



## Climate Resilient Livelihoods

IN SOUTHERN ZIMBABWE



Building Climate Resilience of Vulnerable Agricultural Livelihoods in Southern Zimbabwe

# MONTHLY FLASH

## August 2024

# Introduction

The GCF 'Building Climate Resilience of Vulnerable Agricultural Livelihoods in Southern Zimbabwe' project continues to impact lives and livelihoods in target districts. Implementation efforts are being made to ensure community resilience to climate change as most try to recover from the effects of El Nino.

The project is one of the biggest climate resilience projects in Zimbabwe, having reached 1,120,996 people as of December 2023 i.e. 419,824 direct and 701,172 indirect beneficiaries making up 29% of the total population of Masvingo, Manicaland and Matabeleland South provinces.

To date, 5 irrigation schemes have been completely revitalized and 3 in progress nearing completion and it is exciting to note irrigation members are happy with the development and very eager to hit the local market with their produce.

Various interventions by the project have strengthened communities' resilience and knowledge about the effects of climate change. 45% of direct beneficiaries are consistently using climate information/product and services in farming decisions.

During the month of August, most activities focused on capacitating project stakeholders including IMC to properly run the project as small business entities. The highlight of the month was the high level field visit by top government officials, the UNDP RR and the Netherlands Ambassador to Zimbabwe who were all impressed by the progress and the impact the project has had on communities so far. Also to note is the completion of civil works for Bwanya and Zvinyaningwe irrigation schemes in Masvingo Province.

Government staff were trained on setting up O&M structures, irrigation Scheduling using CROPWAT & CLIMWAT and Community Visioning For Sustainable and Viable Operation of irrigation schemes. Some activities carried out during the month include a PICSA TOT targeting 213 AEOS for all 3 provinces, Soil sampling training & data collection and post treatment survey training and data collection and these were meant to build capacity for project stakeholders..

Lastly a project Interim evaluation was carried out and overall the independent evaluators provided a positive review of the project.

# UNDP RR and Netherlands Ambassador visit GCF Project Sites in Masvingo

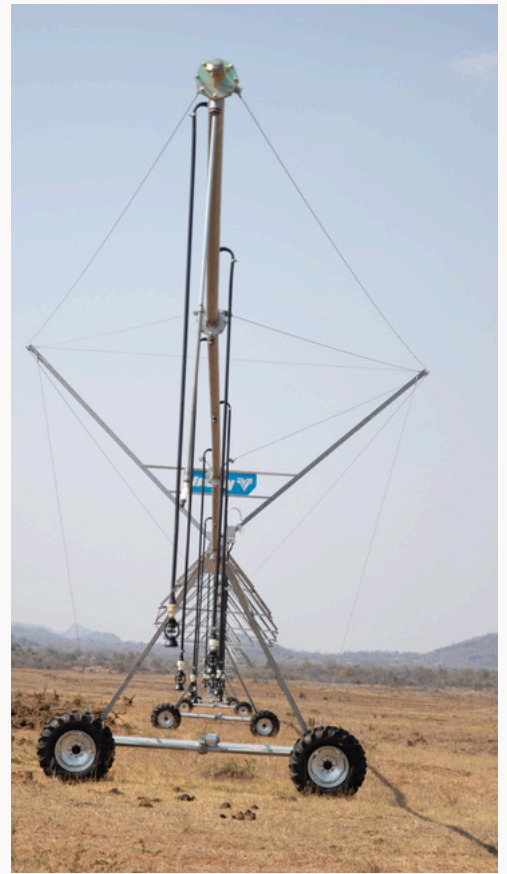


Delegates touring project sites during the mission



From 31 July to 1 August, a delegation comprising of, UNDP-Zimbabwe Resident Representative, Dr Ayodele Odusola, the Netherlands Ambassador to Zimbabwe, Hon Margret Verwijk and various representatives from the Ministry of Lands, Agriculture, Fisheries, Water and Rural Development (MLAFWRD) visited GCF project sites in Masvingo Province. The mission visited Pikinini Jawanda Irrigation Scheme in Mwenezi, Chimbudzi Farmer Field School in Mwenezi and Bindamombe Irrigation Scheme in Chivi.

