



Volcanoes Community Resilience Project

ICYEREKEZO CY'UBUDAHANGARWA: IMBARAGA Z'ABATURAGE



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Editor's Note

Dear Stakeholders,

It is our pleasure to welcome you to the first edition of the Volcanoes Community Resilience Project newsletter:

***“Icyerekezo cy’ubudahangarwa: Imbaraga z’abaturage-
Vision for Resilience: The Power of Communities.”***

Published twice a year, this newsletter highlights progress across our four pillars: **flood risk management, catchment and landscape restoration, Volcanoes National Park expansion with Smart Green Villages, and robust project management—including monitoring, evaluation, learning, and capacity building.**

In recent months, communities in Musanze, Rubavu, and Nyabihu have taken the lead in reducing flood risks and restoring vital landscapes, working closely with national agencies and the World Bank. We have advanced corridor feasibility and secure legal clearances, established hydrological monitoring to strengthen early warning, and finalised detailed plans for flood mitigation. Community-driven land use planning has guided restoration efforts, while initiatives in settlement planning and grievance redress have deepened local engagement and governance.

Looking ahead, we will shift from planning to implementation, focusing on **contracting essential works, expanding restoration activities, launching our impact-based warning system, and piloting new livelihood opportunities.** We trust that you will find these stories both informative and inspiring, and we invite your feedback as we continue to build resilience together.

Enjoy the reading!

Executive Summary

In 2023, the Government of Rwanda, through the Ministry of Environment, secured funding to empower the communities across the Volcanoes region and Vunga Corridor. The VCRP has the following four components and their nine related sub-components:

● **Component 1: Flood Risk Management:**

- *Sub-component 1.1: Flood Risk Reduction;*
- *Sub-component 1.2: Flood Early Warning System (FEWS).*

● **Component 2: Catchment Management & Landscape Restoration:**

- *Sub-component 2.1: Integrated Catchment & Landscape Restoration;*
- *Sub-component 2.2: Ecological Restoration of Priority Conservation Areas;*
- *Sub-component 2.3: Livelihoods Development.*

● **Component 3: Volcanoes National Park (VNP) Expansion & Livelihood Diversification:**

- *Sub-component 3.1: Integrated Climate-Resilient Green Settlements/Park Expansion;*
- *Sub-component 3.2: Livelihood Diversification & Income Generation.*

● **Component 4: Impact Monitoring, Capacity Building & Project Management:**

- *Sub-component 4.1: Project Implementation Support;*
- *Sub-component 4.2: Capacity Building for Sustainability.*

Between October 2024 and March 2025, VCRP moved from design to action in four key areas: flood risk management, landscape restoration, Smart Green Village planning, and institutional strengthening.

In the Vunga Corridor, feasibility and detailed engineering contracts cleared legal review, while Musanze and Rubavu districts wove new flood-hazard maps into their stormwater master plans. Three hydrological monitoring stations now feed

real-time data into our impact-based early warning system, and World Bank clearance for weather-radar nowcasting tools sets the stage for enhanced flood alerts. Detailed designs for Karisimbi sub-catchment flood mitigation are now ready for tender, marking the shift from planning to construction.

Two hundred rainwater-harvesting tanks and over 160,000 agroforestry seedlings further extend resilience into homes and farms.

On the Smart Green Village front, land acquisition for all 287 parcels is complete, ICT infrastructure Terms of Reference have been finalized, and specialist teams are assembling to build prototype homes, green roofs, and shared water-harvesting systems.

Governance gains include the formation of three District Project Coordination Committees (DPCCs) in Musanze, Nyabihu, and Rubavu; 54 Community Coordination Committees (CCCs) across all sectors of Musanze, Rubavu, Nyabihu, Burera, Ngororero, and Rutsiro; and 234 Grievance Redress Committees (GRCs) in these districts. A joint Environmental and Social Framework (ESF) workshop was also convened. A baseline documentary captures these early impacts and outlines the project's trajectory.



CCC in Musanze district, Muhoza Sector

Looking ahead, VCRP will tender flood-mitigation works, activate the early warning system with district meteorological units, scale up restoration in new catchments, and pilot diversified livelihoods—ensuring that every terrace, sensor, and community voice continues to strengthen resilience across the Volcanoes landscape.

Turning Plans into Protection: Flood Resilience for Vunga and Urban Centres



Over the past two quarters, the Volcanoes Community Resilience Project has moved decisively from planning to preparatory action in our most flood-vulnerable zones. In the Vunga Corridor, feasibility studies and detailed engineering designs progressed swiftly through contract negotiation and legal clearance, laying the groundwork for major mitigation works. Simultaneously, Musanze and Rubavu launched updated stormwater master plans that weave newly produced flood-hazard maps into each district's spatial framework, ensuring that future urban growth is inherently climate resilience.



