooperatives covering the whole country.

Access to markets

WCARO reports that more than 2,500 women farmers can now access higher value markets through exports as a result of trainings in organic standards and access to the relevant certification schemes. More than 200 women cooperatives and women-led SMEs and national networks and sectoral federations in the region were strengthened. More than 200 new agricultural products were developed by women along more than 10 value chains. Women's products' value increased by between 3 and 10 times as a result of investments in transformation, packaging and branding. In CAR, the programme is facilitating market links by connecting women producers with large agribusiness companies. In Côte d'Ivoire, 1,927 women shea butter producers obtained the ECOCERT organic certification and are now able to access the European Union and US markets by meeting this requirement, increasing the price from EUR 1.50 to EUR 3.95 per kilo. About 300 contracts have been signed between women farmers and (some major) wholesale buyers in Mali and Senegal.

Other COs in the region did not benefit from a flagship project on CSA. Nevertheless, they consider that climate change and rural women's role in agriculture was a priority for their country, as for example in Democratic Republic of Congo, where resources were lacking for larger scale interventions and follow-up. Some resources were able to be mobilised through Agrifed to deliver training and technology to 90 women farmers and entrepreneurs on the production and transformation of manioc. Despite advocacy at the national level and with tribal chiefs in DRC it was not possible to achieve access to markets and land ownership for women.

The digital platform, Buy from Women was developed both as a web portal and a mobile phone application, that facilitates women's access to markets, key information and learning material, digital technologies and digital financial services. It has been launched in a number of countries in WCA as an attempt to augment access to markets for women farmers. In Mali, 1,335 women farmers from 24 women's cooperatives are registered and actively use the platform. In 2020, as part of the response to the COVID-19 pandemic, the platform was expanded to non-agricultural commodities. The platform is operational in Liberia, and Côte d'Ivoire and is still being developed in Senegal. In Liberia 17 coops were reported to be registered, including 3434 women farmers and entrepreneurs, total number of buyers (groups and organizations) is over 100 and total sales recorded to date is 63,833.95 USD as of June 2023. In Cote d'Ivoire, 8 coops are reported to be registered, including approx. 650 women farmers. In DRC and Nigeria, instead of developing a platform, rural women farmers were linked with existing digital marketplace platforms and their capacities (digital skills, marketing, etc.) were strengthened to take advantage of the digital tools to access new markets. In Central African Republic, BFW started in 2019 with potential but the structure for this programme is absent in rural areas. In Mali and Cote d'Ivoire, the platform has been transferred to the government (AGETIC in Mali and MPPME in Cote d'Ivoire). For sustainability, management of the platform has been transferred to a private sector entity in Liberia, namely, the Orange Foundation. Some stakeholders have indicated challenges for attracting buyers to the platform.

In Mali, as part of AgriFeD programme, a collaboration with the shea butter production company Mali Shi allowed to improve access to markets, as well as to financing and training opportunities, for women shea producers, by pre-financing their activity through advance purchase contracts. Mali Shi trained women and bought their shea nuts ahead of the season through advance contracts, thus providing them access to market, finance and skills.

Income and productivity

WCRO reports that with the flagship programme "the application of new, climate-smart agricultural knowledge and skills, the introduction of new technologies and the focus on product development and value addition, as well as access to new markets, have helped women farmers increase their productivity, sales and income." Examples are presented in the table below.

Senegal More than 1,000 women farmers were able to diversify their income and think of them- selves as better off, as a result of the programme. Following the application of new production techniques and technology, women's productivity has increased by 2 to 3 tons/ha or between 25 and 35 per cent. Before the programme, women farmers in some communities would produce on average of between 4.5 to 5 tons/ha of rice during the winter season, partly due to poor knowledge of climate change impacts. Now, they produce 7 to 8 tons/ha. Mali

The improved productivity of horticultural products (onion, potatoes and shallots) has motivated women farmers to increase and diversify their production, thus applying what they had learned from the trainings in order to enter new agricultural value chains. 7571 beneficiaries from 91 supported groups under the program generated a total turnover of 1,031,993,491 XOF through the marketing of vegetable and other products.1436.22 tons of almonds were sold, generating a turnover of 373,346,305 XOF by beneficiary groups in the shea sector through the tripartite partnership between UN Women, MPFEF, and Mali Shi.

Nigeria

The programme introduced new varieties of rice and trained women farmers on improved rice post-harvest processing skills involving the use of improved rice parboiling technology. This increased yields by 38 per cent, increased the milling recovery rate of rice by 20 to 30 per cent, improved the grain quality, and enabled the beneficiaries to derive a higher market price (by 10 to 15 per cent) per unit of the grain sold to consumers in the local market. **Liberia**

Women farmers saw a 36 per cent in- crease in the sale of cassava flour and a 42 per cent increase in farina sales, as a result of the transformation and value addition training provided by the programme. Combining income generation and renewable energy, UN Women is working with Orange to set up a network of women agents selling and distributing energy products such as solar lamps, clean cookstoves, etc.

