Establishment of an innovative model for the transportation of health commodities in hard-to-access areas of the Dominican Republic

On Thursday June 30, the Multilateral Investment Fund (MIF) of the Inter-American Development Bank (IDB), and e-Mprende, a local technology business incubator based in the Cybernetic Park of the Dominican Republic, signed a collaboration agreement to establish the first transportation network with unmanned aerial vehicles (UAVs or drones) to improve the response capacity of the Primary Healthcare Centers in rural areas of the Dominican Republic.

The project is the first of its kind to be developed in Latin America, and aims to complement the primary health services offered to the population living in areas where inadequate transportation impedes access to basic health services. The project's technical implementation will be executed by Matternet, a Silicon Valley-based technology company pioneering the creation of UAV transportation and logistics networks worldwide.

The initiative will also feature a public-private partnership between the Dominican Republic's National Health Service (SNS), the Ministry of Higher Education, Science and Technology (MESCyT), the Cybernetic Park of Santo Domingo (PCSD), the Dominican Civil Aviation Institute (IDAC), Lionbridge Capital SAS group, and four national universities. A total of $1,152,980 has been allocated for the initiative, from which $613,000 come from the public-private partnership, and $539,980 from the IDB.

The pilot program will begin in the province of San Juan de la Maguana, establishing a transport network for laboratory samples and medicine between eight Primary Healthcare Centers and two hospitals located in the municipalities of Bohechío, Los Fríos, and other hard-to-access locations.

The project is expected to directly benefit around 23,168 low-income people, and a total population of 200,000 attending the Primary Healthcare Centers regularly. Key impact indicators comprise: (i) a 30 to 50% increase in the number of diagnostics and laboratory results delivered; (ii) a 50% increase in the transportation of pap tests and blood samples; (iii) greater availability of emergency and/or biological medicines; and (iv) the establishment of the first Drone Innovation Center for the development of entrepreneurial initiatives with UAVs.

In addition, the Ministry of Higher Education, Science and Technology (MESCyT) will sponsor education and training activities in four national universities, benefiting local students in the areas of mechatronics and robotics. Also, the Dominican Civil Aviation Institute (IDAC) will work towards an adequate regulatory framework to allow the use of commercial UAVs in low altitude airspace.

The pilot program intends to demonstrate that, under certain topographical and logistical conditions, this transport system may be more efficient than traditional healthcare delivery methods. After evaluating the impact results, the National Health Service (SNS) will determine the expansion of the network to other areas of the country with similar topographic conditions.

This initiative highlights the commitment of the Inter-American Development Bank (IDB) and its innovation lab, the Multilateral Investment Fund (MIF), to investigating solutions that stimulate economic and social development in the region with the participation of the private sector.
About MIF
The Multilateral Investment Fund (MIF) is the innovation lab for the Inter-American Development Bank (IDB) Group. It conducts high-risk experiments to test new models, engage and inspire the private sector to solve economic development problems in Latin America and the Caribbean. MIF addresses poverty and vulnerability focusing on small and medium-sized businesses, and on small farmers that have the ability to grow and create economic opportunities.

About Matternet
Matternet is the leading provider of autonomous drone logistics systems for small, urgent deliveries. The company has rapidly gained an international reputation for its work with the World Health Organization, Doctors without Borders, and with some of the world’s leading logistics players. More recently, Matternet developed a pilot project with UNICEF in Malawi for the transportation of early infant HIV diagnostic samples, the first initiative of this category in the African continent. Matternet’s first product, Matternet ONE, is available to logistics and healthcare customers in Europe and the USA, alongside humanitarian organizations in developing countries.

About Emprende
Emprende is a non-profit organization created to support entrepreneurs who have an idea, a project or a technological and innovative company that is in the formation stage, or with limited time on the market. From its beginnings, it was set out to be the first technological business incubator of the Dominican Republic, with the objective of supporting entrepreneurs throughout the process of creation, development and consolidation of companies; as well as generating a critical mass of quality entrepreneurship that promotes participation of investors. e-Mprende is strategically located as part of the ecosystem of the Cybernetic Park of Santo Domingo (PCSD), location that it currently shares with the Technological Institute of the Americas (ITLA), the Caribbean Network Access Point (NAP), among other institutions.