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Field Consultation Report

Consultation of Government Officials and Community Leaders on the Climate Action Initiative in Sri Lanka

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CGIAR Climate Action Program

The Climate Action program aims to drive science, innovation, and collaboration to transform food, land, and water systems for a climate-resilient, net-zero, and equitable future in Bangladesh, Cambodia, Côte d'Ivoire, Ethiopia, Honduras, India, Kenya, Nepal, Nigeria, Pakistan, Philippines, Senegal, Sri Lanka, Sudan, Tanzania, Zambia, and Zimbabwe.

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Introduction

Sri Lanka is increasingly vulnerable to a wide range of climate-induced shocks, particularly floods and droughts, which continue to threaten agricultural productivity, rural livelihoods, and the overall economic stability of farming communities. As climate impacts intensify, there is an urgent need to introduce innovative climate resilience initiatives that can help farmers adapt to changing conditions, safeguard their livelihoods, and strengthen long-term resilience.

As part of the CGIAR Climate Action Program, the International Water Management Institute (IWMI) is undertaking a detailed exploration of potential intervention sites and suitable climate-resilient practices that can be introduced among farming communities. A crucial aspect of this effort is ensuring that both community perspectives and government stakeholder insights are fully integrated into the design and prioritization of these interventions. Their knowledge, lived experiences, and institutional understanding are essential for shaping solutions that are practical, locally relevant, and sustainable.

Recent climate vulnerability assessments in Sri Lanka identify Anuradhapura District as one of the most highly exposed regions to both drought and flood hazards. Given this dual vulnerability and the district's significance as a major agricultural hub, IWMI has selected Anuradhapura as a priority area for developing and implementing climate resilience actions under the Climate Action Program.

To ensure that interventions are responsive to ground realities, IWMI conducted a two-day field consultation in Anuradhapura. The purpose of this consultation was to gather insights from farmers, community organizations, and government officials, understand their challenges, discuss potential resilience options, and jointly identify priority locations for future project activities. This field engagement forms a vital foundation for designing context-specific, community-driven, and government-supported climate resilience solutions tailored to the needs of Anuradhapura's farming communities.

Objectives

The field consultation concentrates on the following key objectives:

- To identify potential intervention sites and suitable climate-resilient practices that can be introduced to strengthen the adaptive capacity of farming communities in the Anuradhapura District.

- To gather insights from both community members and government stakeholders on priority needs, challenges, and opportunities related to climate resilience initiatives.
- To understand current agricultural practices, cropping patterns, and diversification strategies adopted by farmers, particularly in relation to climate variability and resource availability.
- To select an appropriate irrigation scheme for implementing water-use efficiency assessments by examining water scarcity issues and incorporating expert input from government officials.
- To collect government stakeholders' perspectives on existing cultivation behaviors and farmers' readiness to adopt new practices, ensuring that proposed interventions align with local realities and institutional expectations.

Field activity Day-1

During Day 1 of the field activities, three major engagements were carried out to obtain a comprehensive understanding of local conditions and stakeholder perspectives. The day began with a meeting with local government officials, where an in-depth discussion was held using a set of structured questions to capture their insights on climate risks, agricultural challenges, and potential intervention opportunities. This was followed by an interactive session with farmers and farmer leaders from the Galenbindunuwewa in Anuradhapura District, representing diverse cropping systems and cultivation practices. Their experiences provided valuable context on current farming methods, seasonal constraints, and community-level adaptation strategies.

The final activity for the day involved visits to selected farming sites, where progressive farmers shared firsthand knowledge of their ongoing practices, field conditions, and challenges faced on the ground. These site observations enriched the understanding of real-world constraints and opportunities for introducing climate-resilient interventions.

Meeting with Local Government Officials

Representing the local government agencies, Mr Dashun (Irrigation Engineer, Galenbindunuwewa), Mr Pradeep from the Department of Agrarian Development, and Mr Nuwan and Mr Rafi (Agricultural Instructors from the Department of Agriculture) participated in the discussion as key local officers. Dr Upali Amarasinghe, Dr Giriraj Amarnath, and Dr Niranga Alahacoon from the International Water Management Institute (IWMI) provided a comprehensive overview of the previous programs implemented in the region (Figure 1). This introduction helped set the context for the ongoing engagement and highlighted the progress achieved so far.