Partnerships	How did partnerships contribute to the effectiveness of CSA interventions?			
FINDING 5	The complementatry contribution brought by key parterships and joint programmes have been critical for UN Women to obtain results in CSA. These have generated lessons on how to improve future joint programming through more integrated design and implementation modalities that can also enhance the one UN approach.			

It is clear that UN Women could not have implemented the flagship programme on climate resilient agriculture without the key partnership of UN agencies, in particular the Rome based agencies of FAO, WFP and IFAD together with UNEP and other UN agencies. Their substantive expertise on technical aspects of agriculture were essential for the effectiveness of the programme. Partnerships with financial institutions were also critical for providing financial support and financial products for women farmers and value chain work.

While partnerships are key for obtaining results on gender and CSA, Country Offices reported that sometimes Joint Programmes require a lot of effort for at times just a small amount of funds and activities over short time frames. Longer term projects are needed with each agency having its own budget and a clear division of work. They also noted that it is important that UN Women mobilises actors to provide leadership and coordination to ensure that gender equality and women's empowerment are taken forward in the correct manner with institutional partners. UN agencies and other partners often have strong gender policies, gender mainstreaming strategies and lots of research, training materials and guidelines emanating from their headquarters, but their personnel on the ground at country level often lack gender expertise. Agricultural extension officers working in local communities are likely to not have had training on or knowledge of GEWE. For sustainability, follow-up work plans need to be in place for the relevant ministries and local authorities to continue after projects end.

Gender approach	Did UN Women adopt a gender accommodative approach addressing constraints facing women farmers and/or a transformative approach influencing changes in traditional gender norms in agriculture?How and to what extent is UN Women supporting gender mainstreaming in climate smart agriculture policy and community interventions?To what extent were marginalised women included in these	
FINDING 6	efforts? In working with agricultural communities UN Women was able to challenege traditional gender norms around land ownership and to empower women farmers with new farming techniques that improved their status as income earners and producers. For the most part programmes worked with poor rural women and in some instances, though not systematic in	

design, the more marginalised such as disabled women and
victims of violence and conflict were included.

UN Women through its flagship programmes on climate resilience and generally in its interventions at the community level strives to address the structural barriers to women's economic empowerment. This usually involves working with local authorities and village elders and engaging with the menfolk of the communities to raise awareness on women's right to land and agricultural inputs, their unpaid care work burden, and new laws promulgated that are favourable to women for example to open bank accounts. Integrated approaches in capacity building for women on literacy and numeracy, digital, legal and financial literacy, agricultural skills training, addressing EVAW and supporting women's participation, leadership and organisation lead to transformative changes in women's lives in terms of their autonomy, decision-making and income. This also has a positive impact on the well-being of the community as a whole. Having local regulations changed to give women access to land and to participate in decision-making, accompanied by supporting more women to be elected officials leads to longer term transformation and sustainability.

UN Women has engaged in promoting gender mainstreaming in global institutions dealing with climate change and CSA through joint publications (see bibliography) and the UN Commission on the Status of Women. At the regional level WCARO is collaborating the ECOWAS Gender Development Centre on boosting women's access to green jobs opportunities. Land ownership reform is the main area of UN Women's role in policy making at the local, district or national levels on gender equality.

The principle of LNOB is applied considering that the main beneficiaries through the flagships are poor rural women, and in certain instances in remote areas or situations of conflict and displacement. In addition, while not systematic various reports indicate that programmes have been inclusive of women who are disabled or survivors of violence.

In the Democratic Republic of Congo, UN Women has targeted internally displaced women as well as survivors of gender- based violence in transformation and value addition activities (see box below). In Niger, the programme has targeted not only women farmers but also young males in the region of Zinder, one of the regions most harmed by environmental degradation and out-migration. The programme has facilitated access to inputs, training and technology to support women's transformation and marketing activities to enable them to move up the value chain ladder. It has created service centres in four communes, establishing the necessary infrastructure for food processing, agricultural transformation and marketing activities. By supporting women and youth participation in agricultural value chains, and creating economic opportunities in rural areas, the programme is also contributing to slowing down out-migration in fragile regions. In Sierra Leone an important achievement had been in reaching women unable to receive government benefits, subsidies and extension services due to their remote locations, despite the government currently being supportive and progressive on women's rights and supporting their access to health services and agricultural assistance.

Skills training for GBV survivors in cassava-based products in DRC

UN Women, in partnership with the University of Kinshasa and the Congolese Network of Innovation Actors (RCAI), has established the Agrifed Centre (Agriculture, Women and Sustainable Development) in Kinshasa, DRC. The purpose of the Agrifed Centre is to train rural women on sustainable methods of cassava production and transformation. It also trains survivors of violence or vulnerable women on how to start a sustained, incomegenerating activity for their families. As part of the UN 16 days of activism against violence against women and girls in December 2020, 90 women farmers and agrientrepreneurs were trained over 5 days at the Agrifed Centre on cassava production and processing. They were able to acquire new skills for soil selection, disease prevention, transformation techniques and the production of innovative and nutritious cassavabased products such as bread, spaghetti, donuts and cakes.