To power our impact-based early warning system, 3 hydrological monitoring stations were installed across 14 priority river crossings, delivering real-time flow data into our modelling platform. The World Bank's no-objection for the weather-radar mosaic and nowcasting tool Terms of Reference has been secured, and procurement specifications for Automatic Weather Stations, rain gauges, ICT hardware, and the project vehicle have been finalized.

Six new technical specialists have joined the Single Project Implementation Unit (SPIU), reinforcing capacity for rigorous data collection, analysis, and rapid response.

By March 2025, Environmental and Social Safeguards instruments covering feasibility, stormwater, and dredging studies were under execution, and the strategic Environmental and Social Impact Assessment (ESIA) for the Mukungwa and Kivu catchments was well underway. Detailed designs for Karisimbi sub-catchment flood mitigation have been finalized and stand ready for tender—marking the pivotal shift from design to construction. Communities long vulnerable to heavy rains now see tangible progress around every bend in the river.

Flood Risk Management & Early Warning

-  **3** Hydrological monitoring stations installed
-  **14** Priority river crossings monitored
-  **6** Technical specialists recruited to strengthen SPIU capacity
-  Weather-radar nowcasting tool cleared for procurement

Terraces of Hope: Healing Hills and Lifting Lives in the Volcanoes



In the shadow of Rwanda’s majestic Volcanoes, fields once scarred by erosion are now springing back to life. Over the past six months, the Volcanoes Community Resilience Project empowered 128 government and community trainers—35 women and 93 men drawn from the Rwanda Water Board, REMA, and district offices—to co-design Village Land Use Action Plans (VLUAPs); sixty VLUAPs have been established and await technical assistance in July to accelerate their rollout.



Community in Village Land Use Action Plans (VLUAPs)

These locally rooted blueprints guided the ambitious transformation of nearly 28 hectares of steep slopes into radical terraces and 17 hectares of infiltration trenches, slowing runoff, enhancing groundwater recharge, and shielding homes from downstream flooding.

As terraces took shape under the hands of 1,335 casual workers—over 800 of them women—each contour line represented both a soil-conservation structure and a lifeline for families. The RWF 857.4 million invested in materials and wages circulated through village economies, bolstering household incomes and fostering collective ownership of the restored hillsides.

To extend resilience beyond the slopes, the project delivered 200 rainwater-harvesting tanks to vulnerable households, ensuring reliable access to clean water through dry spells. Meanwhile, nurseries produced and distributed 160,000 agroforestry seedlings—trees that will shade fields, stabilize soils, and yield fruits and fodder for generations to come.



Landscape & Catchment Restoration



128

Government and community trainers were empowered by VCRP—35 women and 93 men



60

Village Land Use Action Plans (VLUAPs) established



20

Hectares of radical terraces constructed



17

Hectares of infiltration trenches created



135

Casual workers were employed (over 60% are women)



RWF 857.4 million mobilized in restoration investments



200

Rainwater-harvesting tanks delivered



160,000

Agroforestry seedlings distributed

High-resolution LiDAR surveys and multispectral imagery, now undergoing quality review, will sharpen future interventions by pinpointing erosion hotspots and tracking vegetation recovery. Together, these efforts are not only healing the land but lifting lives transforming subsistence landscapes into resilient, productive systems that thrive under changing climates.

Smart Green Villages: Blueprint for Sustainable Living

With the formal acquisition of all 287 parcels, the Volcanoes Community Resilience Project has opened a new frontier in climate-resilient settlement design, extending the protective buffer of Volcanoes National Park. This milestone paves the way for a flagship community where eco-friendly homes will sit alongside communal gardens, solar micro-grids, and mushroom-cultivation units.

To guide this transformation, the project assembled a team of specialists in procurement, livelihoods, social-risk management, and environmental compliance. Their mandate is to develop design and supervision contracts that honor local priorities, preserving wildlife corridors and supporting traditional crafts—while embedding rigorous ecological safeguards.

On the ground, the arrival of our project vehicle has unlocked comprehensive site visits, detailed topographical surveys, and participatory community workshops. At the same time, the Terms of Reference for ICT infrastructure have been finalized, specifying requirements for high-speed broadband, community information kiosks with e-learning modules, and telemedicine links to district hospitals. With RFP evaluation now underway, design and supervision teams will begin constructing model-home prototypes, installing green roofs, and building shared rainwater-harvesting systems—bringing Smart Green Villages from blueprint to reality.

At the heart of each village cluster lies a set of 20 prototype homes built to passive-design principles: walls constructed from insulating fly-ash blocks, windows oriented for optimal daylight and natural ventilation, and rooftop solar arrays sized to meet household energy needs. Shared amenities will include a 5,000L communal rainwater-harvesting tank and a greywater-recycling system for kitchen-garden irrigation. Through transparent local tenders, at least 60 percent of carpentry, masonry,

and ICT-installation contracts will flow back into village economies, while training sessions in home maintenance, digital literacy, and small-business management will equip residents to sustain—and eventually replicate—these innovations beyond the project footprint.