Following this, the IWMI team presented the objectives and planned activities under the proposed Climate Action Science Program, offering detailed insights into how the initiative aims to strengthen climate resilience in the area. The officers were then invited to share the challenges currently faced by both government institutions and farming communities, particularly regarding climate variability, resource management, and on-the-ground adaptation practices. Their contributions helped shape a deeper understanding of local needs and priorities for future interventions.

Figure 1: Local government offices and the IWMI participants for the discussion. (Photo: Saman Karunarathne/DAD)

Reflection from the Government Offices

During the discussion, the Irrigation Engineer, Mr Dasun, highlighted several critical challenges affecting the Huruluwewa canal command system. One of the primary concerns is the inefficient distribution of water to farmers located at the tail end of the canal network. This issue stems largely from poor canal maintenance by farmers, which has reduced the system's overall functionality. He emphasized the urgent need to raise farmers' awareness on proper canal upkeep to ensure the system remains effective, particularly under future climate conditions where prolonged droughts are expected to increase. Additionally, he noted that certain sections of the command area have become muddy and difficult to cultivate, underscoring the need for targeted interventions to restore and maintain these lands for productive use.

Representatives from the Department of Agrarian Development (DAD) also shared several noteworthy constraints. They explained that the decreasing availability of cultivable land due to the fragmentation of plots is negatively impacting overall agricultural production. Small plot sizes limit efficient farming practices and reduce the potential yield per farmer. They further stressed the importance of proper farm leveling, as the current steep slopes in many fields hinder uniform water distribution and make it difficult to maintain adequate water levels during the cultivation period. Addressing these issues is essential for improving productivity and ensuring more sustainable land use.

The Agricultural Instructors provided additional insights based on their field-level observations. Although the region has received favorable rainfall over the past two years, they warned that full cultivation would still be difficult to achieve if drought conditions arise, primarily due to persistent problems in the canal command system. They observed that many farmers remain reluctant to diversify beyond paddy, as a significant number engage in agriculture only part-time while holding other occupations. This resistance to crop diversification presents a challenge for adapting farming systems to changing climatic conditions. Nevertheless, the

instructors noted an encouraging trend: the use of agroclimatic advisories among farmers is steadily increasing, supported by information disseminated by the Department of Agriculture and the Department of Meteorology. However, they emphasized that more localized and area-specific weather information is crucial for improving decision-making and promoting climate-resilient agriculture.

Meeting with Farmer Leaders

The meeting was held at the Irrigation Management Division (IMD) office with the participation of farmer leaders representing both major and minor irrigation systems. The attendees included Mr Rathnayake, Mr Senarath, Mr Ranawaka, Mr Udeni, Mr Upali, Mr Hemarathna, and Mr Dinapala, along with the IMD officer (Figure 2). Their collective representation ensured that the discussion captured a wide range of perspectives from across the command area.

At the beginning of the discussion, Dr. Upali Amarasinghe and Dr. Niranga Alahacoon provided a comprehensive overview of the previous programs implemented in the region, explaining their objectives, achievements, and lessons learned. They then introduced the proposed Climate Action Science Program, outlining its purpose, planned activities, and the potential benefits it aims to deliver for climate-resilient agriculture. The team also invited the participants to share the challenges currently faced by both government officers and farming communities, particularly in the context of climate variability, shifting rainfall patterns, and existing adaptation practices on the ground.

Figure 2: Farmer leaders and the IWMI representatives join for the discussion. (Photo: Priyantha/IWMI)

Feedback from Farmers

The farmers actively contributed to the discussion, raising several key points based on their lived experience and current field conditions:

Willingness for Crop Diversification: Farmers expressed strong interest in adopting crop diversification as a long-term strategy to strengthen resilience and improve economic returns. They acknowledged the limitations of depending solely on paddy cultivation.

