APO launches new Center of Excellence on Climate-smart Agriculture in Japan

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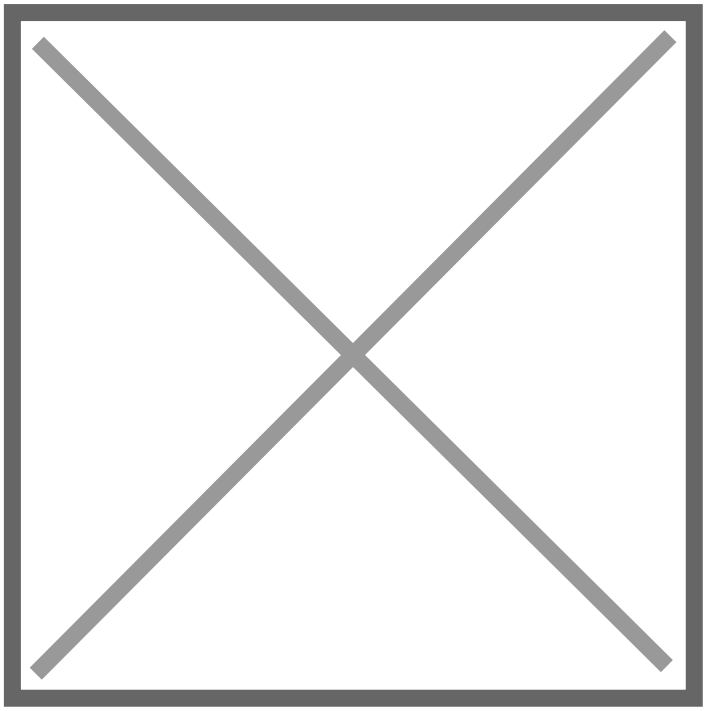

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In efforts to enhance agricultural productivity, improve farmersâ?? profits, and reduce greenhouse gas (GHG) emissions in the sector regionwide, the Asian Productivity Organization (APO) announced the designation of the National Agriculture and Food Research Organization (NARO) of Japan as its new Center of Excellence on Climate-smart Agriculture (COE on CSA). This is a result of the long-term partnership between the two institutions in disseminating know-how in the focus area of the new COE.

The COE on CSA will start its activities from April 2023, including a need and readiness assessment of APO members for implementing climate-change mitigation and adaptation technologies, two international conferences on CSA and other COE focus areas, and pilot projects to apply technologies developed by the COE on CSA starting from 2024 as well as seminars, study missions, workshops, and on-site training for customizing the know-how to meet local needs in APO members.

The COE on CSA may provide technical knowledge and skills such as technologies to reduce methane emissions from paddy fields; agricultural weather data systems for rice, wheat, and soybean production; web-based soil carbon sequestration visualization tool for greenhouse gas reduction in various crops such as rice, wheat, and soybean.

The APO COE Program showcases excellence in specific productivity fields to promote the adoption of the know-how and best practices of one member by others while adapting them to suit local contexts. The COE on CSA will focus on the deployment of climate change mitigation and adaptation technologies, know-how, and frameworks for low-carbon rice, wheat, and soybean production as staple foods in the Asia-Pacific. Specific focus areas will be sharing technical knowledge and methods to reduce methane emissions from paddy fields; adoption of agricultural weather data systems for rice, wheat, and soybean production; web-based soil carbon sequestration visualization tools for GHG reductions in various crops such as rice, wheat, and soybean; application of biochar and development of carbon credit methodologies; and water management practices in rice cultivation and treatment of livestock waste.

The agriculture sector is crucial in most APO members and essential for global food security. However, it is also a significant contributor to GHG emissions and is vulnerable to climate change. Droughts, floods, and extreme weather events may cause food scarcity. GHG emissions due agriculture, livestock operations, and land use are estimated to account for 24 per cent of the global total. The introduction of climate-friendly agricultural practices combined with the adoption of smart technologies can bring multiple benefits in the form of higher productivity, increased agricultural and food production, and reduced GHG emissions.