Early Warning System

ADB-58307-001

Super-resolution Satellite Imagery as a Regional Public Good for Sustainable Development

Quick Facts

Countries	Bangladesh, China, Philippines, Thailand
Financial Institutions	Asian Development Bank (ADB)
Status	Approved
Bank Risk Rating	U
Voting Date	2024-08-02
Sectors	Communications, Energy, Infrastructure, Law and Government, Technical Cooperation
Investment Type(s)	Advisory Services
Investment Amount (USD)	$ 0.23 million
Project Cost (USD)	$ 0.23 million

Project Description

According to the ADB, the TA will generate knowledge to: (i) develop a regional public good comprising an open-source method of deriving high-resolution (super-resolved) satellite imagery, and (ii) demonstrate how these images can be used to assess policy-relevant use-cases such as monitoring the green transition over time or assessing the quality of infrastructure. The TA therefore aims to not just provide policy-relevant insights, but to also provide DMCs with the tools to conduct such analyses themselves. The datasets and algorithms together with capacity building activities can be provided to identify DMCs to equip them in developing data-driven climate policies. This TA is well aligned with Strategy 2030, particularly strengthening institutional capacity in DMCs (OP6) in big data capabilities.

Super-resolved satellite images unlock several use-cases. Therefore, the final part of the TA involves applying super-resolved satellite images to a specific use-case. Such use cases may include the following, subject to data availability and quality of the trained model: (i) monitoring the transition to sustainable energy by measuring solar panel take-up; (ii) updating cadasters; (iii) monitoring the transition to sustainable energy by measuring wind turbine growth; (iv) monitoring infrastructure quality. As such, the super-resolved images will be incorporated into examining a specific policy use-case, which will be determined upon consultation with relevant stakeholders (e.g. other ADB areas, ADB Resident Missions and/or Government stakeholders).

For the use-case applications of super-resolved imagery, possible DMCs include Bangladesh, China P.R., Philippines, and Thailand, contingent on consultations with regional departments, government agencies data availability and model quality. Relevant ADB teams will be consulted as part of a collaborative approach to finalize the DMCs. This approach ensures that the SSTA is closely aligned with the operational priorities of ADB as outlined in the corporate results framework.

Investment Description

- Asian Development Bank (ADB)

Contact Information

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No contacts provided at the time of disclosure.

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