The delegation had an opportunity to interact directly with the project beneficiaries to appreciate how the project has impacted people’s lives and how it is improving their livelihoods. During this mission, there was a coherent demonstration of the level of collaboration between the Government of Zimbabwe and UNDP as well as the adaptive management strategies employed by the project to keep the project on track despite the design inadequacies the project is experiencing.



*The Mission in Pictures*



# Participatory Integrated Climate Services for Agriculture (PICSA) rolled out to GCF districts

From 19 to 23 August 2023, more than 210 (108 males, 102 females) government Agriculture Extension Officers were trained on Participatory Integrated Climate Services for Agriculture (PICSA). This approach which was delivered in collaboration with the University of Reading and World Food Programme (WFP) helps farmers apply climate information in making decisions to manage climate risks.

PICSA requires multi-stakeholder engagement and uses a layered approach in implementation. The institutions involved in the trainings include the Meteorological Services Department whose role in the project is provision of weather and climate information and products. The Department of Agricultural, Technical and Extension Services which has a large pool of agricultural extension officers (AEOs) who work with the farmers almost daily.

Two key PICSA principles that the trainees learnt are

- The farmer decides : Farmers are best placed to make decisions about their agricultural practices, because they have detailed knowledge of their farm, system and environment, and they also face the consequences (whether favourable or unfavourable) of their decisions.
- Options by context : Different farmers have different contexts. This includes differences in wealth, education, land, goals and attitudes to risk. The best options for one farmer might not be appropriate for another and farmers require information and tools that enable them to identify and plan for their own individual context.

Participants were able to develop resource allocation maps, seasonal calendars, farmer options and to determine the probability of various events occurring. They were able to repeat some of the PICSA steps during field work. After this session, the trainers will proceed to capacitate remaining AES and AEOs in GCF wards. Thereafter, they will train lead farmers in FFS, follower farmers then other farmers within the catchment of each ward with a target to reach 9622 direct beneficiaries and 43342 indirect beneficiaries by October 2024.





# Irrigation Management Committees trained on cooperative management

96 (47 male and 49 female) Irrigation Management Committee (IMCs) members were trained on cooperative management and formalization of irrigation schemes as legally recognized & efficient farmer/led-managed entities. This training took place in Masvingo from the 26th to the 29 of August 2024 and it was targeting IMCs for 8 revitalised and new irrigation schemes.

The objectives of this activity were as follows

Vision setting & understanding of the utility of formalization of the irrigation schemes as business enterprises

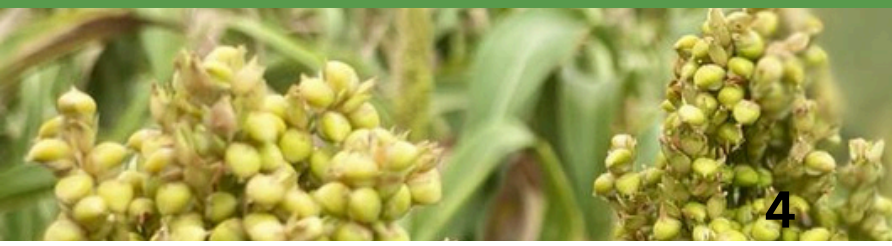
- To develop the capacity of IMCs in understanding & applying cooperative concepts & principles, contract farming, business planning & negotiation, market facilitation, financial literacy, resource mobilization, conflict management & resolution and governance of farmer-led/managed organizations.

After the training, the project is expecting to have IMCs with improved capacity to lead irrigation schemes as formal business entities (cooperative societies) and they should be able to manage conflicts, undertake market research, negotiate for win-win business terms with other market actors & efficiently manage cropping enterprises.

