Resilient Food Systems
Programme highlights 2022

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Design and Layout: Debra-Jean Harte

Editing and Production: Hanna North, Rodrigo Ciannella and Jonky Tenou

For more information: resilientfoodsystems.co
Rodrigo Ciannella: rciaennell@cifor-icraf.org
Jonky Tenou: Y.Tenou@ifad.org
Jean-Marc Sinnassamy: Jsinnassamy@thegef.org

Produced by World Agroforestry (ICRAF)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<td>AGRA</td>
<td>Alliance for a Green Revolution in Africa</td>
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<td>CDP</td>
<td>Chiefdom Development Plan</td>
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<td>CI</td>
<td>Conservation International</td>
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<td>CIAT</td>
<td>The International Centre for Tropical Agriculture</td>
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<td>CIFOR-ICRAF</td>
<td>Center for International Forestry Research and World Agroforestry</td>
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<tr>
<td>COP</td>
<td>Conference of the Parties</td>
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<td>COVID-19</td>
<td>Coronavirus 2019</td>
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<td>CSA</td>
<td>Climate-Smart Agriculture</td>
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<td>CSARL</td>
<td>Climate-Smart Agriculture for Climate-Resilient Livelihoods</td>
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<td>ERASP</td>
<td>Enhancing the Resilience of Agro-ecological Systems Project</td>
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<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>FFS</td>
<td>Farmer Field School</td>
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<td>GEF</td>
<td>Global Environment Facility</td>
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<td>IAP</td>
<td>Integrated Approach Pilot</td>
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<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
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<td>LDN</td>
<td>Land Degradation Neutrality</td>
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<td>LDFS</td>
<td>Reversing Land Degradation trends and increasing Food Security in degraded ecosystems of semi-arid areas of central Tanzania</td>
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<td>LDSF</td>
<td>Land Degradation Surveillance Framework</td>
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<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<td>MSP</td>
<td>Multi-stakeholder platform</td>
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<td>Neer-Tamba</td>
<td>Participatory Natural Resource Management and Rural Development Project</td>
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<td>NGO</td>
<td>Nongovernmental organisation</td>
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<td>PAR</td>
<td>Platform for Agrobiodiversity Research</td>
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<td>PARFA</td>
<td>Agricultural Value Chains Resilience Support Project</td>
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<td>PCU</td>
<td>Programme Coordination Unit</td>
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<td>PRIDE</td>
<td>Programme for Rural Irrigation Development and Empowerment</td>
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<td>ProDAF</td>
<td>Family Farming Development Programme</td>
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<td>RFS</td>
<td>Resilient Food Systems</td>
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<tr>
<td>SHARED</td>
<td>Stakeholder Approach to Risk Informed and Evidence Based Decision Making</td>
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<td>SLM</td>
<td>Sustainable Land Management</td>
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<td>SMS</td>
<td>Short message service</td>
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<td>UNCCD</td>
<td>United Nations Convention to Combat Desertification</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<td>UTNWF</td>
<td>Upper Tana Nairobi Water Fund</td>
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The implementation of the Resilient Food Systems Programme in GEF6 assumed that integration was the right response to give to smallholder farmers, embracing together resilience, global environment benefits, and food security by better managing and restoring agroecosystems in Sub-Saharan Africa. Some cross-cutting issues were embedded in the approach, such as the empowerment of women, the role of the private sector, the use of IT technologies, and the link between science, public policies, and agri-practices.

Program achievements over the past five years show that our strategic thinking was correct and timely. Even in the worse global conditions, with so many cumulative challenges from the COVID-19 pandemic, the desert locusts, to insecurity, countries in the dryland regions have continued to embrace innovative tools and practices to tackle environmental degradation.

The year 2022 provided the opportunity for stakeholders to share some lessons and knowledge at the UNCCD COP15 in Abidjan, Côte d’Ivoire and at the RFS annual Knowledge Exchange & Learning Workshop in Blantyre, Malawi. Integration is becoming tangible and practical for transforming smallholder agriculture in Africa. From the design of multi-sector platforms in Ethiopia, the development of agricultural information management systems accessible by cellphones in Eswatini, or the formalization of payment for environmental services in Kenya with the Upper Tana Nairobi Water Fund, there is growing evidence that such innovations have potential for impactful outcomes.

Furthermore, different ways have been explored to scale up and make systems sustainable, such as value chain approaches in Uganda, political endorsement in Niger, farmer to farmer learning in Nigeria. The number of tools to monitor food systems transformation and track land degradation is also a testimony of the RFS dynamism, as well as the establishment of a global platform for farmer field schools.

As the RFS is coming to an end, I would like to pay tribute to Gustavo Fonseca, Director of Programs at the GEF Secretariat, who pioneered and inspired this path to integration and under whose guidance the GEF has emerged as a major partner for advancing this approach to tackle environmental challenges globally. Gustavo passed away on August 31, 2022.

More than ever before, the year 2022 has demonstrated that food systems are facing enormous challenges. Despite the challenges posed over the projects lifespan by the COVID-19 pandemic and other shocks, the Resilience Food Systems Programme (RFS) has achieved significant results towards sustainably improving resilience for food security in sub-Saharan Africa.

The 2022 report showcases numerous examples of how the programme built resilience in smallholder farming, shaped policies, and strengthened institutional frameworks in targeted countries across Sub-Saharan Africa to produce positive impacts for those facing short and long term climate and other shocks.

Notably, the report demonstrates how connecting agroecological approaches and smallholder livelihoods through an integrated approach can lead to long-term scalability and sustainability beyond the end of the programme.

In addition, the Resilience Food Systems Programme has played a key role in facilitating south-south exchanges, multi-stakeholder and multinational dialogues, rural advisory, sustainable land and water management, livelihood diversification, value chain greening, and capacity building on ecosystem services assessment, all while prioritizing gender mainstreaming and private sector engagement. With only a few months until completion of the programme (end June 2023), I am proud to reflect on the achievements and transformations that the Resilience Food Systems Programme has brought on the ground. These experiences have taught us valuable lessons and yielded best practices that can be leveraged in similar investments in the future. Notably, the RFS Programme has been instrumental in shaping the GEF8 Integrated Programme on Food Systems, in which IFAD and FAO serve as co-leads. I am confident that the successes and knowledge gained from RFS will continue to drive positive change in the years to come.

These achievements are only possible with our countries and partners’ engagement, especially the Global Environment Facility (GEF), to whom we express our recognition for their leadership on programmatic approach. Moreover, the key implementing partners of the global hub project- ICRAF, FAO, UNEP and AGRA have contributed greatly to the achievements.

I extend my heartfelt appreciation to the RFS management team, and especially the IFAD Programme Manager, Mr Jonky Tenou, for his leadership and dedicated services under this programme.
Executive Summary

2022 marked the fifth year of the Resilient Food Systems (RFS) programme. Like in preceding years, we celebrated many milestones in the road towards sustainable food security in sub-Saharan Africa, but also like the years before it, it was unique.

Originally intended to close at the end of 2022, the results of the programme are pouring in against our indicators and validating the integrated approach that RFS has been piloting since 2017. The programme has been awarded a 6-month, no-cost extension until 30 June 2023 (with a few RFS projects going even beyond) to enhance sustainability of activities, and cross-country dialogue facilitated through the programme this year is aiding in the implementation of these mechanisms in our country projects.

The 2022 reporting period was marked not only by the numbers, but also the clear connections between enhancing agroecological approaches and smallholder livelihoods. By integrating these themes, RFS projects are on due course to scale up and out long after the programme ends, changing the lives of millions in the project areas, but we don’t do it alone.

Thank you for your continued support and for reflecting with us.

RFS PCU
Chapter 01

About RFS
Country Projects

Our twelve country projects are located in the dryland regions of sub-Saharan Africa. This area is extremely vulnerable to environmental degradation and climate change. In line with the broad approaches of the RFS programme, each country project invests in safeguarding the environment, advancing food security and improving the livelihoods of the people affected by their activities.
Programme Themes

**Agroforestry & Reforestation**
Integrating trees into agricultural systems to preserve productive ecosystems and adapt to climate change.

**Gender**
Adopting gender-responsive approaches to support equal access to all project activities.

**Integrated Water Management**
Planning, developing, and managing water resources for quality.

**Science, Policy & Institutions**
Connecting policy with science to advance agricultural and environmental agendas in institutional frameworks.

**Sustainable Land Management**
Managing the sustainable use of soils, water, animals and plants for healthy communities and ecosystems.

**Value Chains & Market Access**
Developing new market-oriented value chains and greening existing chains to reduce economic vulnerability.

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Regional Hub

The main responsibilities of the regional hub:
- Coordinate efforts and provide technical support to the twelve country projects,
- Ensure cross-project learning and collaboration,
- Monitor and assess programmatic progress, and
- Establish partnerships, collaboration, and consistency with other initiatives at the regional and global levels.

**COMPONENT 1**
**INSTITUTIONAL FRAMEWORKS**
Create and strengthen integrated institutional frameworks and mechanisms for scaling up proven multi-benefit approaches.