Innovation and	What innovations and approaches could be replicated and				
sustainability	scaled up?				

FINDING 7	UN Women has piloted innovations with digital solutions for rural women to access markets. despite infrastructure limitations around connectivity and electricity supply, UN Women is working towards making these sustainable through partnerships with private and public sector providers as part of the Buy For Women initiatives. For the D4RWRD and 3R Programme, where besides digital technology, some key non-tech innovations and innovative approaches have been included.
	innovative approaches have been included.

Two multi-country programmes working with rural women enabled UN Women to work on innovations (including technological ones) with the private sector in selected West African countries. The first was an Innovation-Norway funded programme on *Digital solutions to improve women smallholder farmers' resilience to natural disasters* (D4RWRD) in Liberia, Mali, and Senegal together with Haiti and Malawi. The second was the *Buy from Women (BfW) initiative*. A third UN Women initiative was the introduction of the 3 R concept (recognising, reducing and redistributing unpaid care work) in northern agricultural communities in Senegal, funded by Canada. The programme adopted several innovative approaches, including: working with insurance providers to improve access to healthcare for women and their families via an adapted and affordable health insurance model; working with men and traditional leaders to change social norms; adopting a bottom-up approach to policy advocacy, based on work and evidence at the community level¹⁷.

The D4RWRD programme

For the D4RWRD programme, early on, a strategic partnership was formed between UN Women and the UN Capital Development Fund (UNCDF) that led to co-financing the project by UNCDF in addition to Norwegian funding. Two private sector partners were selected for the project implementation phase, OKO and Viamo, with which gender-sensitive approaches and innovations were developed and implemented in two pilot countries (Mali and Senegal). Partners were selected following an in depth needs assessment and a "market dialogue" process, where the needs identified among the women were communicated to the market, which was a key innovative approach adopted by the project.

Working with Insurtech OKO¹⁸ to leverage gender-responsive innovative approaches and business models, 1100 women farmers in Mali benefited from crop insurance for the first time to protect their crops against losses due to drought and flood. In Senegal, the project worked with private sector partner Viamo¹⁹ to leverage innovation and mobile technology to develop low-tech and voice-based capacity building trainings tailored to the needs of rural women - 1730 women farmers benefited from an educational programme entirely delivered via the mobile phone in local languages, combining educational games and remote trainings, which enhanced the rural women's knowledge and skills on agriculture insurance and risk management.

¹⁷ - Policy brief: https://africa.unwomen.org/en/digital-library/publications/2023/06/innovative-solutions-to-recognize-reduce-and-redistribute-the-unpaid-care-work-of-rural-women-in-senegal

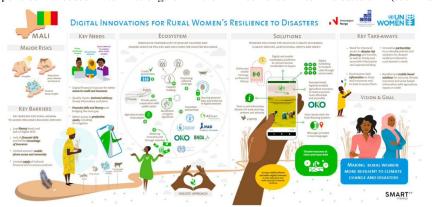
⁻ Infographic:

https://africa.unwomen.org/en/digital-library/publications/2023/06/innovative-solutions-for-rural-womens-unpaid-care-work-in-senegal

¹⁸ Founded in 2017, the Malian company OKO develops affordable mobile-based crop insurance products to provide smallholder farmers with the financial security they need, regardless of unstable climate trends.
¹⁹ Viamo is a global social enterprise that specializes in mobile engagement and Information and Communication

¹⁹ Viamo is a global social enterprise that specializes in mobile engagement and Information and Communication Technology for Development.

The project produced a set of infographics summarizing rural women's needs and innovations and policies needed to strengthen their resilience to disasters (see below).



What was innovative was to work with service providers to include a gender lens in their business models, services and products so that these met the women's needs, an approach that should be scaled up by UN Women and other partners.

While there were technological aspects of the D4RWRD Project in Mali the main innovations were adopting:

- a gender-responsive approach,
- partnership with financial service providers;
- conducting a needs assessment and market dialogue process.

In the case of Senegal innovation reflected adopting appropriate, low-technology, readily available IVR technology, as opposed to "high tech" interventions, with the choice of the technology dictated by that which was most appropriate to effectively reach the rural women.

The resilience-building and disaster risk reduction tools developed by the D4RWRD project were integrated into the existing digital Buy from Women platform and contributed to the development of a weather information and weather alert module in Senegal and Liberia, to provide women farmers with localized and relevant information and alerts in case of heavy rainfall, storms, or prolonged drought.

Buy from Women (BfW) initiative

The second programme, the *Buy from Women (BfW) initiative*, seeks to facilitate rural women's access to new market and learning opportunities by using web and mobile platforms tailored to their needs. The platform is designed to also facilitate the management of women's businesses and assets, providing a one-stop shop and supporting women smallholder farmers throughout the business cycle. There are 1,335 women farmers from 24 women's cooperatives registered and actively using the platform in Mali. In 2020, as part of the response to the COVID-19 pandemic, the platform was expanded to non-agricultural commodities. The platform is still under development in Senegal.