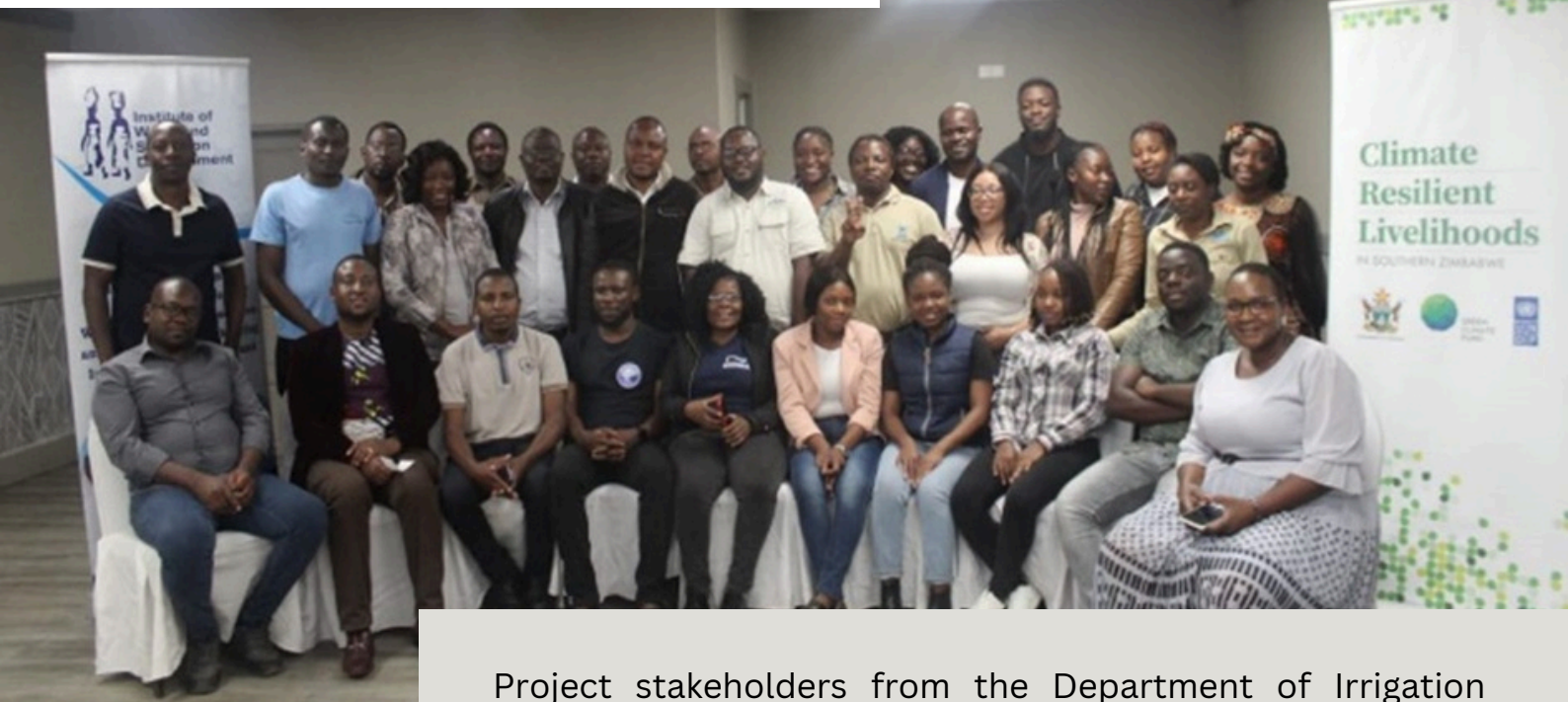
Implementation plans for cascading trainings to irrigation scheme members and formal registration for the 8 irrigation schemes were developed & scheduled for implementation during the month of September.

## Project Interim Evaluation

The project also underwent an interim evaluation that was carried out by independent evaluators. It is essential for the project to have an external eye providing an objective review of the performance of the project towards attainment of set objectives and results.



# Stakeholders capacitated on hydrological modeling



Project stakeholders from the Department of Irrigation (DOI), Meteorological Services Department (MSD) and Zimbabwe National Water Authority (ZINWA) received a training on hydrological modelling, rainfall and streamflow forecasting from the 6th to the 9th of August 2024 in Harare.