**COMPONENT 2**
**UPSCALING OF INTEGRATED APPROACHES**
Scaling up integrated approaches and practices, including resilient and sustainable food value chains.

**COMPONENT 3**
**MONITORING & ASSESSMENT**
Monitoring and assessment of global environmental benefits and agro-ecosystem resilience.

**COMPONENT 4**
**PROGRAMMATIC IMPACT, VISIBILITY AND COHERENCE**
Coordination, reporting and general management functions across RFS projects for programmatic impact, visibility and coherence.

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Figure 2. RFS Regional Hub components
RFS in Numbers

PEOPLE

Women directly benefiting from project activities over 1.9 million

- 70% 56,704 Burkina Faso
- 60% 6,890 Eswatini
- 56% 35,585 Ghana
- 44% 645,330 Ethiopia
- 41% 12,115 Malawi
- 43% 928,209 Niger
- 47% 43,266 Nigeria
- 49% 20,330 Senegal
- 52% 152,622 Burundi
- 41% 19,835 Kenya
- 33% 3,255 Tanzania
- 63% 11,899 Uganda
RFS country projects engage over **4 million** beneficiaries.

**2211 Farmer Field Schools or Agro-Pastoral Field Schools established**

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<th>Country</th>
<th>Target</th>
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* (incl. Co-financed project)
### Projects’ disbursements (USD) against GEF grant

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<th>Country</th>
<th>Grant</th>
<th>Disbursement</th>
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**Partnerships**

- **11** Multistakeholder platforms at the national level
- **1177** Multistakeholder platforms at the district/landscape level
- **88** Multistakeholder platforms at the local level
- **$116 million** GEF Grant (USD)
- **$785 million** Secured co-financing
- **14** INRM policy instruments and regulatory frameworks established
**PESTLE**

337,314 hectares of previously degraded land restored (79% of the programme target)  
(GEF 7 core indicator 3)

- **Burkina Faso**: 10,192 hectares restored  
  - 1,050 target  
  - 6,505 target

- **Kenya**: 78,241 hectares restored  
  - 4,920 target

- **Nigeria**: 36,566 hectares restored  
  - 165,461 target

- **Senegal**: 1,600 hectares restored  
  - 2,250 target

- **Tanzania**: 25,488 hectares restored  
  - 3,500 target

- **Ethiopia**: 1,897 hectares restored  
  - 45,000 target

- **Ghana**: 1,897 hectares restored  
  - 4,920 target

- **Burundi**: 25,488 hectares restored  
  - 4,920 target

- **Malawi**: 2,388 hectares restored  
  - 12,500 target

- **Niger**: 29,994 hectares restored  
  - 1,050 target

- **Uganda**: 78,241 hectares restored  
  - 4,920 target

- **Eswatini**: 470 hectares restored  
  - 3,500 target

- **Guinea**: 30,079 hectares restored  
  - 1,050 target

- **Niger**: 1,576 mitigated

- **Nigeria**: 5,260,000 mitigated

- **Senegal**: 30,963 mitigated

- **Uganda**: 286,439 mitigated

- **Burkina Faso**: 2,669,198 mitigated

- **Burundi**: 7,602,646 mitigated

- **Kenya**: 5,800,000 mitigated

- **Ethiopia**: 17,697 mitigated

- **Niger**: 1,576 mitigated

- **Senegal**: 30,963 mitigated

- **Uganda**: 286,439 mitigated

* (incl. Co-financed project)
IFAD, CIFOR-ICRAF and other partners held a side event at the United Nations Convention to Combat Desertification (UNCCD) COP15 in Abidjan, Côte d’Ivoire.

Case studies from three RFS programme countries (Nigeria, Burundi and Senegal) and from IFAD projects in Cambodia demonstrated emerging lessons on integrated SLM and payments for ecosystem services. The event also included an interactive session and a panel discussion on the main challenges in addressing LDN in smallholder farming.

Key country project representatives, partners and Consultative Committee members were invited to Blantyre, Malawi to exchange experiences, take stock of lessons learned, and jointly plan for the final steps of the RFS programme.

IFAD hosted a side event at the United Nations Framework Convention on Climate Change (UNFCCC) COP27 in Sharm El-Sheikh, Egypt, highlighting the innovative approaches and successes of the RFS Eswatini and Niger country projects in dryland transformation.

A panel discussion including the Regional Hub partner CIFOR-ICRAF also looked at ways to scale up best practices in climate and food systems resilience for large-scale landscape transformation in Africa.
Chapter 02

Engage
South-South Exchanges & Multinational Dialogue

RFS is not only piloting an integrated approach to achieving food systems and environmental sustainability, we are also piloting a new way forward where development projects convene, work together, exchange knowledge and experiences, and learn from each other.

This puts multinational dialogue at the core of the programme, and south-south exchanges at its heart. This year, the Regional Hub and Country Projects were present at several high-level events.

**UN COPs**

At the UNCCD COP15 in May, IFAD held a side event in partnership with CIFOR-ICRAF and several other multinational development organisations. The event was titled *Integrated approaches for sustainable land management in sub-Saharan Africa and South-East Asia* and presented emerging lessons from RFS Nigeria, Senegal and Burundi in sustainable land management.

Also at COP15 were country projects Eswatini and Burkina Faso. The Eswatini delegation presented on their Ngololweni wetland and Sikhunyane land rehabilitation and re-use projects at the RIO Pavilion. Burkina Faso formed part of the panel *My Land My Rights - Legitimate Tenure Rights for Food Security, Climate Resilience and Ecosystem Restoration* on Food Day.

IFAD also held a side event at the UNFCCC COP27 highlighting improvements in dryland productivity and investments to advance food security and livelihoods for people exposed to climate change in RFS Eswatini and Niger.

**Scaling Tools on the World Stage**

*Conservation International* presented the Resilience Atlas and Trends.Earth tools for ecological restoration in Africa at the first Society for Ecological Restoration Africa symposium in May 2022. The theme of the event was ‘Restoration Tools for the African Landscape.’

As Africa’s first water fund, the UTNWF has consolidated new and existing methods of operationalising sustainable land and water management into an independent trust. During the 9th World Water Forum in Senegal, UTNWF Trust president and conservation Programme Manager Eddy Njoroge participated in several events under the forum theme of ‘Water Security for Peace and Development.’ This engagement led to invaluable experience exchange within the global community.

**The 2022 RFS Annual Knowledge Exchange & Learning Workshop**

After two years of mostly virtual interactions, the RFS programme met in Blantyre, Malawi to celebrate the successes of the regional IAP and exchange lessons learned in facilitating food systems transformation in sub-Saharan Africa.

The Workshop consisted of:

- 6 jointly-designed Learning Labs exploring core RFS themes
- An evidence and experience session highlighting RFS impact on the ground
- Field trips to visit the RFS Malawi irrigation schemes and catchment management projects hosted by the PRIDE-ERASP teams
- A meeting with the RFS Consultative Committee
- An interactive panel session with key RFS stakeholders

Read the full summary of the event on our website and download the full Workshop report from the Knowledge Centre.

"WHEN YOU ARE INSIDE, YOU DON’T KNOW IF YOU’VE DONE MUCH, BUT THROUGH OTHERS’ EYES IT’S EASY TO SEE THAT YOU REALLY HAVE DONE THINGS."

Jonky Tenou, IAP Task Manager for IFAD
Influencing Policy & Institutions

Enabling Environments

RFS country projects work closely with local and national governing bodies to strengthen the enabling environment for scaling sustainable farming practices and enhancing food security. This takes different forms in each unique context.

In Ethiopia, for example, a national multi-sector project steering committee is responsible for overall project guidance and for providing strategic direction. The committee is chaired by the Environmental Protection Authority with members from the Ministry of Finance, the Ministry of Agriculture, the Ministry of Water and Energy, the Ethiopia Biodiversity Institute, the Ethiopian Wildlife Conservation Agency, seven state Environmental Protection bureaus and 12 woreda administrations. By bringing together these stakeholders across different, and sometimes competing, sectors, the actors can better understand each others’ objectives and find policy routes that are harmonious.

FAO, ICRAF and the SHARED Decision-making Hub collaborated to gather evidence, lessons learned, tools and resources in their report on Strengthening the enabling environment for sustainable and climate-smart land management in Africa. The report draws on examples from RFS country projects on what the enabling environment looks like on the ground.

In November 2021, the RFS PCU presented the event Advocating for Resilient Food Systems as part of the 2021 Virtual Workshop Series. The workshop shared effective approaches for driving socioecological change and shared approaches for country projects to influence policy and implementation processes in their unique contexts. This crucial training offered steps and concrete actions, backed by research and established tools, as well as examples from advocacy on the ground in RFS country projects. The learnings from this event culminated in a new report from FAO, ICRAF and the SHARED Decision-making Hub titled A framework for advocating Resilient Food Systems in Africa, and many of the teachings were put into practice almost immediately in Nigeria.