The Flagship Programme on Women's Empowerment through Climate Smart Agriculture was envisaged as simultaneously addressing the structural barriers faced by women farmers, and leveraging ICT platforms such as BfW to accelerate results as shown below.



In Senegal BFW is being developed by UN Women in collaboration with the FAO and WFP with the support of the Senegal Government, including the Ministry of Posts and Telecommunications of Senegal; the Ministry of Gender, Children, and Social Protection; the Ministry of Agriculture; the Ministry of Commerce and Industry; and the Environmental Protection Agency. The project is also being developed in close partnership with the private sector, specifically ORANGE Senegal; and civil society organizations, namely the Senegal Rural Women Structure, the Senegal Marketing Association, the Association of Women in Cross Border Trade, and Rights and Rice Foundation.

In the Democratic Republic of Congo, the Family Code legislation has changed to facilitate women's entrepreneurship and allowing women to have bank accounts and economic activities without the permission of husbands. However, many communities are not aware of these changes, so the UN Women CO promotes awareness of the new business laws and environment favourable to women through Buy for Women and campaigns on line via digital clinics as well as going to the communities and local markets with campaigns using theatre, videos, braille, etc. Buy from Women was seen as an innovative approach in regard to digitalisation, value chain for small business and localization and 5000 women were identified and organised.

Innovative aspects

Innovative features of the D4RWRD and Buy from Women initiatives include working with the private sector to build women's resilience to climate change through digital technology that can provide information on their mobile phones concerning weather patterns, access to crop insurance and access to markets and buyers for their added value agri products supported in synergy with the UN Women flagship programme on rural women's economic empowerment through climate smart agriculture value chains, referred to as "AgriFeD (Agriculture Femmes et Développement Durable) programme" in Mali and Senegal. Integrating the 3 Rs programme to the ongoing AgrifED project in Senegal also represented value addition to the project. In combination with education and application of climate resilient agricultural measures, introducing the concept to local government and rural women's associations (REFAN) of reducing women's unpaid care work to facilitate productive work contributed to increased incomes, as well as access to the nation health insurance scheme for 1000 women.

3R Programme

The innovation in the 3R Programme went beyond just introducing the concept of recognising, redistributing and reducing unpaid domestic work. The programme adopted several innovative approaches, including:

- working with insurance providers to improve access to healthcare for women and their families via an adapted and affordable health insurance model;

- Working with men and traditional leaders to change social norms;

- Adopting a bottom-up approach to policy advocacy, based on work and evidence at the community level²⁰.

Integrating the 3 Rs programme into the ongoing AgrifED project in Senegal also represented value addition to the project. In combination with education and application of climate resilient agricultural measures, introducing the concept to the local development government agency and rural women's associations (REFAN) of reducing women's unpaid care work to facilitate productive work contributed to increased incomes, as well as access to the national health insurance scheme for 1000 women.

Other innovative initiatives

Besides D4RWRD, BfW, and 3R, another area for innovation being explored in the region is women's participation in renewable energy value chains. This a key area for scale-up going forward as part of the green jobs transition. This has been piloted in Liberia and Mali. See details below:

In Liberia, with support from UN Women and the Liberian MGCSP, the Solar Mamas model has also been developed as part of the Women's Entrepreneurship for Sustainable Energy program leading to training of 26 "Solar Mamas" solar engineers who have electrified over 425 homes and other structures in their hometowns. Solar Mamas is a women-led enterprise that has installed solar panels in rural communities in several countries. Solar Mamas are non-literate women that receive a six-month training to become solar engineers at the Barefoot College in India, including on building, installing and maintaining solar lamps, panels and batteries. In Liberia, the solar engineers install solar panels on the roof of village houses, bringing electricity to homes for the first time, as well as community centers such as the Peace Huts. According to Barefoot College, every woman trained by the programme electrifies 50 homes on average in her village. In previous years, women active in the solar business were supported to import and distribute solar products. In 2022, the « Buy from Women Champions » rural women were trained to install, use, repair and maintain the solar suitcases manufactured by We Care Solar. As a result, these women are now able to independently buy and install solar products, diversifying their income, while supporting access to energy in rural communities. UN Women is also working with Orange to set up a network of women agents selling and distributing energy products such as solar lamps, clean cookstoves, etc.

In **Mali**, an innovative approach was piloted with UN Women's support and participation from the Government, private sector and civil society as part of the project Climat et Energie au Mali (CEMALI), where women are at the heart of promoting access to improved and energy-efficient cookstoves, leading to improved income, health, wellbeing and quality of life for rural women and their households, a reduction of women's domestic workload and time poverty, and climate mitigation and adaptation co-benefits. The initiative promotes the entrepreneurship and leadership role of women throughout the biomass value chain through training in the production of improved stoves and sustainable fuels (500 women trained, 150,000 improved stoves manufactured, 119 tons of sustainable charcoal briquettes manufactured), reforestation activities, training on management of tree nurseries, training on improved and efficient carbonization techniques, establishment of women-led forest management mechanisms (1,105.6 ha of forest regenerated). The initiative led to reduced GHG emissions linked to the activities to reduce biomass consumption. *Sustainability*