The main objective of the training was to build/enhance the capacity of ZINWA and DOI personnel in using MSD seasonal forecasts or other regional models to develop a seasonal hydrological forecast.

Participants used the MSD 2023/24 seasonal forecast and the European Center for Medium-range Weather Forecasts (ECMWF) of ensemble forecasts whose results will be used the PITMAN model to project runoff.

The participants are going to repeat the Hydrological Modelling Using the PITMAN Model for the catchments as groups. Once the model has been set up, they will develop a hydrological forecast. Participants will use the 2024/25 seasonal forecast to streamflow. Thereafter they will analyse the results and produce a report



## Operation and Maintenance of irrigation schemes reinforced with a refresher course

The project carried out an O&M Phase 3 training for engineers, technicians, AEOs, AES and Agronomists in Bulawayo from 15 to 17 August 2024. The objectives of this training were to (i) set up mechanisms for O&M fee levying and collection including scheme specific O&M fee calculation and member contribution, (ii) build the capacity of engineers, technicians and AEOs on CLIMWAT and CROPWAT as key tools for irrigation scheduling and (iii) leveraging on community visioning as a catalyst for sustainable operation and maintenance of smallholder irrigation schemes.

After the training, all irrigation schemes were given up to 30 September 2024 to ensure that the O & M fund as well as the functional constitutions are in place.

To improve O&M collection, the schemes were encouraged to ensure good scheme governance – final climate responsive constitution, address scheme ownership and usership rights as well as instituting volumetric based O&M fees and seasonal cropping pattern.

The training of trainers workshop objectives were met, and the facilitators were assured of the commitment by extensionists that they were now fully equipped as a result of the workshop to develop sustainable Climate proofed O&M funds and governance documents at all their respective schemes. Extension staff were also recommended to always emphasize the importance of following proper irrigation schedules as a resilient irrigation practice.

# CSA post treatment assessment and data collection carried out.

The Post Treatment Assessment was undertaken from 5 to 10 August with the objective of generating evidence of the impact of the project in contributing to resilience capacities and food security of beneficiary households. Initially, as part of the capacity building activities, 156 AEOs (94 females, 62 males) were trained in conducting surveys related to knowledge management, that is, acquired knowledge and skills in tracking project performance.



The assessment interviewed a total of 2212 households (1814 beneficiaries and 398 non beneficiaries) and data analysis is on-going. The post treatment assessment is also designed to collect evidence that is critical for informing programming decisions for adaptive project management.



## 152 AEOs trained on soil sampling, testing and analysis



Soil biodiversity is important for creation of a conducive environment for optimal crop production. In this regard, 152 AEOs (78 females, 74 males) received training on soil sample collection including administering of a soil assessment survey questionnaire to targeted farmers.



A soil testing assessment was then carried out during the month of August. Soil samples including meta data for the sampled sites were collected from 1363 sites by the trained officers for subsequent analysis by the Chemistry and Soil Research Institute (CSRI)/DR&SS. Laboratory analysis of the soil samples is currently underway to produce science-based data to inform soil improvement techniques to be promoted amongst the farming households. Following soil analysis, soil fertility related advisories will be given to farmers for evidenced-based soil fertility management

## Lifeline for 300 Families: Bindamombe Irrigation Scheme Revitalised

In Ward 18, Chivi district, Masvingo Province, a newly revitalized irrigation scheme is poised to transform the food security narrative of 300 families in its community. The 34-ha Bindamombe Irrigation Scheme has been climate-proofed through a partnership between the Green Climate Fund, the Government of Zimbabwe, and the United Nations Development Programme (UNDP).

Each of the 300-member scheme's 0.1ha plots is crucial to their food security, as well as providing income to send children to school and meet daily needs. The scheme's chairperson, Mr. Obert Maoneke, expressed optimism that this development will make the community "unstoppable despite climate change," ensuring no child drops out of school due to financial constraints, and no one goes to bed hungry.