RFS Nigeria pays a visit to the Nigerian House of Representatives and Senate

The RFS project has established a national, multi-stakeholder, gender-sensitive and inclusive advocacy platform in Abuja. The platform hones the skills and experiences of men, women, youth, and civil society to influence policy as it relates to food and nutrition security.

In December 2021, the platform paid a visit to the Nigerian House of Representatives and Senate to advocate on behalf of rural smallholder farmers and the agricultural sector.
Building Partnerships

Partnerships are integrated into the RFS programme at all stages and levels, drawing from unique experiences and knowledge that create mutually beneficial outcomes that would be a challenge to facilitate from standalone projects. Solid partnerships also form the foundation for sustainability and up-scaling of interventions post-RFS. Here are some examples of the partnerships we engaged with in 2022:

**Public Sector**

In partnership with Burkina Faso’s National Center for Forest Seeds (CNSF), the Neer-Tamba project is working to:
- Create a nursery to produce seedlings,
- Harvest and store seeds, and
- Regulate forest seeds in Burkina Faso.

As of 2021, 50 nursery workers were trained and employed, and 50 beneficiaries received seeds and training in Yatenga, Passoré, Zondoma and Loroum provinces. With help from CNSF, an additional 342 kg of seeds from 3 local species (African Baobab, Moringa, Jujube) were provided to provincial partners for distribution to an additional 50 beneficiaries.

Additionally, the RFS Nigeria project reviewed and harmonized national policies on food and nutrition security into the National Sustainable Food Security Resilience Framework (NSFSRF), accompanied by an implementation action plan. This has been signed by the Minister of Agriculture and Rural Development and is now on its way to implementation.

In the livestock value chain, ESWADE has engaged with several private sector businesses for product buy-back, and to connect farmers with input providers and markets. Here are a few of those companies:
- Impendulo Goats Project
- Somkhandi’s Investments
- Organic Honey
- Lujilo Honey
- Makhaya Chickens
- Vilakati Farm Services

This advocacy campaign is one of the external factors that influenced the quick passage of the National Rice Council Bill in January 2022. The Council will provide guidance on research, development, and on organising stakeholders to enhance the rice sector.

The issues raised were:
- Establishment of the National Rice Development Council
- Improving access to simple processing and production mechanization and tools
- Introduction of high-yield seed varieties
- Combatting fertilizer adulteration through a bill that will protect farmers
- Providing sustainable support to extension and research institutions
- Halting rice importation barriers and fluctuating market prices in the wake of inflation and insecurity
- Making a case for climate change mitigation, security of farmers, and adaptation

This advocacy campaign is one of the external factors that influenced the quick passage of the National Rice Council Bill in January 2022. The Council will provide guidance on research, development, and on organising stakeholders to enhance the rice sector.
Civil Society

While ERASP is facilitated by different ministries from the Government of Malawi, it is implemented through partnerships with civil society. Extension agents and frontline staff are trained in irrigation and natural resource management to support farmers in employing sustainable land management practices that deliver benefits to entire project catchments.

**Community-level institutions involved in the project include:**
- Catchment Area Management Committees (CAMCs),
- Village Natural Resources Management Committees, and
- Interim Waters Users Associations.

All community-level committees have been effectively trained on project activities and are able to implement them independently. This is to ensure sustainability of the project results after the programme ends.

Research

The RFS Ethiopia project has been working with several national research centres to fill knowledge gaps that have been identified throughout the project and to support sustainability of the project activities. Findings are being finalized to inform research outputs that can benefit smallholder farmers in the long-term, and filling these knowledge gaps (and any new ones that are identified) will continue to be undertaken long after the project ends.

**Here are some of their projects:**

**Haromaya University**

- **Where**: Chiro and Doba woredas
- **Topics**:
  - Research on soil carbon
  - Multi sectoral problem-solving for food security issues

**Debrebirhan University**

- **Where**: Menz-gera and Angolela woredas
- **Topics**:
  - Adaptation of frost-tolerant and highly-adaptive plant species
  - Technology for livestock production

**Melka-Werer Agricultural Research Center**

- **Where**: Amibara woreda
- **Topics**:
  - Identification, adaptation and propagation of salt tolerant fodder and crop species

**Jigjiga University**

- **Where**: Tuliguled and Gursum woredas
- **Topics**:
  - Provision of technical support in integrated watershed management interventions – particularly in gully rehabilitation and soil water conservation technologies

**Wolaita-Sodo University**

- **Where**: Duguna Fango woreda
- **Topics**:
  - Adoption of alternative technology for reducing land degradation and enhancing biodiversity
Rural Advisory and Engaging Audiences

“COMMUNITIES LEARN BETTER FROM EACH OTHER THAN FROM EXPERTS.”
Lynn Kota, ESWADE

Farmer-farmer exchanges help connect rural people with locally-relevant information and support them in adopting sustainable farming practices. This year, RFS projects undertook several initiatives to engage farmers in knowledge sharing, and to reach wider audiences to communicate the programme results and activities.

RFS Uganda Partners with Access Agriculture

The RFS Uganda project, led by FAO, partnered with Access Agriculture and local FFSs to develop a series of farmer to farmer training videos to add to a growing library of knowledge encouraging South-South learning. Technical staff are trained in video production, but farmers themselves lead the messaging of the videos which are translated into local languages. The videos are additionally translated into several other languages including English and French to promote widespread access and use.

So far, the project has developed 20 videos which were released in late-2022, but more are on their way.

Making Every Voice Count for Adaptive Management (MEV-CAM)

The MEV-CAM project from FAO is helping communities document their existing sustainable land and forest management practices and baseline environments through participatory videos; an innovative method of knowledge sharing.

Participants from RFS projects in Tanzania, Burkina Faso, Burundi and Niger completed a series of trainings throughout 2022 to learn the participatory video process, and begin filming with communities. The videos are in production and are expected to be released in early 2023.

Watch & Learn

ESWADE is looking to various mediums to interact with farmers and engage national audiences with the project activities and results. As of this year, they produced 8 documentaries on project interventions: permaculture, Conservation Agriculture, legume farming, beekeeping, goat production, indigenous chickens, horticulture, land rehabilitation and chiefdom development planning.

The Eswatini team also engaged with farmers on television through the Kusile Breakfast Show where they discussed sustainable land and water management techniques, livestock nutrition, and community development. They participated in 8 live shows last year, providing information that has helped rural people make informed decisions in agriculture.

An SMS platform that was piloted in Eswatini in early 2020 is scaling up through its connection with an Agricultural Information Management System (AIMS) which compiles monthly production and marketing information to disseminate to farmers, as well as weather advisories. This year, the AIMS registered 1488 new users against their annual target of 1200, and received 87,271 visitors to the platform.
Spotlight: The Upper Tana Nairobi Water Fund is now an independent trust

The UTNWF, led by IFAD, was the first water fund in Africa, and now, following completion of the 5-year RFS programme cycle, it is fully independent.

The objective of the UTNWF is to scale climate-smart agricultural practices in the upper-Tana River basin in Kenya. The Tana River supplies 95% of the water used by Nairobi’s 4.4 million residents, and half of the country’s hydropower, but growing populations, climate shocks and unsustainable agricultural practices threaten the quality of its waters.

The approach of the UTNWF is to treat the water at its source, rather than at downstream extraction sites. Alongside a rich network of multi-stakeholders representing public agencies, NGOs, and community-based organisations, the UTNWF has engaged private sector actors by making a business case for investing in rural livelihoods in the Tana River headwaters.

By supporting farmers to adopt sustainable farming practices, and building institutional capacity in M&E, the UTNWF has reported an additional 42 million litres flowing into the Thika Dam, reduced sedimentation of the waters, and reduced turbidity by 16%. This all leads to reduced treatment costs downstream by the water utility, lowering energy costs for residents.

Now that the Water Fund is an independent entity, its successes are hitting the World stage through more than 24 (so far!) regional and international meetings to share knowledge and lessons learned.

The UTNWF has worked closely with the Eldoret-Iten Water Fund, a new initiative also in Kenya and operating under the GEF-7 funding cycle, and it is now past the design phase. Several other water funds in Africa have also been developed including in Greater Cape Town, Sebou, Addis Ababa, Tanga, Blantyre, and Freetown.

Following the 2022 RFS Knowledge Exchange and Learning Workshop in Blantyre, Malawi, the UTNWF team stayed for an extra few days to visit the Blantyre Water Fund sites, observe their potential obstacles and share knowledge on potential opportunities with Malawi colleagues. As a leading initiative in their field, the UTNWF are committed to scaling the water fund model into other parts of Africa to enhance the resilience of rural people and safeguard the environment for years to come.

Over USD 4 million mobilised from private sector investments to support conservation work

8 500 farms supported to obtain Rainforest Alliance certification for Arabica coffee

33 river gauging stations continuously log data in 30 minute intervals to inform decision-making

Here is a bit about this independent water fund in numbers:

WE HAVE EVERYTHING TO CELEBRATE IN THIS PROGRAMME.”