As concerns the D4RWRD (digital solutions for women farmers) a UN Women donor narrative report on the D4RWRD project (December 2019 -September 2022) details the comprehensive assessment and ecosystem mapping that was carried out to identify the needs of women farmers' to access resilience-building mechanisms. Considerable research, tools development and knowledge

²⁰ For more details:

⁻ Policy²⁰ brief: https://africa.unwomen.org/en/digital-library/publications/2023/06/innovative-solutions-torecognize-reduce-and-redistribute-the-unpaid-care-work-of-rural-women-in-senegal

⁻ Infographic:

https://africa.unwomen.org/en/digital-library/publications/2023/06/innovative-solutions-for-rural-womens-unpaidcare-work-in-senegal

sharing together with engagement with private sector companies and resource mobilisation has contributed to the sustainability of this initiative.

In both Mali and Senegal UN Women is continuing to work with the private sector partners to scale up and sustain the innovative initiatives. In Senegal work continues with Viamo and the CNAAS (insurance company specialised on agricultural risk insurance) with technical support from other local partners, to identify opportunities and scenarios to hand over the training materials developed to the CNAAS, which is planning to adopt the mobile training approach developed by the project and take it to scale to the national level. In Mali, the partnership with OKO will be continued and scaled up through Innovation Norway's Scaling grant scheme, which will ensure that more women farmers will have access to tailored, gender- sensitive crop insurance. UN Women and OKO are exploring the potential to replicate this partnership Cote d'Ivoire.

While Liberia only benefited from the research phase of the D4RWRD project, key innovations to address the rural women's needs are planned to be implemented under a new strategic partnership with Orange which is expected to allow 1,200 rural women to improve their access to resilience building services, including mobile- enabled insurance and other financial services, as well as modern energy sources for domestic and productive uses through the exploration of market-based finance models such as Pay-As-You-Go.

As concerns BFW, A 2021 UN Women Corporate Formative Evaluation on UN Women's Approach to Innovation queried to what extent UN Women's technology-based innovation initiatives such as BFW have carried out prior systematic needs assessments and problem-identification processes. The evaluation noted that interviews with key informants involved in the planning and design of the BFW digital platform highlighted that the initiative originated as a result of the desire of executive leadership to have a digital element to complement the Climate Smart Agriculture Flagship Programme Initiative to be rolled out in 2016. The evaluation further noted that a number of Country Offices implementing BFW reported that there was insufficient technical expertise in the Country Office or headquarters to support the design process and identify potential challenges.

A 2021 UN Women *Corporate Formative Evaluation on UN Women's Approach to Innovation* queried to what extent UN Women's technology-based innovation initiatives such as BFW have carried out prior systematic needs assessments and problem-identification processes. The evaluation noted that interviews with key informants involved in the planning and design of the BFW digital platform highlighted that the initiative originated as a result of the desire of executive leadership to have a digital element to complement the Climate Smart Agriculture Flagship Programme Initiative to be rolled out in 2016. The evaluation further noted that a number of Country Offices implementing BFW reported that there was insufficient technical expertise in the Country Office or headquarters to support the design process and identify potential challenges.

Legal risks for UN Women in implementing BFW pointed out by the corporate evaluation on innovation were overcome in Liberia with the agreement for a private sector foundation, Orange, to host the BFW platform.

This evaluation on women's economic empowerment in West and Central Africa heard from stakeholders that while there was considerable enthusiasm for the BFW concept, practical problems arose in its application. Beneficiaries shared that internet packages were expensive and so often they only purchased them for a few days at a time. When there were electricity cuts and connectivity problems they could not make use of the packages already paid for. Smart phone penetration and internet usage has greatly increased in the last decade, especially in urban areas. It is predicted to significantly climb in the coming years. Gender disaggregated data is available for only a few WCA countries. It shows that fewer women than men in overall having access to internet usage. Breakdown for urban and rural areas was only available for Cote d'Ivoire, but it can be assumed for other WCA countries that women in rural areas have much less access to internet than in urban areas and less than that of men in rural areas.

Thus, there are challenges exist for BFW in terms of stable and affordable connectivity and electricity supply as well as for ownership and maintenance of mobile phones, especially for the poorest women farmers in remote communities who lack basic literacy and numeracy skills.

	Percentage of population using the internet				
Country	2010	2021	Country	2010	2021
CAM	4.3	45.60	MLI	2.0	34.49
CAF	2.0	10.58	NER	.83	22.39
CIV	2.7	45.43	NIG	11.5	55.36

DRC	.72	22.90	SEN	8.0	58.05			
LIB	2.3	33.63	SLE	.58	18.0 (2020)			
Source: ITU database 2022								

Percentage of population using the internet									
Country	Male	Female	Urban Men	Urban Women	Rural Men	Rural Women			
CAM (2017)	27.4	19.2							
CIV (2019)	39.8	32.9	58.2	49.5	19.5	12.7			
NER (2017)	16.0	5.3							
Source: ITU database 2022									

Free digital training by Orange in the capital Monrovia, Liberia was much appreciated but considered too short by women beneficiaries in urban areas. They were able to set up Facebook pages for their start-ups but lacked seed capital to advance their small businesses. They were hesitant to take loans given high interest rates and perceived corruption in lending institutions. On the other hand, Orange's gender sensitive approaches led to creating job opportunities for women as Orange money agents throughout the country. Another challenge raised by stakeholders registered on the platform was the lack of buyers for their agricultural products on the BFW platform.

