

# BOTSWANA INNOVATION FUND

## OPEN INNOVATION CHALLENGE ON SPACE APPLICATIONS FOR AGRICULTURE AND TOURISM SECTORS

### CALL for submissions



#### THE CHALLENGE

The Botswana Innovation Fund, under the Grand Challenges Botswana initiative in partnership with African Academy of Sciences - Alliance for Accelerating Excellence in Science in Africa (AESA) is calling on developers and creatives to participate in the open innovation challenge on space applications for Agriculture and Tourism. We are seeking the best ideas in the downstream application of space technology including, but not limited to, the utilisation of satellite, airborne and unmanned aerial vehicle (UAV) data as well as value-added datasets to provide daily solutions in these sectors. The target solutions will have undergone calibration and validation stages to ensure they are of the right quality and standard. Standard metadata are a must for all spatial products.

This Challenge is in alignment with the national digital transformation initiatives as well as economic transformation and recovery plans. The Challenge aims to identify locally developed solutions that demonstrate the utilisation of relevant emerging and Fourth Industrial Revolution (4IR) related technologies, e.g., Artificial Intelligence and Big Data analytics in geospatial data benefitting the tourism and agriculture sectors.

#### THE GOALS OF THE CHALLENGE

The desired outcomes of this Challenge include the development of a set of applications which use earth observation, the gathering of information about the physical, chemical, and biological systems via remote-sensing and related technologies and further integration with other datasets including real-time data processing and solution generation. It is anticipated that this Challenge will result in the following:

- Design and development of mobile and online based applications and communication tools to support sustainable growth in the agriculture and tourism sectors
- Optimisation of the use of Earth Observation (EO) data as well as its integration with other datatypes to generate impactful solutions
- Collaboration between start-ups, industry experts, testing and accreditation facilities, knowledge holders, and skills development practitioners
- Development of local capacity in space applications development
- Empowerment of the general public on Agri-Tech solutions and increased participation
- Facilitation of access to capacity building, market access and investment opportunities improving the odds of early stage start-ups growing into sustainable companies.

The target solutions should create unique visualizations of existing data for local communities relating to food security, land and wetlands ecosystems, water resources, climate and conservation. The applications and communication tools developed should address key issues including, inter alia, the following categories:

- Cultivated Area; Crop-yield Forecasting; Weather Forecasting; Suitability Mapping; Soil Conditions (e.g. moisture); Market and Logistical Opportunities; Monitoring Agriculture Activities; Monitoring Tourism activities; Tourist Services Maps; etc.

#### ELIGIBILITY

The competition is open to the following categories of applicants (app developers, animators, graphic designers / comic creators) operating in Botswana, including:

- Registered companies
- Start-ups
- Freelance developers
- Entrepreneurs

All applicants should complete an application form available on the following link:

<https://form.jotform.com/innovationfund/SpaceChallenge>

Selected applicants will be invited to pitch their ideas and showcase their sample product(s) on a date to be communicated.

#### DEADLINE FOR SUBMISSION

- All Concept Notes must be submitted by Thursday, **11th March 2021 at 17:00HRS CAT.**