Agnes Chepkorir Yobterik, Director, Programmes, Projects and Strategic Initiatives, Ministry of Environment and Forestry, Kenya

5 permanent monitoring sites established for assessing land health using the the Land Degradation Surveillance Framework (LDSF)

15 university students granted scholarships to research thematic areas within the project
Chapter 03

Act
Sustainable Land & Water Management

Planting Trees to Stabilise Slopes

Perennial plants have longer time to establish, thus reaching deeper and stronger into the ground than most annual plants. This is why trees which have long lifespans are commonly used to stabilise areas of land that are prone to erosion like slopes and riverbeds.

In Burundi, the waters of the Kayokwe and Kaniga Rivers are being harnessed to provide small-scale irrigation and support food production even during the dry season. The project is benefiting 1614 ha of cropland and 2696 households that rely on these rivers. The RFS Burundi team is protecting the rivers in turn by raising 157 063 bamboo trees to plant along 47 km of riverbanks.

In Malawi, the ERASP project is working upstream of PRIDE irrigation schemes downstream to scale sustainable land and water management at catchment scale and improve water quality and quantity moving through the irrigation infrastructure.

In Niger, migrating sand dunes pose a challenge to crop production, so the project has turned to dune binding, tree planting, half moons, uprooting invasive plants and other anti-erosion works on 23 517 ha of agro-sylvo-pastoral land. They’ve also treated 188 234 ha through assisted natural regeneration. As of this year, the project boasts achievement surpassment of all their SLM targets.

In Nigeria, the project has continued trainings and provided seedlings to 12 380 (6 775 Male, 5 605 Female) beneficiaries to support the agroforestry systems in their communities. This has resulted in a total of 44 857 seedlings planted in 70 project communities.

In Eswatini, the Plant a Tree Campaign implemented in previous years has been transitioned into the Adopt a Tree Campaign. The goal? To ensure the survival of the trees planted through the project.

In Ethiopia, 30 school clubs with a total of 2705 members (1470 male, 1255 female) in 10 districts have greened their school compounds, planted seedlings, and are toting a reusable shopping bag. The RFS project distributed 2 320 farm tools and 64 000 tree seedlings, including fruit trees, to the schools.
Mechanising SLM

SLM techniques can range from being high-intensity or highly invasive to low, depending on needs on the ground.

Here is an example of each from RFS country projects this year:

Gully erosion is a big problem in Eswatini but one that is being combated with machinery and planting of native species to rehabilitate the land. The Ndinda Gully, for example, is about 30 m deep, 15 m wide, and 1 km long. The gully was reshaped with the help of large machinery, gabion stops were then installed to trap sediment and fill the gully, and then the community came in and planted kikuyu grass and 130 indigenous trees that are known for their soil-holding capabilities.

Treadle pumps are benefitting 70 project communities in Nigeria. The device is mechanised but requires human power to operate the foot pedals, and they are used to drain flooded farm and extract groundwater for irrigation. 1,593 farmers (890 Female, 703 Male) are benefitting so far.

Mafai and Haubi villages in Kondoa District of Tanzania are already seeing an increase of up to 500% in maize yields from 4-6 bags/acre to 40-50 bags/acre. This occurred in spite of low rainfall recorded in 2022, after the implementation of Mbegu Tisa and Jembe la Mzambia planting pits in the project sites. The techniques involve replacing low-fertility subsoil with a mix of topsoil and manure to improve structure, water retention and fertility.
Safeguarding the Environment

RFS is working against **core indicators** on carbon storage alongside biodiversity and resource use goals that are contextually relevant. Here are a few examples of how these themes are represented in our country projects and **Regional Hub** activities.

**Burkina Faso**

In 2019, the **Neer-Tamba** project provided financing to develop the Tin Fii cooperative in Fada, Eastern **Burkina Faso**. Now, the cooperative is independent and safeguarding a threatened species, the néré seed, which is used to create a paste called Sumbala. This is an important activity for women in the community who are the primary processors of the condiment. Watch the full documentary short on our YouTube channel.

In addition, the **RFS Burkina Faso project’s climate-smart agroecological activities** have led them to **sequester more than 2,669,198 tonnes of CO₂** equivalent so far.

**Ethiopia**

The project has engaged 22,518 households (14,353 female-headed, 8,165 male-headed) in clean and efficient energy use through technologies including fuel efficient cooking stoves, biogas and solar powered water pumps. As a result, 17,697 tonnes of CO₂ equivalent emissions have been avoided over the past two years.
Improving value chains through multi-stakeholder platforms

RFS has 22 sustainable value chains in development

In February, FAO and CIFOR-ICRAF’s SHARED team held a Training of Trainers for Multi-Stakeholder Platform (MSP) Facilitators on the ground in Uganda to promote MSPs that will stand well on their own after the project’s end and support sustainable value chains.

UNEP is now linking up with the RFS national focal points to providing capacity building trainings on best practices for integrating SLM into regulatory frameworks. Capacity building trainings in Nigeria and Burkina Faso followed the Uganda training, which underwent a second, virtual session in March.

The RFS Uganda project formed MSPs around commodities with value additions like cassava flour, maize flour, sorghum flour, honey, beeswax and a fermented sorghum beverage. Each platform was operationalised by local Executive Committees.

Here is a breakdown of who participated where:

**Sorghum**

- **Kaabong**
  - 50% Female Participants
  - 40% Male Participants
  - 10% Youth Participants

- **Karenga**
  - 50% Female Participants
  - 40% Male Participants
  - 10% Youth Participants

- **Nabilatuk**
  - 40% Female Participants
  - 45% Male Participants
  - 15% Youth Participants

**Kaabong Cassava**

- 40% Female Participants
- 40% Male Participants
- 20% Youth Participants

**Moroto Honey**

- 20% Female Participants
- 50% Male Participants
- 30% Youth Participants

**Kotido Livestock**

- 25% Female Participants
- 55% Male Participants
- 20% Youth Participants

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**A Closer Look at Uganda**

In February, FAO and CIFOR-ICRAF’s SHARED team held a Training of Trainers for Multi-Stakeholder Platform (MSP) Facilitators on the ground in Uganda to promote MSPs that will stand well on their own after the project’s end and support sustainable value chains.

**Improving value chains through multi-stakeholder platforms**

**RFS has 22 sustainable value chains in development**

**Burundi**

- Potato
- Goosesgrass
- Beekeeping
- Horticulture

**Kenya**

- Avocado
- French beans
- Coffee
- Tea

**Malawi**

- Beekeeping
- Horticulture
- Sweet potato

**Swatini**

- Legumes
- Chicken
- Goats
- Beekeeping
- Horticulture

**Ethiopia**

- Sheep
- Beef
- Chicken
- Wheat
- Ground nut

**Burkina Faso**

- Rice
- Bean
- Shea butter

**Nigeria**

- Maize
- Soybeans
- Cassava

**Senegal**

- Millet
- Milk
- Cowpea

**Uganda**

- Cassava
- Sorghum
**Good Neighbours in Nigeria**

The RFS Nigeria project conducted a training with beneficiary farmers on scaling CSA practices to neighbouring communities. So far, the project has trained 8,639 (4,931 Female, 3,708 Male) beneficiaries who are disseminating activities with peer farmers.

However, neighbouring communities can see the benefits themselves and are taking the initiative to attend gatherings and trainings on their own. A Study Report on Increased Crop Production from May 2022 showed just how beneficial the project practices are, not just for sustainable environments, but also in increasing yields. In consultation with beneficiaries, they reported that production in the project areas increased in all major crops. Now, these benefits are being scaled to other communities for greater food security in Nigeria.

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<th>Baseline Values</th>
<th>Study Report</th>
<th>% increase</th>
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<tbody>
<tr>
<td>Rice</td>
<td>6,230,208</td>
<td>8,090,275</td>
<td>22%</td>
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<td>Groundnut</td>
<td>585,006</td>
<td>686,929</td>
<td>17%</td>
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<td>Cassava</td>
<td>1,659,492</td>
<td>1,898,049</td>
<td>14%</td>
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<td>Maize</td>
<td>1,789,374</td>
<td>2,206,250</td>
<td>23%</td>
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<tr>
<td>Sorghum</td>
<td>793,430</td>
<td>914,874</td>
<td>15.3%</td>
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</table>

**Scaling & Sustainability**

The RFS programme has received a no-cost extension until 30 June 2023, and some of the key activities in this time will be in strengthening sustainability mechanisms for project activities long afterwards. Country project teams and Hub partners are taking unique approaches that are locally relevant, leveraging off of partnerships, stakeholder interest and sustainability mechanisms that have been in place since the programme’s inception.

Examples of routes being taken to sustain and scale results across the programme:

The RFS Regional Hub hosts the Knowledge Centre on our website, and a key element of sustaining project results lies in maintaining the knowledge products we’ve developed through Hub partner CIFOR-ICRAF, and those of our country projects. Opportunities and options for migrating the Knowledge Centre to other agencies are still in the works, but interest has been expressed by the Platform for Agrobiodiversity Research.