In a positive move to support innovation and sustainability, the WCARO WEE team has incorporated an innovation specialist position. This is providing impetus for innovation in the region (including on digital solutions, energy savings and alternatives, and reforestation) to support country flagship projects on climate resilient agriculture, document and share information and lessons on innovation and reach out to donors for resource mobilisation. In addition, the regional WEE team is reaching out to banks, financial technology companies and mobile operators to explore collaboration around the BfW platform. The BfW Knowledge Sharing webinar series in WCARO, is an initiative for internal capacity building and sharing of lessons learned and best practices among UN Women personnel on innovative projects and approaches. But more needs to be done to go beyond relying on technology as a form of innovation in itself to be able to address the overall design of innovative initiatives that will ensure sustained accessibility, usability, capacity and results for women farmers. The D4RWRD Project in Mali did not involve use of mobile phones at all, while in Senegal, the choice of a voice-based technology (IVR) was based on a prior needs assessment: the technology is based on voice messages that can be accessed through any type of basic phone (a survey in 2022 showed that over 90% of rural women farmers members of REFAN have access to a mobile phone) independently on the literacy skills of the user, since it based on voice/audio. This approach involves developing business models and partnerships along the various agricultural supply chains to address the needs of rural women.

As pointed out by the corporate evaluation on innovation, "there is no organization-wide systematic approach to identify, track, document and learn about these new solutions, nor is there guidance or frameworks on how to monitor and report on results from innovation." While there is a global UN Women position on innovation designed to provide this kind of support, the position has been vacant for some years.

Institutional strengthening

In addition to improvements in climate resilience measures and, the flagship programme, *Women in Climate-Resilient Agriculture Value Chains* programme has also contributed to sustainability through strengthening the institutional capacity of women's cooperatives in the region. To varuing degrees across the region, UN Women has also contributed to institutional strengthening of public and private service providers and policy makers to deliver gender -responsive policies, laws, services and business models. These have been mentioned earlier in the text.

The WCARO has reported the following results:

In Côte d'Ivoire, the programme supported the creation of 19 rural women's groups which produce shea kernels and an economic interest group (GIE FIKACI), made up of 8 MSMEs and seven cooperative societies, bringing together nearly 1,500 women in the sector across nine regions. In Mali, 117 women's groups have been supported: 105 in horticultural production, ten in shea

production and two in rice production. In Senegal, the institutional strengthening of the Network of Rice Producers of the North (REFAN) included training on contract development and partnering with financial institutions to promote women's access to credit for 36 women members of the REFAN Executive Committee. In Mali, a tool was created to help track land acquisitions by women in flooded and exposed areas through data collection. In DRC, the programme supported the creation of the National Network of Rural Women's Associations (RENAFER), which brings together 4,700 women's associations in the agricultural sector in 15 provinces. In Nigeria, UN Women and its partners facilitated the creation and registration of women farmers' cooperatives in three states. A total of 49 cooperatives, with an average of 250 members each, were registered in the Borno, Ebonyi and Niger states. As part of the programme, UN Women also provided training to cooperatives on financial literacy, cooperative principles, governance, management and marketing.

The way ahead

Moving forward, for the flagship programme, *Women in Climate-Resilient Agriculture Value Chains*, UN Women WCARO plans together with a coalition of actors and partners to continue to look into strategies to scale up results and expand activities to other countries and value chains within countries where the programme is already working. For example, work is already underway to allow women to scale up impact significantly through access to green climate finance in Senegal. In this process, the programme plan to continue leveraging UN Women's comparative advantage by building on good practices and innovative approaches such as working alongside men and traditional leaders to change systems and social norms at the root of women's participation in the economy.

The programme also plans to incorporate new strategies to strengthen impact in key areas for women's empowerment by reducing vulnerability and improving autonomy and agency. In Liberia, Mali and Senegal to piloting social protection mechanisms adapted to women farmers in the form of digital micro-insurance is ongoing. A stronger integration of women farmers' unpaid care needs and solutions to recognize, reduce and redistribute women's unpaid care burden along agricultural value chains is also an important area to continue developing in the future.

UN Women is increasingly advocating for quality green jobs for women in the transition process to green economies. In a policy brief²¹ of 2021 UN Women puts forward policies and programmes for Sub-Sahara Africa to ensure that women share in the new jobs expected to be created in the transition to green economies. The brief lists recommendations with measures to get women ready for the green economy, to level the playing field for a gender-responsive green economy and to accelerate action for a gender-responsive green economy. With the shift from the FPI to the new global Signature Intervention "Women in Green and Blue Economy and Climate Action", UN Women is planning to expand its work in the region beyond agricultural value chains and integrate other green and blue economy value chains, particularly by integrating renewable energy value chains.

