

Global Partnership Channels More Than USD 1 Billion to Scale Up Weather Services for Hundreds of Millions of Farmers Across Asia, Latin America and Africa

Baku, 13 November 2024: At the COP29 World Leaders Climate Action Summit, the Agriculture Innovation Mechanism for Scale (AIM for Scale) unveiled its first-ever, groundbreaking Innovation Package, aimed at providing weather information to help farmers adapt to the impacts of climate change. Future Innovation Packages will expand efforts to scale additional solutions addressing the interconnected challenges of climate change, food security, and agriculture.

AIM for Scale, in partnership with the Innovation Commission for Climate Change, Food Security, and Agriculture, designed an Innovation Package to empower the generation and dissemination of weather forecasts to hundreds of millions of farmers. The Package recognizes the transformative potential of AI-supported weather forecasting to help national meteorological and hydrological services (NMHS) produce high-quality, farmer-centered forecasts. Co-producing and disseminating these forecasts to millions of farmers can build resilience and support adaptation as climate change makes weather patterns less predictable. This process will build on previous efforts and consider varying needs across countries, while emphasizing gender equity and inclusion to ensure broad and equitable impact.

A consortium of global partners has committed to mobilizing significant investments over the next three years to drive the implementation of the AIM for Scale Weather Package. Highlights of these announcements include:

Following on its food security ambition during 2022–2025, the **Asian Development Bank** (ADB) will invest approximately \$300 million in advanced weather forecasts tailored for the needs of farmers in Asia and the Pacific as part of ADB's portfolio of food security operations during 2025-2027. ADB also announced a \$600,000 technical assistance grant to facilitate the investment. Food security is a top priority under ADB's updated Strategy 2030.

The **Inter-American Development Bank** expects to leverage weather forecasts in its portfolio of \$280 million in loans in the coming three years and announced that it has programmed \$600,000 of grant resources to support countries to introduce AI-based weather forecasts tailored to farmers' needs in the IDB's agriculture lending portfolio in Latin America and the Caribbean.

The **World Bank** is currently investing \$1.46 billion in Data, Digital Agriculture and Innovations investments that align with the AIM for Scale Weather Package. These investments, of which about \$591 million are in the Africa region, support georeferenced farmer registries, soil information systems, climate smart advisories, early warning systems, and pest diagnostic, and will provide the ideal vehicle to transmit high-quality, timely weather information to millions of Africa farmers.

The U.S. Agency for International Development (USAID) and NASA, working with Congress and through the U.S. President's Emergency Plan for Adaptation and Resilience (PREPARE), announced plans to expand the SERVIR program to Central America, investing \$6.6 million in the Tropical Agricultural Research and Higher Education Center (CATIE). The new regional hub will launch in early December. SERVIR uses satellite data and geospatial technologies to expand access to early warning systems helping communities prepare and adapt to extreme weather events. The new SERVIR Central America Hub will collaborate with local, national, and regional partners to bolster the resilience of more than 40 million people, including 11 million people directly employed in agriculture.

The **Ministry of Agriculture and Farmers Welfare of India** plans to digitally deliver weather forecasts to tens of millions of farmers, building on a successful initiative that reached 9.45 million in 2024.

The **Massachusetts Institute of Technology** and **Community Jameel** announced the scale-up of the Jameel Observatory-CREWSnet, using climate modeling, research and technological innovation to initially support 8 million smallholder farmers in Bangladesh at risk from climate change, in collaboration with BRAC.

The **Mohamed bin Zayed University of Artificial Intelligence** (MBZUAI) and the **University of Chicago**'s Human-Centered Weather Forecasts and AI for Climate (AICE) initiatives, in partnership with the World Meteorological Organization (WMO) and the United Nations Systematic Observations Financing Facility (SOFF), launched a research and training program to improve access to high-quality, farmer-centered AI-supported predictions in more than 30 LMICs. The program will leverage SOFF's Peer Advisor Network to provide continued support to NMHS.

The **World Meteorological Organization** (WMO) will provide guidance and technical assistance on weather observation, data management and exchange, forecasting, and agrometeorological weather and climate service development and delivery.

The **United Nations Systematic Observations Financing Facility** (SOFF) committed to support countries, in particular Small Island Developing States and Least Developed Countries, to close today's significant weather and climate data gaps through the long-term grant financing and peer-to-peer technical assistance.