In preparation for the project exit, ESWADE supported activities to maintain key stakeholder relations with the government ministries, parastatal organisations and private sector entities.

Embedded in the 3N Initiative (Nigeriens Nourish Nigeriens), the ProDAF project has facilitated an agreement with the High Commission of Niger to provide institutional support to continue, strengthen and facilitate the project’s consultation frameworks beyond the RFS programme.

By ensuring that beneficiary communities have a comprehensive understanding that what they do upstream impacts irrigation structures downstream – and creating an enabling environment for them to do so with incentives that promote application – ERASP has fostered sustainability of the project activities because farmers can see and understand the benefits of management across catchments.
Spotlight: Updates from the Global Farmer Field School Platform

Farmer Field Schools (FFS) are an integral part of RFS country project approaches in Tanzania, Burundi and Uganda. Developed by FAO, the Global FFS Platform is now a network connecting people across continents, sectors and levels of development project implementation.

This year, the Global FFS Platform produced 15 news products through their online discussion groups, agroecology groups, and RFS news channels. The cohesive structure and vast library of knowledge products from the Platform has seen it mainstreamed into the GEF portfolio, and it is being taken forward in multinational dialogue and in the GEF-8 toolbox.

Sustainability was integrated into the Platform from its design, and now it is leveraging off of institutions and partnerships to keep the learning going.

[W] WANT TO KEEP CONTINUITY OF APPROACHES AND TEAMS SO [THE PROJECTS] DON’T BOMBARD COMMUNITIES.” said Anne-Sophie Poisot, Coordinator - Farmer Field School Programme, FAO, at the 2022 RFS Knowledge Exchange & Learning Workshop. Anchored in existing development initiatives in the project regions, the Platform thinks long-term and intends to scale the benefits to communities long after the RFS programme has ended.

Burundi
- 106 FFS groups have been structured into 39 cooperatives
- 254 Governmental staff (21% women) of which 62 are FFS Facilitators were trained in SLM monitoring and evaluation tools

Tanzania
- 127 FFS are currently operational, exceeding the project target of 100
- Farmer to farmer exchange visits have been conducted with 32 farmers from Magu (6) Mkakama (10), Nzega (10) and Micheweni (8) Districts, supported by 5 Extension Officers and 4 Ward Councilors

Uganda
- One male and one female member act as community-based farmer facilitators for each of the 252 FFS groups
- CSA/INRM. 7,513 FFS farmers (65% women) are trained in CSA/INRM
- 186 FFS have established Village Savings and Loan groups
- With support from the National Agricultural Advisory Services, each FFS received 312kg of seed through the District Agricultural Officers

Events
- Farmer field schools, to achieve a successful agroecological transition and re-think agricultural advisory services
- Agroforestry management in natural forests and pastures in drylands, Burundi, Chad, Ethiopia, Iran, Uganda, GEF-6 Resilient Food Systems Project, Global Farmer Field School Platform and FAO
- Innovative approaches of adaptation to climate change in Africa: Farmer Field Schools and Climate-Smart Villages
- Webinar on the institutionalization of farmers’ field schools in West and Central Africa
- Can we do Farmer Field Schools training remotely?
- Farmer Field Schools for the agroecological transition

Read the story
FAO’s Global Farmer Field School Platform: Successes, updates and what’s more in agroecological services
Chapter 04

Resilient Food Systems | Programme highlights 2022
**Monitoring & Evaluation**

### Citizen Science

Rural people are the most in-tuned and present in their own landscapes, so RFS country projects have made a point to engage them in data collection and the use of tools and methods to aid in decision-making.

In Burundi, 39 cooperatives and FFS groups have been trained to use participatory impact monitoring tools and approaches like Participatory M&E for FFS or the Land Degradation Assessment in Drylands (LADA LOC) tool. Overall, 24,420 farmers are now applying participatory impact monitoring tools and sharing the results through FFS exchanges.

### Extension

An SMS platform is reaching 51,400 beneficiaries in Kenya through the UTNWF. This provides extension support, surveys, and weather advisory messages to farmers, and also supports remote data collection, synchronization, analysis, and visualization of results to aid project staff on the ground. The data are based on water quality and quantity collected from 33 river gauging stations, and climate information from 6 weather stations across the Tana River watershed.

### Monitoring at Scale

The SmartME dashboard collects and presents data from across RFS country projects to aid in monitoring against core indicators from the programme. These data are updated yearly so take a look and see where we are at in year 5!

**Ethiopia has distributed:**
- 60 mobile smart phones to 60 project sites
- 6 desktop computer systems to the 6 project regions
- Internet infrastructure in all project districts
- Land use land cover changes and land productivity changes (NDVI) software along with training on how to use it

### Reporting on Resilience

Resilience is the ability to withstand challenges, but what those are differs from place to place and person to person. RFS Regional Hub partner Conservation International (CI) is conducting a study on resilience based on the experiences of the RFS country projects. As of the end of 2022, the study is nearing completion and will communicate how RFS has increased the resilience of communities faced with food insecurity against varying indicators.

To help decision-makers understand some of the challenges that intersect at the community level, the Resilience Atlas presents high-resolution land cover datasets from baseline and annual observations, including from the Earth Observation for Sustainable Development (EO4SD) Consortium. Combined with spatial socio-economic data from Demographic and Health Surveys (DHS) and baselines from RFS country projects, the continuously-updated interface orients users with a fuller picture of what development opportunities look like from place to place.

To sustain the wealth of geo-referenced data gathered from across the RFS country projects, CI is collaborating with the Regreening Africa programme, coordinated by CIFOR-ICRAF, to develop tools for M&A building from the RFS experience.
Tools of the Trade

RFS country projects each use a different set of tools to meet their unique needs and contexts. Here are a few of the tools that were used on the ground to monitor and assess food systems transformation this year.

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<tr>
<th>Diversity Assessment Tool for Agrobiodiversity and Resilience (DATAR)</th>
<th>Burkina Faso</th>
<th>Burundi</th>
<th>Eswatini</th>
<th>Ethiopia</th>
<th>Ghana</th>
<th>Kenya</th>
<th>Malawi</th>
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<td>Earth Observation for Sustainable Development (EO4SD)</td>
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<td>Integrated Food Security Phase Classification (IPC)</td>
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<td>Land Degradation Assessment in Drylands Mapping Tool (WOCAT-LADA)</td>
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<td>Multidimensional Poverty Assessment Tool (MPAT)</td>
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<td>Resilience, Adaptation Pathways and Transformation Assessment (RAPTA)</td>
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<td>RESILIENCE ATLAS</td>
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<td>Resilience Index Measurement and Analysis (RIMA) model</td>
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<td>Results and Management Impact System (RIMS)</td>
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<td>Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists (SHARP); HH-BAT</td>
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<td>Food Insecurity Experience Scale (FIES)</td>
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<td>Household Dietary Score (HDDS)</td>
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<td>Vital Signs monitoring framework</td>
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<td>Women’s Empowerment in Agriculture Index (WEAI)</td>
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<td>Outcome Mapping (OM)</td>
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**Scaling Tools**

To scale the **Vital Signs** tool, CI has:

- Joined the Natural Capital Accounting Coalition for Africa as a platform for sharing information, lessons, and experiences
- Engaged with the Global Landscape Forum to learn and share knowledge
- Joined a collaboration to support Kenya through the Regreening Africa programme coordinated by CIFOR-ICRAF in which they will play the role of developing tools for M&A
-Partnered with the Africa Forest Landscape Restoration Initiative (AFR100) to help track progress on the AFR100 targets
Building Capacity

Burkina Faso

In Burkina Faso, the Neer-Tamba project is building capacity amongst project implementers at all scales. On the ground, 5,486 beneficiaries (34% women) have been trained to use environmental monitoring tools, and 29,930 beneficiaries (39% women) have been trained on SLM good practices as of this year.

The National Chamber of Agriculture (CNA) in conjunction with the Regional Chamber of Agriculture of the North (CRA-North) of Burkina Faso developed a series of training courses to increase rural resilience to climate change, training 5,486 beneficiaries on sustainable methods like the use of bio-pesticides and green manure. All of the skills and activities implemented in RFS project regions are sustained by extension agents who are trained in them as well.

Moreover, the project engages women and youth in MSPs to enhance the collective learning and leverage off of the experiences of actors from across sectors in policy who also engage in capacity building activities with practices on the ground.

Tanzania

Training on biodiversity management, land use planning, rangeland management and gender was offered to members of the Village/Shehia Natural Resources Committees, Land Use Planning Committees, Farmer Field School and producer-group members, and district facilitation teams in Tanzania this year. The gender training in particular was attended by a total of 575 participants, engaging local authorities to transform gender relations in the communities.

