

CONCEPT NOTE

YOUTH4CLIMATE SERVICES INNOVATION HACKATHON

From Climate Data to Climate Action: Youth Innovation for User-Centred Climate Services

1. Background

The IGAD region is highly vulnerable to climate variability and change, with recurrent droughts, floods, and other climate-related hazards threatening water availability, food security, livelihoods and sustainable development. A substantial proportion of the region comprises arid and semi-arid lands (ASALs), where pastoralist, agro-pastoralist, and smallholder farming communities depend heavily on climate-sensitive natural resources and production systems. These vulnerabilities highlight the importance of effective climate services that enable individuals, communities, businesses, and institutions to anticipate climate-related risks, make informed decisions, and take timely action.

Climate services involve the generation, translation, communication, and application of climate information to support decision-making across climate-sensitive sectors. They bring together climate data and forecasts, scientific knowledge, digital technologies, user needs, and institutional capacities to deliver relevant and actionable services. In the IGAD region, climate services are increasingly important for agriculture and pastoralism, disaster risk management, water resources management, food security, and other sectors affected by climate variability and change. Through the work of ICPAC, National Meteorological and Hydrological Services (NMHSs), and other partners, climate information and related services are being developed and disseminated through various channels, including digital platforms, mobile applications, community networks, and advisory services.

Despite progress in climate information generation and dissemination, significant challenges remain in ensuring that climate services respond effectively to the needs of end users. Climate information does not always translate into practical guidance that people can understand and apply in their specific contexts. Services may not adequately reflect local livelihood systems, decision-making needs, languages, accessibility requirements, or preferred communication channels. Limited digital connectivity, varying levels of literacy, gaps in user engagement, and weak linkages between climate service providers and users can further constrain the reach, relevance, and uptake of these services. Addressing these challenges requires approaches that go beyond disseminating climate information to develop user-centred, accessible, inclusive, and actionable climate services that connect climate knowledge with decisions and actions on the ground.

Digital technologies and youth-led innovation offer significant opportunities to address these challenges. Young innovators across the IGAD region are developing solutions using mobile technologies, data science, artificial intelligence, digital communication, and other emerging technologies. These innovations can strengthen different aspects of the climate services value chain, including the interpretation and localization of climate information, the development of tailored advisories, the delivery of services through appropriate communication channels, engagement with end users, and the integration of climate information into decision-support

tools. Such solutions can help make climate services more responsive to the needs of farmers, pastoralists, extension workers, local institutions, and other climate-sensitive sectors. However, promising youth-led innovations often face barriers to further development and application, including limited access to climate data and technical expertise, insufficient opportunities to test solutions with climate service providers and end users, and limited pathways to mentorship, institutional collaboration, piloting, and scaling. As a result, the potential of these innovations to strengthen operational climate services may remain underutilized. Creating structured opportunities for young innovators to engage with climate institutions, understand user needs, demonstrate their solutions, and receive technical feedback is essential to bridging the gap between digital innovation and the practical delivery and use of climate services.

In response, the IGAD Climate Prediction and Applications Centre (ICPAC) plans to convene the **Youth4Climate Services Innovation Hackathon**, a regional initiative to identify, test, and promote promising youth-led innovations that can strengthen the delivery, accessibility, relevance, and use of climate services across the IGAD region. The hackathon will prioritize existing, functional, or pilot-stage solutions rather than ideas alone, with a focus on their potential to address practical challenges across the climate services value chain. Participants will demonstrate how their solutions can improve the way climate services are developed, tailored, communicated, delivered, accessed, or applied by end users.

The hackathon will bring together about 10-20 youth from IGAD member states for a three-day regional event. Through practical demonstrations, technical mentorship, engagement with climate service experts, and, where feasible, feedback from end users, participating youth will have the opportunity to test and refine their solutions.

Ultimately, the initiative aims to strengthen youth participation in the climate services value chain and establish pathways through which promising innovations can be further tested, refined, piloted, and potentially adopted by relevant institutions and programmes.