Challenges in Paddy Cultivation: Several farmers highlighted the growing difficulties associated with paddy farming. Highly muddy fields and steep slopes in many areas lead to rapid water flow and poor water retention, making it hard to maintain favorable conditions for a good yield.

Need for Larger and Leveled Plots: The participants emphasized the importance of having spacious, leveled fields instead of the existing small and uneven plots. They believe proper land consolidation and leveling would significantly improve water management and productivity.

Canal System Maintenance: Proper maintenance of the irrigation canals emerged as a major concern. Farmers called for immediate repairs and rehabilitation of damaged sections of the canal network to ensure equitable and reliable water distribution.

Awareness on Climate-Smart Agriculture: The need for improved knowledge and training on climate-smart agriculture was strongly emphasized. Although a few farmers have started adopting such methods, they stressed the importance of wider awareness programs to promote adoption at scale.

Promotion of Greenhouse Cultivation: Several participants suggested that greenhouse farming should be encouraged, particularly as a solution to frequent crop damage caused by wild animal attacks in open fields.

Interest in Integrated Farming: There was notable enthusiasm for integrated farming systems, especially those combining crop cultivation with livestock production, as farmers recognized the potential for increased resilience and diversified income sources.

Access to Quality Seeds: Farmers also raised concerns about the limited availability of high-quality seeds. They stressed the need to promote local seed production but noted that many farmers are hesitant due to the intensive care and attention required for seed farming.

Field Work to Farming Fields

Site 01

The first field visit was to a cluster of rainfed farms, where farmers cultivate a variety of high-value crops primarily using rainwater supplemented by water from agro-wells. These farms play an important role in the local agricultural economy, as they focus on crops that offer both higher market returns and greater resilience under varying climatic conditions. The farmers in this area commonly cultivate watermelon, pumpkin, chilies, tomatoes, and onion seeds, which require careful management and timely water availability (Figure 3). The images below illustrate the specialized huts and structures used for onion seed production, showcasing the practical adaptations farmers have made to support seed drying, storage, and protection from pests and weather.

Figure 3: Crop field – Pumpkin and Onion for seeds (Photo: Niranga Alahacoon/IWMI)

In addition to their cultivation practices, the farmers place strong emphasis on environmentally friendly pest management. They actively adopt nature-based pest control methods, reducing chemical use and promoting safer, more sustainable farming systems (Figure 4). These practices not only help maintain soil health and biodiversity but also contribute to producing cleaner, healthier crops for the market.

Figure 4: Chilli field and the nature friendly pest management by the farmers (Photo: Niranga Alahacoon/IWMI)

Site 02

At the second site, the farmers have adopted a more controlled and systematic method of cultivating chilies, incorporating key principles of climate-smart agriculture. This approach allows them to manage soil moisture better, optimize nutrient use, and protect crops from adverse weather conditions. One of the farmers has been practicing this improved cultivation method for the past year and has already experienced significantly higher income compared to previous seasons.

This example demonstrates a successful transition from traditional practices to a more innovative and climate-resilient farming approach (Figure 5). It highlights how adopting new agricultural techniques can lead to increased productivity, improved crop quality, and greater economic stability for farming households.

Figure 5: Chilli cultivation with innovative and climate-resilient farming approach (Photo: Niranga Alahacoon/IWMI)

Day 2

Building on the insightful discussions and field observations of progressive farmers from Day 1, Day 2 was explicitly designed to facilitate a high-level consultation with key government officials. This session brought together senior representatives, including the District Secretary (GA – Government Agent) of Anuradhapura and the Governor of the North Central Province, creating an important platform for strategic dialogue.

In addition to these dignitaries, the meeting included officials from several major provincial ministries, including Agriculture, Irrigation, and Health, whose participation ensured a broad, multisectoral perspective. Their collective engagement was crucial for understanding institutional priorities, strengthening inter-agency coordination, and exploring opportunities to integrate the Climate Action Science program into ongoing provincial development initiatives. This high-level discussion played a pivotal role in aligning field-level findings with policy-level actions, ensuring that the insights gained from farmers and local officers can meaningfully influence district and provincial planning..