Uganda

Let the numbers speak for themselves:

- 18,888 community members (63% women) trained on SLM/INRM practices – 10,002 just this year
- 7,277 farming households representing 252 FFS were trained on CSA/INRM plus 2,725 participants (1,002M: 1,723F) who are not yet affiliated with any FFS
- 42 extension Officers (30M: 12F) and community based leaders (25M: 17F) trained to support the seed multiplication program per district this year alone
- 36 community livestock health workers trained and equipped with veterinary kits
- 11 watershed management associations established with 304 resource user committee members (128F: 176M) trained to support planning and implementation of watershed management activities
- 2 virtual workshops offered training on Trends.Earth, Google Earth Engine and Participatory video recording were conducted by Conservation International and FAO, respectively, just this year

<table>
<thead>
<tr>
<th>Men</th>
<th>Women</th>
<th>Youth</th>
<th>Total participants</th>
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<tbody>
<tr>
<td>80%</td>
<td>20%</td>
<td>9%</td>
<td>243</td>
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<tr>
<td>76%</td>
<td>24%</td>
<td>10%</td>
<td>719</td>
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<tr>
<td>48%</td>
<td>52%</td>
<td>15%</td>
<td>566</td>
</tr>
<tr>
<td>75%</td>
<td>25%</td>
<td>11%</td>
<td>459</td>
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</table>
Knowledge Management

Component 4 of the RFS Regional Hub is led by CIFOR-ICRAF and is all about communicating programmatic impact and steering cohesiveness across partners and country project teams. Through our dedicated communications channels, outputs, reports and more are disseminated to stakeholders and the wider RFS audience. In 2022, the RFS Twitter audience grew from 715 followers to nearly 1200 (a nearly 60% increase!) who receive bi-weekly updates on events, news postings, resources and content related to the broader themes of food security and environmental sustainability.

RFS Reads

39 News Stories in 2022
123 in total!

12 Monthly Newsletters in 2022 monthly since August 2019

55 New resources on the RFS Knowledge Centre in 2022
225 in total!

Our most-read webpage of 2022: 2022 Resilient Food Systems Knowledge Exchange and Learning Workshop

Our top read resources

• Making a difference for women through gender-responsive project implementation: Learning Note
• Strengthening the enabling environment for sustainable and climate-smart land management in Africa: Country initiatives of the Resilient Food Systems programme
• A framework for advocating Resilient Food Systems in Africa

Through our Twitter and Facebook pages, we are connecting on the global stage with partner organisations and communities on the ground. We share knowledge products with everyone.
RFS Watches

In November, RFS launched the video Reflections from Resilient Food Systems: Piloting an integrated approach and celebrating successes, which was filmed during the 2022 Knowledge Exchange and Learning Workshop in Blantyre, Malawi.

The video comprises interviews with RFS stakeholders, and a closer look at the South-South exchanges and multinational dialogue that are so central to the integrated approach.

Also released this year is the documentary Through Her Eyes (also available in French), produced by CIFOR-ICRAF, which explored gender sensitisation training and constraints in Burkina Faso and Ghana.

We nearly doubled our YouTube video library this year!

Our most-viewed video of 2022: Burkina Faso: Poulet Local (Local Chicken)
The Land Degradation Surveillance Framework (LDSF), developed by CIFOR-ICRAF, is helping RFS country projects monitor ecosystem and soil health, and laying the groundwork for decision-making processes to come.

The tool provides a method for establishing baseline conditions and tracking landscape recovery, so integrating it into project frameworks and establishing sustainability mechanisms are key to the process. The RFS Eswatini project, ESWADE, has taken great efforts to guarantee the sustained use of the technology by engaging national-level actors in its implementation.

Data are collected using a systematic sampling method, taking into account various indicators of land health like land use, topography, and land cover, and then through soil sampling. So far in Eswatini, the RFS project has conducted data collection and analysis at 11 sites, and had 1500 soil samples processed and shipped to the ICRAF soil spectroscopy lab in Kenya. Development of the dashboard is ongoing, but once it is complete, national decision-makers will be able to easily access and create landscape maps to aid in the process.

The LDSF has been helpful in creating chiefdom management plans in 6 chiefdoms in Eswatini. This information is essential to identify target areas of intervention for reversing land degradation that are location and context-specific.

With ICRAF’s backstop the Eswatini Ministry of Agriculture’s Land Use Planning Unit and the Ministry of Information, Communications and Technology are engaged to host and run the LDSF facility at the national level. 70 governmental staff have received training on the implementation of the LDSF and the technology behind generating useful assets from the data. Even more training is planned and underway to assist in the transition of this vital tool from ICRAF to the Government of Eswatini to operate it independently.
Chapter 05
Targeting Gender
Gender engagement in numbers

89% of land under integrated landscape management is owned by women

564 women and youth have received literacy training (of a target of 320)

55% of community leadership positions are occupied by women

2387 women have been reached with time-saving technologies (e.g., water pans, irrigation pits)

4682 women engaging in micro projects

354 beneficiaries, all of whom are women, are using energy-efficient cookstoves
Women in Charge

Enhancing women’s roles in decision-making is deeply embedded in the RFS approach to resilience and sustainability.

The GEF Gender Implementation Strategy lays out six entry points for addressing gender gaps, one of which is “enhancing women’s participation and role in natural resources decision-making processes, with women as agents of change at all levels.” These entry points are directly referenced in the RFS Gender-Responsive Project Implementation Guidance Note, RFS lead agency IFAD also underscores women’s participation in decision-making in their Mainstreaming Gender-transformative Approaches at IFAD – Action Plan 2019-2025.

The following shows what integrating and prioritising women in decision-making looks like across RFS.

In Office

Women and men in Burundi are trained on conflict resolution for natural resources, and staff are trained in gender-responsive M&E and collect gender-disaggregated data across the project. Furthermore, to ensure that women’s and men’s perspectives are heard at every level, when the president of cooperative is one sex, a member of the opposite sex is appointed vice president.

In Kenya, the project is also intentional about ensuring women’s participation at all levels of project management and decision-making. This has been achieved through involving women in the Board of Trustees (20%), County Advisory Committee (42%), Project Steering Committee (39%), Project Management Unit (43%), Focal Area Teams (55%), as well as Youth Technology Promoters and frontline extension officers.

In Communities

In Uganda, 4 concrete drying yards, measuring 48 m² each, are helping women reduce post-harvest loss in the Karamoja sub-region. As the main actors in drying and storage of grains, women in the communities were seeing so much maize, sorghum and millet go to waste that food loss became the leading cause of food insecurity in their communities. The slabs have moved the drying process off of the soil, and helped produce cleaner and safer grains to enter markets. The slabs are run by women and have become a community meeting place. Read more about the slabs on the RFS website.

In Eswatini, leadership training was conducted to capacitate women with leadership skills and skills to reduce their workload. The training extended to 21 lead farmers, Inner Council members, Chiefdom Development Committee members, Natural Resources and Rangeland Management committees and women farmers participating in the project value chains. These trainees will scale their learnings to their peers for the benefit of their communities. There are about 214 women representatives in Development Committees at community level alone!

In Eswatini, about 649 female smallholder farmers are supported in business development services for crops and livestock farming.

Gender Research in Ethiopia

There are 10 fully operational gender teams working diligently across the 12 project woredas in Ethiopia. In most of the districts more than 70% of the gender team members are women, who support and oversee gender-responsiveness in the project as a whole and are led by the Head of the Women and Youth Office with members from the gender focal persons of the sector offices.

Gender teams facilitate structured community dialogue and consolidate the results and learnings into quarterly reports and key directions for the project to take, as well as influence capacity development trainings provided at the federal level to district stakeholders and communities.

To aid in collecting information on the ground through gender teams, the RFS Ethiopia project conducted a study across all woredas to:

- Identify gaps, existing practices and capacity of women in natural resource management,
- Develop a gender-responsive monitoring tool
- Develop gender-responsive, socio-economic indicators
- Identify changes over time in terms of gender roles in natural resource management

Following the study, a gender consultant was recruited to develop and implement a training module for national policy analysts, woreda gender teams and woreda experts in the collection and use of sex-disaggregated data. The 12 woreda gender teams alone have cascaded the training to their 512 (354 women and 158 men) community gender team members.
Community Connections

Community groups create a space for peer-to-peer learning that is unparalleled. They also provide a structured environment to support the activities well after the programme’s end, and scale up the benefits. Here are a few women-led groups that are making a big impact in their communities.

Mwaiwathu Goat Club

Livestock were uncommon in Mjojo village in Phalombe district, Malawi before the ERASP-PRIDE project intervened. Now, the Mwaiwathu Goat Club has seen more than 660 households receive goats under a livestock pass-on scheme which is overseen by its 45 club members (32 women and 13 men).

Each beneficiary household receives 5 goats to promote household nutrition and supply manure for agriculture. Each goat produces on average 5 offspring that are gifted to the next beneficiary in line and so on.

The beneficiaries are capacitated on livestock care which extends to a sister-programme which focuses on chicken. As of this year, more than 900 households have benefitted from goat and chicken pass-on programmes in Malawi.