UN Women notes that the formulation of national green jobs strategies, is currently underway in a number of countries in the sub-Sahara Africa region and these present an opportunity to contextualize and apply some of the high-level recommendations of this brief. In this process, UN Women underlines that it will be important for states to build their capacity to formulate and implement gender-responsive green-economy strategies. This includes strengthening their capabilities to collect and analyse sex-disaggregated data, an important gap identified by UN Women's research efforts and to formulate gender-responsive economic policy, planning and budgeting. It also will be critical to increase women's participation in green economy decision-making forums and technical task forces, and to create institutional spaces for dialogue and the co-creation of policy solutions where women's advocates can actively participate.

Not discussed in the brief and the accompanying report²², is the role UN Women could play at the country level in the above processes. UN Women is focusing more in the next strategic period

²¹ Green Jobs for Women In Africa: Opportunities and Policy Interventions, Policy Brief, 2021 https://africa.unwomen.org/sites/default/files/Field%200ffice%20Africa/Attachments/Publications/2021/11/2021120 6 UN%20Woman Green%20Jobs policy%20brief ENG webpages.pdf

 ⁶ UN%20Woman Green%20Jobs policy%20brief ENG webpages.pdf
 ²² UN Women and African Development Bank Group, *Green Jobs for Women In Africa*, produced by African Natural Resources Centre and UN Women Regional Office for West and Central Africa, 2021

(2022-25) on policy action and an enabling environment for gender equality and women's economic empowerment in the economic and fiscal policy space. There are opportunities for UN Women to fully exercise its triple mandate (convening, normative and operational) to play a strategic role in engaging stakeholders to realise women's share of future green jobs, including enhancing their role in decision-making on climate smart agriculture and climate change policies and planning generally at the community, district and national levels. This may require working more with finance ministries to revisit the subject of gender responsive budgeting in terms of advocating for new laws or implementing existing laws. Not only are finance ministries key for allocating overall national gender budgets, but other parts of government such as sectoral ministries (including agriculture) and agencies for enterprise development are key players in the implementation of gender responsive budgeting legislation.

Conclusions

The experience of implementing the flagship programmes in WCA on climate-resilient agriculture resulted in evolving an integrated strategy that combined:

- \Rightarrow policy reform;
- \Rightarrow implementation of measures to improve women's land rights;
- ⇒ institutional strengthening of women cooperatives and women-led and owned agri-businesses as well as service prividers from public and private sector (e.g. financial institutions, insurance companies etc.);
- \Rightarrow provision of access to finance and markets through technology-enabled solutions.

UN Women's technical expertise for design and quality assurance, in partnership with UN agencies to leverage implementing capacity, and with the backup of the UN system at the country level was a critical aspect of this strategy.

As shown in the case study the numbers of women farmers reached through the flagship programme were significant given the fairly modest budgets available. Partnerships played a key role in achieving this outcome. The challenge is how to scale up these interventions and to sustain them on a much larger scale given the millions of poor women working in agriculture in the region. UN Women is not alone in this endeavour as there are many other players implementing similar programmes and concerned with climate change and CSA, some of which have far greater resources. These include UN agencies, IFIs, international development agencies and bilateral donors. UN Women's contribution in supporting the organisation of women farmers into autonomous groups and cooperatives is an important element for sustainability. Not only does there need to be more of this kind of support for the development of further groups to reach more women, but these groups also need further financial inputs to expand their economic activities in agriculture and value chains.

In this context, UN Women needs to focus on areas where it has comparative advantage in accordance with its triple mandate (normative, convening and operational). At the operational level it has high levels of credibility in the region on organising and empowering women farming communities, advocating for and capacity building on the removal of structural barriers facing women farmers such as land ownership, lack of access to agricultural services, illiteracy and EVAW. Results for women on CSA have been substantially achieved through partnerships with technical agencies such as FAO and WPF and ministries of agriculture, given UN Women's limited expertise on climate resilient farming practices, agricultural and aquaculture techniques, investment modalities and value chain mechanisms. Partnerships with financial institutions and banks have been critical for facilitating access to finance and credit lines for women farmers.

In addition, WCARO has engaged in initiatives such as *Digital solutions to improve women* smallholder farmers' resilience to natural disasters and Buy from Women, piloting important innovations. Given UN Women's limited human and financial resources, these can only be

https://africa.unwomen.org/sites/default/files/Field%20Office%20Africa/Attachments/Publications/2021/11/2021120 6_UN%20Women_Green%20Jobs_report_ENG%20webpages.pdf

upscaled and replicated through strong agreements and partnerships with governments and private sector companies.