Site demarcation and foundation works are slated to begin in Quarter three 2025, with the first fully fitted prototypes ready for handover in Quarter one 2026. This phased, participatory approach ensures that each design element is field-tested, refined, and championed by the future residents themselves—creating homes that do more than shelter, but uplift.

Smart Green Villages

 **287** Land parcels acquired for climate-resilient settlements

Each village cluster to include:

-  **20** Prototype homes with fly-ash block walls and rooftop solar arrays
-  **1** Communal 5,000L rainwater-harvesting tank
-  Greywater-recycling system for kitchen-garden irrigation



Empowering Community Champions: Strengthening Local Leadership for Resilience



Across the Volcanoes landscape, community ownership has emerged as the cornerstone of resilience-building under the Volcanoes Community Resilience Project (VCRP). Over the past six months, our emphasis on inclusive governance and capacity strengthening has translated into tangible gains in accountability, coordination, and local empowerment.

These bodies are essential for community engagement, coordination, and accountability. To raise awareness and mobilise communities around VCRP field activities—such as flood risk reduction, catchment management strengthening, and livelihood support—campaigns during Umuganda and inteko z’abaturage have been conducted in various areas of Musanze, Rubavu, and Nyabihu.



Project affected community awareness in Musanze district, Kinigi sector, Nyabigoma cell

Three District Project Coordination Committees (DPCCs) are now operational in Musanze, Nyabihu, and Rubavu. All fifty-four Community Coordination Committees (CCCs) have also been formed across six districts: Musanze, Rubavu, Nyabihu, Burera, Ngororero, and Rutsiro.

Out of the 244 targeted Grievance Redress Committees (GRCs), only eight remain to be established: seven in Bugeshi sector (cells Buringo, Butaka, Hehu, Kabumba, Mutovu, Nsherima, and Rusiza) and one in Gahunga sector (cell Gisizi) in Burera. Once in place, these committees will provide transparent and trusted channels for residents to raise concerns, suggest solutions, and shape project activities.

At the district level, regular Community Coordination Committee meetings brought together mayors, sector leaders, and technical officers to review progress, realign resources, and fast-track priority deliverables under Component 3—Volcanoes National Park (VNP) expansion and Smart Green Village development.



GRC Training in Nyabihu district, Karago sector (1) Rubavu district, Nyakiriba sector (2)

In February 2025, a high-level oversight meeting with the Ministry of Environment and the Rwanda Development Board reaffirmed national support for harmonizing conservation goals with sustainable livelihoods. Underpinning these structures, a joint induction workshop on the World Bank’s Environmental and Social

Framework equipped 14 ministries and implementing-partner staff with the knowledge and tools to safeguard communities and ecosystems. Simultaneously, our baseline documentary now validated—captures the voices of field officers, community elders, and youth advocates, weaving personal stories into the project’s evolving impact narrative.

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Together, these efforts are more than institutional milestones: they reflect a profound shift toward locally led resilience.



Community work unblocking water drainage channels in Nyabihu district, Mukamira Sector, Kanyove cell

As VCRP moves into its next phase—tendering flood mitigation works, scaling up landscape restoration, and piloting new livelihood interventions—these strengthened governance platforms will ensure that the people of the Volcanoes region remain at the heart of every decision, securing a future that is both resilient and equitable.



Looking Ahead

As we enter the next phase, VCRP will launch tenders for flood-mitigation works in Karisimbi and Vunga, operationalize our nowcasting early-warning system with district meteorological units, and scale up community-driven restoration across new catchment areas.

Livelihood pilots in beekeeping and eco-tourism will provide additional income streams, reinforcing the link between environmental health and economic well-being. Each step will be guided by our district leaders, national agencies, and community champions—whose dedication remains the foundation of resilience in the Volcanoes region.





We extend our sincere gratitude to the **Ministry of Environment** for its leadership and guidance in the implementation of the VCRP.

Special thanks to our **implementing partners—REMA, RWB, Meteo Rwanda, and RDB**—for their technical support and coordination. We also acknowledge the contributions of other **government institutions, development partners, NGOs, the private sector, academia,** and the **media** for their continued collaboration.

We are grateful to the districts of **Musanze, Rubavu, Nyabihu, Burera, Ngororero,** and **Rutsiro,** and to the local communities for their active engagement and commitment.

A heartfelt thank you to the **World Bank** for its **financial and technical support,** which continues to be instrumental in advancing the goals of the VCRP.

Partners



Republic of Rwanda
Ministry of Environment



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