Mata Masu Dubara Groups

Post-harvest loss threatens the already stretched food security status of rural Nigeriens, so the ProDAF project has been employing the Women’s Welding Granaries approach to combat it.

The reduction in food loss has reduced the length of the lean season in the RFS Niger project sites by:

<table>
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<tr>
<th>Region</th>
<th>Reduction</th>
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<tr>
<td>Tahoua</td>
<td>41%</td>
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<td>Zinder</td>
<td>26%</td>
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<td>Maradi</td>
<td>33%</td>
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</table>

The Granaries are cereal stocks that are managed by Mata Masu Dubara (MMD) groups – meaning “ingenious women” in Haussa – which are comprised of women from vulnerable households brought together by women’s savings and credit associations.

As of this year, 84 out of a target of 74 granaries have been set up.

Demaksitu Cooperative

The majority of income generation activities in the RFS Ethiopia project are targeted at women and designed with smallholder farmers and landless families in mind. Self-Help Groups are community groups which are 76% women like the Demaksitu Cooperative in Doba District.

The dairy farming group was provided with degraded land with support from the kebele administration to produce fodder. In turn the Group is protecting and rehabilitating the land which has seen several plant species return to the hilly slopes where they graze their cattle.
Livelihood Diversification

**Burkina Faso & Eswatini**

Women’s handicrafts are common livelihood options across RFS project sites, but sourcing materials isn’t always straightforward or efficient. In Burkina Faso and Eswatini, the projects are engaging in activities that naturally provide raw materials.

798 micro-projects have been financed in Burkina Faso, and women are the primary recipients of this initiative, representing 4,682 out of the total 5,242 beneficiaries (89%) to receive them. This is not only because the project targets women, but also because it is expanding forest cover, and the use of non-timber forest products is traditionally conducted by women. Women in the project area are using these materials to weave mats for sale.

Catchment management activities in Eswatini have led to an increase in grasses that women are also using to weave mats and baskets with. The newly restored catchment is being endorsed as a tourist site and so the women engaged in handicraft making are connected with a new market to sell their wares.

**Nigeria**

The RFS Nigeria project is promoting livelihood diversification by building capacity at all stages along value chains. The project targets women for all activities, and their participation and enthusiasm has been impressive.

To enhance women’s participation at diverse stages along value chains, the project:

- Supported 13,062 members of cooperative groups (61% female) in rice, groundnut, cassava, maize, soybeans, corn and millet supported value chains,
- Conducted processing and value addition training to 12,109 independent beneficiaries (81% female) on rice, groundnut, soya beans and cassava, and
- Trained 9,643 beneficiaries (41% female) from the 7 project states on aflatoxin management for groundnut and maize just this year.

**Senegal**

PARFA is working diligently towards restoring the mangrove forests that are invaluable to the livelihoods of rural people, especially women, in Senegal. By employing sustainable oyster farming and beekeeping, the women beneficiaries of the project are improving their livelihoods, and accessing advanced markets with a taste for sustainable products. So far, more than 750 ha of mangrove have been preserved or restored through the project, which is reporting an average sequestration rate of 5.66 tonnes of CO2 equivalent per hectare across their project areas.

Read the original article on our website.
Intersectionality

Many factors intersect to determine a person’s participation in development activities, and access to and control over resources. Gender is a major factor, which is why it is so central to the actions taken by RFS country projects, but there are infinite possibilities that nuance each beneficiary’s experience. Here are a few examples of constraints that coloured the approaches taken on the ground this year.

Age

The Water and Soil Conservation and Soil Defense and Restoration activities of the RFS Burkina Faso project saw 33.1% participation from women across all of their activities this year. In addition, through targeting youth, they saw involvement of:
- 35.4% youth in constructing stone bunds
- 32.6% youth in digging half-moon erosion ditches
- 32.4% youth in adopting zai planting pits
- 45.3% youth in filter dam activities

In Kenya, about 8% of the targeted youth beneficiaries have gone on to explore new opportunities in agricultural value chains, aligning with the Kenya Youth Agribusiness Strategy 2017-2021. The UTNWF also provides a 50% subsidy on all conservation technologies to women-headed households and elderly persons aged 60 years and older.

Geography

Where a community is located affects their needs and in RFS Eswatini, this has meant different resources are called for to complement project activities. For example, solar driers are needed in many areas to help preserve and prolong the shelf life of agricultural products. But in low-lying areas where it’s extra hot and sunny, ESWADE is supplying shade nets to protect crops from sun damage. This is a pilot project that began with 8 farmers this year, but will be upscaled to more farmers experiencing this geographical phenomenon.

Income Status

Many rural people are challenged by income and job security in Ethiopia, so the project has engaged out-of-work youth and smallholder, poor households in livelihood activities like small ruminant fattening and production, vegetable production, poultry, apiculture, seedling production, carpet making, tailoring, and fuel-efficient cookstove production. So far, these activities and more have created 61,254 jobs in the project areas. To ensure sustainability of the jobs and livelihood activities, the project has facilitated beneficiaries into 176 Self Help Groups – 159 of which are linked with financial institutions for long-term support.

Time

Women are typically responsible for a disproportionate amount of work in their households. In Uganda, the RFS project is working to lessen the burden of time-consuming activities like collecting firewood which is considered a woman’s role in the target areas. This year, 150 fuel saving cookstoves were constructed in the 3 project manyattas, reducing wood requirements for cooking by 50%. Women’s time spent collecting firewood was reduced from three times per week to just once.
Spotlight
Women at work in Nigeria

The Integrated Landscape Management to Enhance Food Security and Ecosystem Resilience in Nigeria project, led by UNDP, closed in 2022 and is proud to have facilitated 93,206 jobs (47% held by women) in the project areas. Women are targeted in all project activities, and some are even exclusively offered to women.

In alignment with the Nigerian Agricultural Transformation Agenda, the project facilitated 64,399 on-farm jobs (43% held by women). These positions address production, processing, marketing, and farm service provision along agricultural value chains for rice, groundnut, cassava, cowpea and more.

Off the farm, the project has facilitated 29,807 jobs (54% held by women) in a variety of livelihood activities. Beneficiaries were trained and received starter packs including resources like equipment, animals, infrastructure, and land to support for income generation in addition to farming.

Activities like beekeeping have been incredibly successful in engaging women in sustainable income generation through cooperatives, and beekeeping in particular complements the environmental restoration work that was conducted through the project. The bees pollinate crops and assist in regeneration and forest growth, while safeguarding the people who look after them in the event of shock and crop failure.

Here is the gender breakdown of some off-farm livelihood activities facilitated by the RFS Nigeria project:

- **Beekeeping**
  - Total Beneficiaries: 2,145
  - Female: 68%
  - Male: 32%
  - This is the most successful of all the off-farm activities and provides pollination to 8,365.5 hectares of land.

- **Ram Fattening**
  - Total Beneficiaries: 390
  - Female: 55%
  - Male: 45%
  - Participants are trained on new systems of fattening and are provided starter rams.

- **Dairy Goat Production**
  - Total Beneficiaries: 1,402
  - Female: 100%
  - Male: 0%
  - Women are trained in feeding and milking goats and given starter goats. They are encouraged to pass on a nanny goat to another woman in their cooperative groups to scale the activity.

- **Mushroom Production**
  - Total Beneficiaries: 548
  - Female: 70%
  - Male: 30%
  - This was identified as an opportunity during the project in Benue state during this project year, and beneficiaries have already been trained and provided starter packs to begin production.

- **Seed Multiplication & Marketing**
  - Total Beneficiaries: 5,202
  - Female: 47%
  - Male: 53%
  - Several project states are involved in this form of livelihood activity.

- **Briquette Making**
  - Total Beneficiaries: 8,914
  - Female: 55%
  - Male: 45%
  - Using rice husks and groundnut pods, beneficiaries can now produce charcoal briquettes for cooking, reducing pressure on forest resources. They have even started marketing the briquettes.

