PROJECT SUMMARY

OBTAINING SOCIAL AND ENVIRONMENTAL GAINS THROUGH SATELLITE IMAGERY AND SOLUTIONS (RG-L1139)

Insights from the remote observation of Earth's surface (Earth observation) represent a powerful and irreplaceable tool to enable governments, businesses, NGOs, and civil society to make informed decisions in a wide variety of fields. "Earth observation satellites–EOS" constitutes the most far-reaching source of remote imagery, collecting satellite imagery (also known as "Earth observation data–EOD") to identify, quantify and monitor human and environmental phenomena. EOD becomes actionable when processed and translated into final **end-user solutions (also called "Earth observation applications–EOA")**, which are particularly valuable in natural resource intensive sectors—such as agriculture, forestry, response to natural disasters and energy.

Latin America and the Caribbean (LAC) is a region naturally endowed to reap substantial social and environmental gains from a wide scope of satellite imagery-based solutions. However, such solutions are not currently available to the region's farmers, SMEs, NGOs, public institutions and regular businesses due to the high prices of EOD (required as inputs) and the lack of development of EOA capable of directly benefiting those groups. While the high final prices of EOD result from the high cost structure that private EOS companies face in building high-resolution satellite constellations, the lack of development of EOA is associated with the complex data analytics process required to translate raw EOD into actionable and user-friendly EOA.

With the objective of developing and deploying targeted high-impact EOA to bring benefit to vulnerable populations and the environment in LAC, the project will support "Satellogic", an Argentina-based startup founded in 2010 that is leading a global revolution in the field of satellite imagery solutions. With the explicit mission of "democratizing satellite data to help solve the world's most pressing problems", Satellogic globally innovated by creating patent-protected satellites that are smaller and collect EOD at a cost 65 times lower, and by following an end-to-end integrated model, developing and delivering end-user EOA solutions in LAC.

To that end, IDB Lab will provide a US$3 million convertible loan to Satellogic to finance the development of end-user solutions in agriculture, forestry, response to natural disaster and energy/infrastructure.

IDB Lab's financed solutions will include: monitoring crop growth and preventing the spread of plagues in agriculture to help increase yields and livelihoods of a vast universe of small and medium-sized farmers caught in a low-productivity cycle in LAC; improving the reaction time and accuracy in natural disasters, which typically disproportionately impact vulnerable populations; preventing deforestation; monitoring large forestry areas for land restoration; preventing environmental losses and negative impact to local forestry and indigenous communities resulting from water and soil contamination; and ensuring environmental compliance of energy and infrastructure projects. Satellogic will also partner with local institutions (cooperatives, associations) and startups to amplify the outreach of solutions to vulnerable populations and facilitate local-specific adoption and support to users.

IDB Lab is also expected to provide specific value-added by providing strategic advice to help Satellogic structure its impact strategy and development-focused services, leveraging its extensive network of local organizations, which is an essential asset as it pilots its EOA solutions through LAC; facilitate knowledge sharing and synergies with LAC's public sector; and help signaling confidence to additional private investors in light of Satellogic's funding needs.

Among other impact results expected, Satellogic's solutions are expected to benefit over 36,750 small and medium-sized farmers in the region and monitor the environmental conservation and identification of potential deforestation activity in at least two million hectares of land in the region.