Meeting with District secretary

The discussion was held at the office of the District Secretary (GA) in Anuradhapura, with the participation of Mr. K.P.R. Vimalasooriya (District Secretary), Ms. Sandya Abesekara (Additional District Secretary), and representatives from the International Water Management Institute (IWMI). The meeting provided an important opportunity to present ongoing initiatives and explore future collaboration to strengthen climate-resilient development in the district.

During the meeting, the IWMI team delivered a comprehensive overview of previous programs implemented in the region. This included key initiatives such as the AWARE platform, the Climate Smart Governance (CSG) activities, provincial-level workshops, and the detailed study conducted in the Huruluwewa command area. These past engagements helped establish a strong foundation for continued collaboration. The team then introduced the proposed Climate Action Science Program, outlining its objectives, planned interventions, and the potential benefits for district-level planning and agricultural resilience.

Figure 6: Meeting with the District Secretary (GA) and the Additional District Secretary of Anuradhapura (Photo: Office Assistant/ GA office)

The District Secretary responded very positively to the proposed activities, acknowledging the importance of the initiative for addressing climate variability, improving data-driven decision-making, and supporting vulnerable farming communities (Figure 6). He expressed his full willingness to extend institutional support for the successful implementation of the program.

Action Points Identified During the Meeting

• Organize an awareness meeting with all key stakeholders attached to the District Secretariat to ensure broad understanding and buy-in.

• Conduct a provincial-level launch of the Climate Science Program (CSP) in the Anuradhapura District.

• Provide a Concise Presentation summarizing the CSP objectives, activities, and expected outcomes for circulation among district officials.

• Establish a consultative group to guide, coordinate, and oversee future program activities, ensuring effective cross-sector engagement.

• Identify and select additional tank systems—other than the Huruluwewa Tank—to implement and scale project activities across the district.

Meeting with Governor – North Central Province

Consultation with provincial government with the presence of the governor of the north central province held at the Office of the Hon. Governor with the participation of:

Hon. Wasantha Jinadasa – Hon. Governor, North Central Province

Mr. W.G.W. Wanasingha – Secretary to the Governor, North Central Province

Mr. B.H.M.T.W. Bulathsinghala – Director (Planning), Provincial Planning and Monitoring Department, NCP

Mr. K.B.D.B. Dissanayaka – Deputy Director (Planning), Provincial Planning and Monitoring Department, NCP

Figure 7:Dr Giriraj Introduce the Climate Action program to the Governor and Team of North Central Province (Photo Anuradhi/NCP)

The meeting commenced at 2.00 PM, chaired by Mr. W.G.W. Wanasingha, Secretary to the Governor. He welcomed all participants and outlined the purpose of the gathering, emphasizing the importance of understanding ongoing initiatives by the International Water Management Institute (IWMI) and exploring opportunities for collaboration with the North Central Province.

Dr. Niranga Alahacoon initiated the technical briefing by providing a comprehensive overview of the IWMI and the Climate Action program. He elaborated on the institute's objectives, its strategic focus areas, and the broader vision behind the project activities proposed for the province. Following this introduction, Dr. Upali Amarasinghe delivered an in-depth presentation on IWMI's work in Sri Lanka. His explanation covered several key aspects, including:

- A historical overview of IWMI's long-standing engagement in Sri Lanka.
- The importance of IWMI's contributions to shaping resilience-related policies.
- The institute's unique role in promoting research and governance related to water management.
- Past and ongoing initiatives such as the Huruluwewa Study, the Climate Resilience Integrated Management (CRIM) Project, and the Climate Science Program (CSP).

Dr. Giriraj Amarnath further expanded (Figure 7) on IWMI's research portfolio, focusing on areas crucial to the North Central Province. His discussion highlighted:

- The hydrological and agricultural importance of the traditional Cascade System.
- Strategies to strengthen the provincial agricultural economy through improved water management.
- Potential support mechanisms and technologies available for farmers.
- Existing funding opportunities that can aid sustainable and scalable project implementation.