- **Production of Energy Efficient Cook Stoves**
  - Total Beneficiaries: 11,506
  - Female: 50%
  - Male: 50%
  - This employs similar technology to the briquettes, and stoves are now being marketed in and beyond the project sites.
Chapter 06

RFS Reflects
## Challenges & Lessons Learnt

<table>
<thead>
<tr>
<th>Country</th>
<th>Challenge</th>
<th>Strategy</th>
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<tbody>
<tr>
<td>Burkina Faso</td>
<td>Ensuring sustainability of activities after the project’s end</td>
<td>Encourage participation from stakeholders at all levels during project implementation to build capacity and foster ownership over the catchment development results</td>
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<td>Women and youth are inclined to over-extract resources out of need</td>
<td>Communicate the importance of sustainable ecosystems and the long-term benefits they can provide to communities to incite behavioural change</td>
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<td>Institutional involvement is compromised by high turnover rates</td>
<td>Always involve entire teams rather than just one partner from each sector or organisation</td>
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<td>Eswatini</td>
<td>Slow progress in implementing CDPs on the ground from lack of funds, competing land use objectives or turnover of roles</td>
<td>Increased teams’ capacity for proposal writing, negotiating and marketing of ideas</td>
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<td>Political unrest and COVID-19 restrictions disturbed the execution of some of the planned activities</td>
<td>Adhere to World Health Organisation and the Eswatini’s Ministry of Health’s guidelines for COVID 19 as well as to ESWADE’s Safety, Health and Environmental guidelines. Supply and deliver protective inputs to support project teams and beneficiaries to continue with work where feasible</td>
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<td>A shortage of materials and persistent rainfall have affected implementation of construction projects like ferrocement tanks</td>
<td>The project is piloting larger infrastructure (like ferrocement tanks) to minimise the number of construction projects needed to support communities</td>
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<td>Climate change-induced extreme weather such as hailstorms, prolonged and heavy rain, hot spells and increased evapotranspiration challenge farm yields</td>
<td>Mobilize resources towards adaptation activities such as agroforestry and climate advisors</td>
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<td>Ethiopia</td>
<td>COVID-19 restricted in-person meetings</td>
<td>Minimize physical meetings, instead promoting virtual and phone meetings</td>
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<td>Conflict and security posed a challenge in the project sites in the Afar, Amhara and Tigray regions</td>
<td>Advocating for the no-cost extension until June 2023 has allowed more time for project implementation and additional support for beneficiaries affected by the conflict</td>
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<td>Kenya</td>
<td>The project area is prone to landslides which are exacerbated by the effects of climate change; landslides lead to sedimentation of river systems and, in some cases, destroys water supply pipes and clogs water intakes</td>
<td>The trust is investing in mapping landslide and landslide-prone areas to provide a framework for early warning systems and increase stakeholder preparedness</td>
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<td>Niger</td>
<td>COVID-19 slowed implementation of activities</td>
<td>The no-cost extension until June 2023 will allow more time to finalise activities and implement sustainability mechanisms</td>
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<td>Without a clear sustainability mechanism, mayors, who are the primary advocates for project implementation, are likely to transition roles, taking their knowledge and experience with them</td>
<td>Involve all stakeholders in the implementation of the program for sustainability of the activities</td>
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<td>Volunteer positions in the MSPs and in on-the-ground roles such as site-guardians could constrain the potential for concerted efforts</td>
<td>The project MTR from June 2019 identified this issue and recommended support for volunteers to motivate them for better management of restored sites and MSPs</td>
</tr>
<tr>
<td>Country</td>
<td>Challenge</td>
<td>Strategy</td>
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<tr>
<td>Senegal</td>
<td>Ownership of the Environmental Information System (EIS) is low, compromising sustainability</td>
<td>The EIS could be taken up by national agricultural ministries through the Department of Planning and Environmental Monitoring by broadening the system to accommodate other projects</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Drought and uneven rainfall delayed farming seasons in some districts, emphasizing the need for scaling up adaptation practices, but there is limited documentation on appropriate climate change adaptation practices</td>
<td>The project is testing various adaptation farming practices in FFS and monitoring results with simple logs to inform scaling up of promising practices with help from evidence-based knowledge products</td>
</tr>
<tr>
<td>Uganda</td>
<td>A bordering nature reserve may experience encroachment due to proximity with the project activities, leading to conflict</td>
<td>The project is providing water points in each district for both irrigation and animal production to reduce water extraction and disruption of the reserve</td>
</tr>
<tr>
<td></td>
<td>Cattle rustling may challenge the beef MSP</td>
<td>Government intervention has increased the level of security in the region</td>
</tr>
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<td>COVID-19 restrictions have slowed the project by limiting the number of people allowed to congregate</td>
<td>Mass vaccination, online meetings for technical project implementers, and new regulations are allowing more people to meet.</td>
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<tr>
<td></td>
<td>New crop and animal diseases</td>
<td>Pests and diseases are under control and continuously monitored through the Ministry of Agriculture</td>
</tr>
<tr>
<td>Hub</td>
<td>The response rate from country teams has been overall low in terms of sharing data to be fed into the SmartME system. Additionally, there have been some slow responses to various training offers (due to various reasons such as projects coming to an end or unapproved workplans)</td>
<td>Hub partners will intensify efforts to follow up with countries on monitoring and assessment, as well as on training opportunities and technical support; this might include adopting virtual tools or reallocation of funds to develop online, self-training courses</td>
</tr>
</tbody>
</table>

### 5-year reflection

**What has been your favourite moment or greatest accomplishment in the last five years?**

**The project in Burkina Faso is entering the close-out phase until the end of March 2023. Our greatest success is the scaling up of good agricultural practices in the Northern region and this may have resulted in carbon sequestration of around 19% of Burkina Faso’s Nationally Determined Contributions.”**

Sidbewindin Simon Kabore, Environmental Monitoring Manager, NEER-TAMBA Project

**Successful transition of the project to a local organization (UTNWF Trust – www.nairobiwaterfund.org), 4 months before end of project.”**

Anthony Kariuki, Project Lead, Upper Tana-Nairobi Water Fund (UTNWF)
Over 1,000,000 direct and indirect beneficiaries have been reached with benefits such as increased income, diversified livelihood, improved postharvest skills, reduced postharvest loss, enhanced Household Dietary Diversity Score (HDDS) & Food Consumption Score (FCS) and adaptation to climate change shocks. The project created thousands of additional jobs across the value chain and in the off-farm coping mechanism strategy.

It helped increase farmers’ yield through the adoption of climate-smart agricultural technologies. Farmers are adopting techniques of safeguarding their environment through soil erosion control, carbon sequestration and establishing an agroforestry system. It set a stepping stone in creating an enabling environment by reviewing and harmonising all Nigerian Agricultural policies favouring smallholder farmers."

Rhoda Dia, Project Lead, Integrated Landscape Management to Enhance Food Security and Ecosystem Resilience in Nigeria

"Our greatest moment in the last 5 years is above all the positive impact that we have recorded in the daily lives of the beneficiary populations: namely the development of activities where we thought it was impossible to do so, especially with the recovery of salt land with the construction of anti-salt and water retention dams.

There is also mangrove honey production and oyster farming in the Fatick region of Senegal. And ultimately the fact that these populations now have storage stores and production tracks where it was difficult to move."

Dr Souleymane DIOP, Former Acting Coordinator, Agricultural Value Chains Resilience Support Project (PARFA)
**The final push**

As a regional programme, the RFS was given a 6-month, no-cost extension until 30 June 2023, with a few country projects having been extended even beyond that. Here's what the continuing projects are most looking forward to this year:

**Ethiopia**

The extension has given us an important additional time to complete and develop the stakeholders accountability and sense of ownership. Furthermore, though the sustainability of the project has been thought initially from the project start and was part of the project document and strategically inbuilt, we have also developed an exit strategy document as per the recommendation from TE.

We also focus on the engagement of stakeholders to maintain and upscaling the project results into the broader Ethiopia area and provide some inputs to the relatively weak communities/beneficiaries of the project.”

**Salvator Ndabirosisere, Project Lead, Support for Sustainable Food Production and Enhancement of Food Security and Climate Resilience in Burundi’s Highlands**

**Malawi**

The Enhancing the Resilience of Agro-Ecological Systems Project (ERASP) is a project that ensures that the irrigation structures constructed under another project, PRIDE, are resilient to climatic shocks by conserving the upper part of the catchment where irrigation schemes are constructed.

The year 2023 will see construction of six schemes completed under PRIDE Project. We will therefore endeavor to construct adequate soil and water conservation structures around and upstream of these structures. The structures targeted are open canals, intake points and night storage reservoirs. Also targeted will be the streams and rivers supplying water in the catchment.

Since several nurseries have been established by the communities in the catchments, we look forward to continuing planting trees and grass cover along the banks of these streams and rivers as well as hotspots identified under the Village Level Action Plans (VLAPs). We also hope that livelihood activities, such as beekeping and livestock pass-on program will reach many people and improve their lives. These activities are done in order to motivate the farmers upstream the catchment that do not directly benefit from the irrigation schemes.

The interventions mentioned above will not only cover catchments that were initially earmarked for implementing ERASP activities (Wowo, Lingoni, Dowa-Dambo, Kasimba and Mwenilondo), but will extend to 6 other all 6 catchments where PRIDE is working. So, we are looking for intensification and expansion of the activities that will result in lesser runoff and erosion within the catchments. This will result in better river and stream flows and higher yields.

What will the extra time bring to the Project?

From the above discussion, it can be seen that the extra time will bring about increased coverage by the ERASP project as well as more targeted protection/climate-proofing of the irrigation structures and farming fields. We also expect that rivers and streams will be better recharged with the river banks being protected. Promotion of livelihood activities is expected to improve peoples’ lives with farmers benefiting from them in the form of utilizing livestock manure and realizing income from the sales of livestock and honey.”

**Munday Makoko, Project Lead, Enhancing the Resilience of Agro-ecological Systems Project (ERASP)**