The irrigation system was upgraded through leakage testing and repairs to the existing sprinkler system, as well as the installation of a 55kw solar system for pumps, backed up by national grid power for night irrigation. The scheme's members have planted maize with government support, ensuring a cost-effective irrigation system that allows farmers to continue their activities even during power outages or when they cannot afford it.

"For the first time, I am looking forward to selling my farm produce and taking care of my family. This has never been the case as this region faces a hot arid climate", she said.

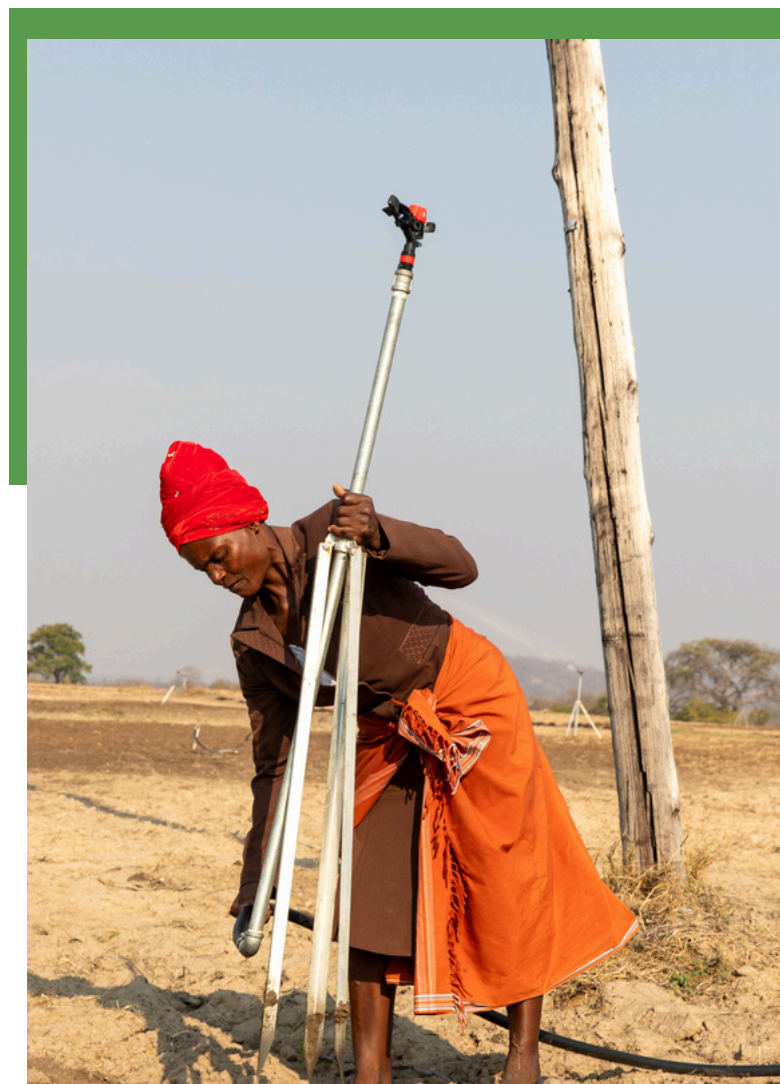
The scheme has approximately 1,500 direct beneficiaries, including household heads registered as members, making their dependents the primary beneficiaries of the plots. The scheme also includes 57 youth-headed households and elderly female representatives.





The Irrigation Management Committee, subcommittees, and scheme members received training courses to enable them to assume full stewardship of the scheme even after the project ends. This includes financial management training that led to the formation of six Village Savings and Lending (VS&L) groups. These groups will help increase income and resilience to climate change, making rural households bankable and providing access to low-cost sustainable credit.

UNDP Resident Representative Dr Ayodele Odusola praised the scheme's organization, noting that each committee member is fully aware of their duties and everyone is committed to ending hunger in their community. The project is part of a larger effort to address rural poverty through food production and agricultural commodities. In total, it is revitalizing and climate-proofing 21 irrigation schemes across Masvingo, Manicaland, and Matabeleland South Provinces.



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