An interactive discussion followed, during which the Hon. Governor and other participants engaged with IWMI representatives to clarify issues, share local insights, and explore pathways for collaboration (Figure 8). The conversation emphasized the need to integrate IWMI's research outputs and proposed activities into the provincial planning and development framework. Participants agreed that collaboration with relevant provincial departments would ensure smoother implementation and stronger institutional alignment.

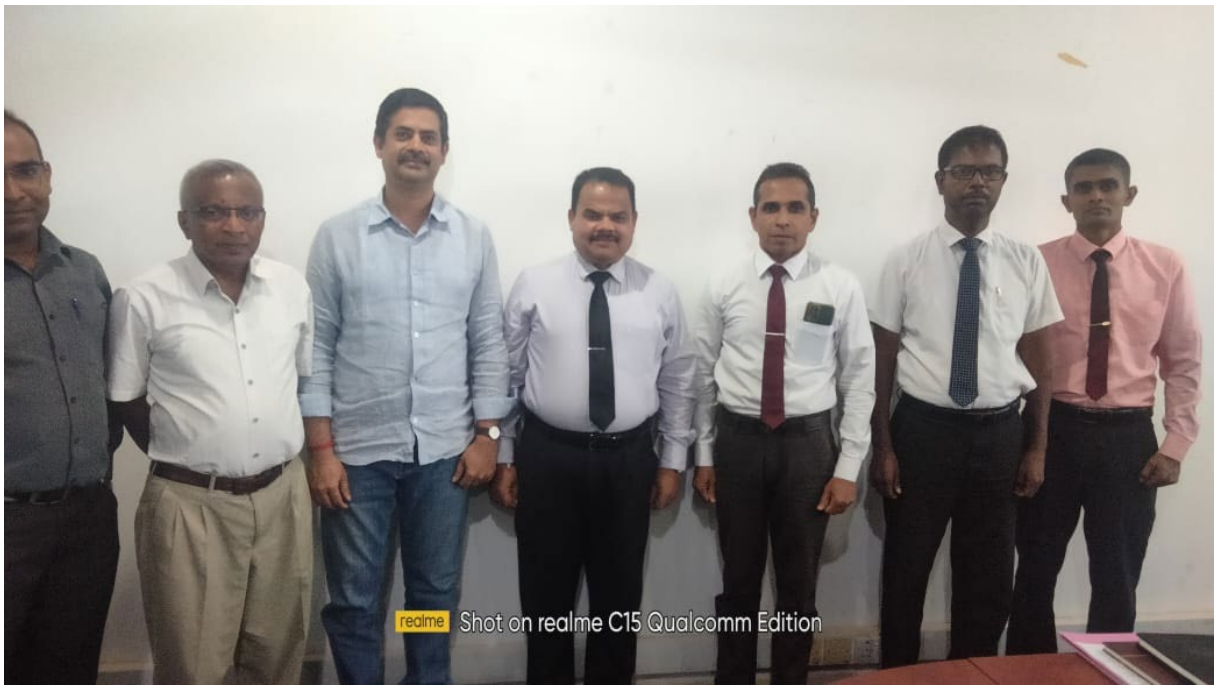

Figure 8: Meeting participants from the Governor's office and IWMI (Photo: Anuradhi/NCP)

The meeting concluded with words of appreciation from the Hon. Governor, who commended IWMI's long-term contributions to Sri Lanka's water management and climate resilience efforts. He acknowledged the value of the expertise shared during the meeting and expressed his support for continued cooperation to strengthen sustainable development initiatives in the North Central Province.

Closing Remarks

Ms. Nilmini Wickramarachchi expressed gratitude to IWMI for sharing valuable knowledge on drought tools, noting that the information provided was both useful and important. She emphasized that these tools could be applied effectively in technical work and extended an invitation to IWMI to collaborate as a technical partner. She also conveyed her sincere appreciation for the opportunity to learn from IWMI.

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