Her Excellency Dr. Amna al Dahak, Minister for Climate Change and Environment of the UAE, welcomed the launch of AIM for Scale following the achievements of the AIM for Climate platform, saying: "Only three years ago at COP26, the UAE and the United States of America launched AIM for Climate to mobilize investments in food systems innovation worldwide. Our success has been truly transformative. Today, with the launch of AIM for Scale, we are accelerating our efforts to find highly promising, climate-friendly agricultural innovations and breaking down barriers to their scaling."

In prepared remarks regarding the announcement, Her Excellency Mariam Almheiri, Head of the International Affairs Office at the Presidential Court of UAE, emphasized the importance of international collaboration: "The UAE's partnership with the Bill & Melinda Gates Foundation was launched to mobilize actions like the AIM for Scale Weather Package announced at COP29.

Through this partnership, we seek to accelerate food systems transformation and climate action. Many innovations have the potential to improve the lives and livelihoods of climate-vulnerable people, but additional coordination and targeted investments are necessary to transition them to scale."

Professor Celeste Saulo, Secretary-General of the World Meteorological Organization welcomed the partnership, noting: "More and better data leads to better weather forecasts, early warning systems and climate information services for agriculture and other vital economic sectors. Closing basic data gaps will also help inform AI models." Professor Saulo added that "the agriculture sector is undoubtedly one of the most vulnerable sectors to climate variability and change. Additional partnerships are needed to ensure that farmers are involved in the coproduction of weather and climate services which will enhance resilience and adaptation in the agriculture sector."

Dr. Abdulla Al Mandous, President of the WMO and Director General of the National Center of Meteorology (NCM) of the UAE, highlighted the importance of providing farmers with weather information: "Today's launch of the AIM for Scale Weather Package marks a vital step forward in supporting millions of farmers on the front lines of climate change. By improving the reach of accurate, farmer-centered weather forecasts, we can equip vulnerable populations with the information they need to adapt to unpredictable conditions. This initiative underscores the importance of partnerships, technology, and accessible data to build resilience where it's needed most."

Fatima Yasmin, Vice-President of the Asian Development Bank (ADB), stated that "ADB, as the climate bank of Asia, recognizes the transformational importance of weather forecasts for advancing climate change adaptation in Asia and the Pacific. In this context, ADB is engaging in this Partnership with the ambition of increasing access to high-quality weather forecasts for any economic sector, and with the objective to scale up and boost evidence-based investments for weather forecasts for farmers and digital agriculture."

"Food insecurity and hunger have actually worsened in Latin America and the Caribbean over the past decade. Increasing agricultural productivity, and small farmers' output in particular, will be a key part in reversing this trend. Providing more accurate and relevant weather forecasting to small farmers will improve decision making around planting, harvesting and fertilizer use, leading to higher incomes and poverty reduction," said Jordan Schwartz, Inter-American Development Bank (IDB) Executive Vice President.

Nobel laureate Michael Kremer, Chair of the Innovation Commission for Climate Change, Food Security, and Agriculture and Chair of AIM for Scale's Advisory Panel, highlighted the significance of these investments: "There is a wealth of evidence that smallholder farmers benefit from high-quality weather forecasts. Yet, the challenge of reaching hundreds of millions of farmers remains. AIM for Scale is a vital step toward filling this gap by leveraging new investments and global partnerships."

Regarding the launch of the research and training program to improve access to high-quality, farmer-centered forecasts, Professor Timothy Baldwin, MBZUAI Provost and Professor of Natural Language Processing, noted: "MBZUAI is proud to leverage the potential and power of AI to identify and develop solutions that drive real-world impact. Like many sectors, agriculture is

affected by climate change, and farmers, particularly in the Global South, need urgent and reliable access to data that will inform their decision-making and support national food security agendas. As a leading research university that is dedicated to artificial intelligence, we are committed to supporting improved access to high-quality, AI-supported weather forecasting for farmers in 30 low-and-middle-income countries."

Throughout its COP28 Presidency, the UAE has highlighted the power of agricultural innovation as a critical engine to help communities adapt and transform food systems in the face of climate change. Key announcements were made on food security and climate action at COP29's World Leaders Climate Action Summit as countries sustain momentum implementing the COP28 UAE Declaration on Agriculture, Food Systems, and Climate Action (the Declaration), launched in Dubai by 160 heads of state.

AIM for Scale, first announced at COP28 as part of a new partnership between the UAE and the Bill & Melinda Gates Foundation, is a multi-partner effort to transition evidence-based, cost-effective innovations to scale for the benefit of farmers affected by climate change.

The Innovation Commission for Climate Change, Food Security, and Agriculture is an independent initiative at the University of Chicago that identifies innovations with rigorous evidence of impact and cost-effectiveness, as well as early-stage innovations with high expected returns, and generates recommendations to transition them to scale.