The combination of the flagship initiatives and partnerships with a range of technical and financial agencies has generated strategies and methods that can further enhance UN Women's convening and normative roles. Greater efforts will need to be made share these strategies and to garner government, financial institutions and donor commitments to support the agricultural communities capacitated and mobilised by UN Women and its partners to gain access to finance and markets. The holistic approach of AgriFeD combining smart technologies with cultural and gendersensitive contexts has a positive effect on social cohesion:

"The new products and techniques not only increase income, but also improve the nutrition of our children."

"The training had a positive influence on our community spirit as women from different ethnic groups came together and spoke with each other, something they haven't done for a long time"

Women farmers Mali.

Advocating for the establishment of credit guarantee funds and development of financial products for women farmers is key for taking these communities a step up from their existing levels of savings and loans associations and cooperatives for large scale impact. In some instances, UN Women has been able to push for this kind of step up as well as to introduce other innovative aspects that contribute to addressing WEE barriers such as social protection measures and reducing the burden of women's unpaid care work in rural areas. Scaling these up across the region is a challenge and will require continually seeking out partners and donors to push forward on these aspects.

There is still much work to be done on policy change and implementation to remove structural barriers to gender equality and women's empowerment in agricultural communities as integral to achieving gender sensitive CSA outcomes. UN Women can play a strategic role in advocating for and supporting gender sensitive CSA policies and plans at the local and national levels. Elaboration (or revision) and implementation of National Adaption Plans (for climate change) and other climate plans and strategies such as Nationally Determined Contributions (NDCs) and Long Term-Low Emission Development Strategies (LT-LEDs) in the region to can provide a vehicle and an opportunity for UN Women in this regard. Such a Plan in Liberia for 2020-2030 has mainstreamed gender thanks to the input of UNDP. Exploring coordination modalities and role identification among UN agencies and the UNCTs on gender sensitive CSA will be key for coherent strategies and resource allocations in the framework of One UN. Ensuring the participation and leadership of women farmers in climate change and CSA decision-making in these processes will be vital for achieving wider impact. Gender mainstreaming and generating data disaggregated by sex in CSA analysis and policy making are key underpinnings for enhanced results.

Recommendations

- 1. Avoid fragmented approaches to WEE and CSA implementing small initiatives here and there that cannot be scaled up. Promote the flagship programme approach to establish community structures and work with existing community structures for sustainability and ownership. Adopt integrated approaches that address underlying causes of inequality both at the local level and from district level build a movement up to national policy level informed by the community realities.
- 2. Given UN Women's limited resources to take innovative initiatives to significant scale, focus on influencing others to scale up innovation on digital solutions for climate smart agriculture and advocate for the modification of UN Women policies, procedures and guidance to facilitate collaboration with the private sector. Design and implement an exit strategy and hand over to institutional partners for Buy from Women digital platform.
- 3. Document the experience of the flagship programmes on climate resilient agriculture in WCA, not only in terms of activities and results, but with an analysis of the strategies employed and what worked well and what did not. Communicate results of the flagship programmes through dissemination on websites and social media as well as through enhanced internal UN Women knowledge sharing platforms. Use knowledge products to advocate with donors.
- 4. Document and share more across countries on the experience and lessons learned in applying digital solutions to CSA.

- Recruit and/or train CO staff to increase capacity and knowledge on working with innovation and digital technology in CSA.
- 6. Provide capacity building for CO staff in the region on advocacy strategies for policy influence and resource mobilisation on CSA and transition to green economies to better orient them for future programme design and implementation, identification of pertinent partners and stakeholders and for resource mobilisation, and establish an electronic platform for sharing tools and tips among COs and the RO.
- 7. While CSOs are valuable implementing partners, work more with government authorities and agencies in countries to co-create and implement programmes for CSA so as to promote exit strategies with long term commitments and plans for sustainability, as well collaboration on policy frameworks. These could include Ministries of Agriculture, of Finance, of Employment, and agencies responsible for enterprise development and linking these with Ministries of Women and Gender Equality.
- 8. For working on digital solutions and initiatives such as D4RWRD and BFW in relation to CSA continue to explore options for agreements with ICT companies in the private sector to manage platforms and training and guarantee accessibility for women farmers and buyers, in tandem with UN Women's comparative advantage of access to women in agricultural communities.
- 9. Ensure participatory approaches through structured and systematic consultations with women farmers at community level in the elaboration of CSA plans and projects and identify pertinent gender issues at the community level to bring to the policy making table at local, district and national levels.
- 10. With the increased focus on economic and fiscal policy, in particular for green jobs, UN Women could renew its efforts on gender responsive budgeting and synergise more across its priority areas given that the subject of gender responsive budgeting sits within the UN Women's portfolio of governance.
- 11. For sustainable stepping up of the agricultural communities already mobilised and strengthened by UN Women, enhance partnerships with national, regional and international financial institutions to leverage ongoing financing support and access to markets for these communities and for replicating in more such communities, as well as for joint advocacy on policy changes to facilitate rural women's access to finance and markets.
- 12. Promote the collection of gender disaggregated data and development of data bases on women farmers and women led and owned agri-businesses as part of promoting their participation in value chains and creating data for companies and SME agencies interested in pursuing gender responsive procurement initiatives.

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