



DISRUPTIVE TECHNOLOGIES FOR DEVELOPMENT

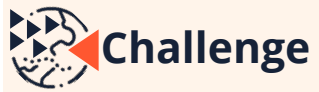
◀ **Unlocking the lower skies –
Accelerating Drone
Technology Services in Africa**

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Unlocking the lower skies – Accelerating Drone Technology Services in Africa



Challenge

Hard-to-reach communities face higher costs for goods and long wait times for deliveries with lower productivity of rural facilities and fewer opportunities for rural citizens. **Critical supply chains are failing** -12,500 stock-outs in Tanzania's Mwanza region in 2016 compromising health services.



Solution & Technology Used

Cargo drones to speed up deliveries and connect the excluded along Lake Kivu in Rwanda in faster, greener and cheaper ways than the traditional means of transportation.



Implementation

The **African Drone Forum** and **Lake Kivu Challenge** (Nov-Dec 2019) convening regulators, government officials and drone enterprises to accelerate drone technology and ecosystem. The winning drone enterprises were awarded cash prizes in the following categories: Laboratory Sample Collection, Emergency Delivery and Rural Asset Mapping.



Impact

Potential to impact **health, agriculture, and cargo supply chains in the Lake Victoria Basin and East Africa region**. Drone technology offers a **leapfrogging opportunity in Africa to develop new markets** and boost rural economic opportunity.



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Pilot Results



The African Drone Forum (ADF) 2020 that brought together more than 1,000 stakeholders shaped the technology ecosystem, facilitated policy dialogue, and incubated business opportunities for drone technology.

- **Focused on high-impact use-cases:** Lake Kivu Challenge Flying Competitions identified 10 winners of drone use-cases in emergency delivery, sample pickup, and rural asset mapping.
- **Created an enabling policy environment:** Drone regulators summit convened 60 regulators from 26 African countries. The summit conducted a review of all regulations, policy dialogues, and regulatory gaps for the Unmanned Aerial Systems in the African continent. The comprehensive research and **drone regulations database** will be available on the ADF website.
- **Accelerated drone entrepreneurship and nurtured future industry leaders:** The African Drone Business Challenge awarded USD 60,000 to 10 finalists. The ADF invited 200 youth ambassadors and provided African Youth Scholarship to 21 scholars from 11 countries.



Partners

- The Government of Rwanda, the Ministry of Land, Infrastructure and Transport of Korea, UK AID, World Economic Forum, IMC Worldwide, UN International Civil Aviation Organization (ICAO), Civil Aviation Safety and Security Oversight Organization (CASSOA), World Food Programme, JSI, Deloitte.



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Pilot Results

Relevance in the age of Covid-19

- Some governments are using drones in their Covid-19 responses. In China, drones are deployed for aerial spray and disinfection, transport of medical samples and consumer goods delivery. Other potential use-cases include symptom tracking and crowd monitoring.

Next Steps & Beyond DT4D

- **Incorporating drones in WBG operations:** The ADF initiated the discussion to include drones as a business line within the Transport sector. Haiti is the first country to introduce drones in its transport project. Additionally, Sierra Leone and Malawi have formally requested support.
- **Country level engagement:** Ministries of ICT and Infrastructure in Rwanda have announced their intention to develop a National Drone Operation Hub and have sought for the Bank's support through operation.
- **Regional level engagement:** The Secretary-General of the East African Community (EAC) requested for the Bank's support in building 1) regulation capacity for the Civil Aviation Safety and Security Oversight Agency and 2) developing harmonized drone market in EAC.