2. Objectives

Overall objective

To identify, test, refine and promote promising youth-led innovations that strengthen the delivery, accessibility and application of user-centred climate services across the IGAD region.

Specific objectives

- Identify promising youth-led innovations that can address practical challenges across the climate services value chain and have potential for further piloting, institutional adoption, and regional expansion.
- Assess the capacity of existing solutions to improve the relevance, accessibility, usability, and application of climate services in response to the needs of end users.
- Promote meaningful youth participation in the development and delivery of climate services.
- Strengthen collaboration between young innovators, climate service providers, governments, research institutions, end-user organizations, development partners, and technology companies.
- Generate practical lessons and recommendations on how digital innovation can improve the design, delivery, accessibility, and uptake of climate services.

- Identify pathways for mentorship, further testing, piloting, and scaling promising youth-led climate services innovations.

3. The Challenge

The hackathon will challenge participants to demonstrate how their existing solutions can address a practical challenge in the climate services value chain. This may involve improving how climate information is translated into sector-specific advisories, tailoring services to local user needs, communicating climate risks through accessible channels, facilitating user engagement, or integrating climate information into tools that support climate-sensitive decisions.

Solutions will be assessed not only on their technical functionality but also on their responsiveness to user needs, accessibility, relevance, usability, potential contribution to decision-making, and prospects for sustainability and scaling. Technical mentors and, where feasible, representative end users will provide feedback to help participants strengthen their solutions.

4. Participants and Eligibility

The hackathon will target young innovators, entrepreneurs, software developers, data scientists, and multidisciplinary teams from across the IGAD region.

Eligible participants must:

- Be between 18 and 35 years of age.
- Be nationals of, or based in, an IGAD member state, subject to the final eligibility guidelines.
- Have an existing climate-related digital tool, platform, product, or solution that is functional or at pilot stage. Concept-only proposals without a demonstrable solution will not be eligible.
- Be able to demonstrate the solution and explain its functionality, intended users, current stage of development, and potential contribution to climate services.
- Be available to participate in the hackathon and present their solutions to technical experts, the evaluation panel, and potential partners.
- Submit all required information and supporting materials by the stated deadline.

5. Application

Applicants are required to submit the below by **06 November 2026** through **youthcoalition@igad.int**

- A brief description of the innovation and the problem it addresses.
- An explanation of how the solution contributes to climate services and which part of the climate services value chain it addresses.
- A description of the intended users and how the solution responds to their needs.
- Evidence of the solution's current development stage, such as a working demonstration, prototype, screenshots, video, or pilot results.
- A brief explanation of the innovation's distinctive features and potential value compared with existing approaches.
- Information on the innovator (s), relevant skills, and the motivation for participating.

- A brief statement outlining the solution's potential for further development, practical application, and scaling.

6. Proposed Awards and Post-Hackathon Support

The hackathon will recognize and award outstanding youth-led innovations based on their functionality, relevance to climate services, user-centred design, potential impact, and prospects for further development and scaling.

Financial awards will be provided to recognize outstanding solutions and support their further development. In addition, selected innovators may be connected to technical mentors, incubation and acceleration programmes, and potential partners for piloting and institutional collaboration, subject to partner commitments.

The awards and potential follow-up support are intended to encourage continued innovation and help promising youth-led solutions progress towards practical application, institutional uptake, and wider use across the IGAD region.

7. Expected Outputs

- A regional pool of promising youth-led innovations addressing challenges and opportunities across the climate services value chain.
- A selection of youth-led solutions demonstrated and assessed against predefined criteria relevant to their respective areas of innovation.
- Practical feedback and recommendations for improving participating solutions.
- New linkages and partnership opportunities between youth innovators, climate service providers, end users, and other relevant stakeholders.
- Increased visibility of youth contributions to climate services innovation.
- Potential follow-up support, including further development, piloting, and scaling of promising solutions.

8. Date and Location

- 08-10 December 2026
- Nairobi, Kenya