



UNIVERSAL ACCESS AND SERVICE FUND (UASF) YOUTH HACKATHON

THEME: DATA-DRIVEN SOLUTIONS FOR SUSTAINABILITY AND PRODUCTIVITY IN E-AGRICULTURE

1.OVERVIEW

1.1. The Botswana Communications Regulatory Authority (BOCRA) through the Universal Access and Service Fund (UASF) in partnership with Botswana Telecommunications Corporation (BTC) is calling for proposals for a Hackathon focusing on the e-agriculture sector. Participants are to develop data driven and decision-making Applications that can drive the production and adoption of local content in sectors of Botswana's e-agriculture.

2. ELIGIBILITY

- Citizens of Botswana
- Youth between the ages of 18 - 35
- Team Composition:- 2-5 Members within a team
- At least 1 female participant
- No individual submissions

3. PROBLEM STATEMENT

3.1. ADDRESSING BOTSWANA'S AGRICULTURAL CHALLENGES THROUGH LOCALLY DATA-DRIVEN TECHNOLOGICAL INNOVATIONS

3.1.1 Botswana's agricultural sector faces multitude of challenges that hinder productivity and sustainability. These include but are not limited to climate change-induced water scarcity, limited fertile land, livestock management issues, pest outbreaks, and a lack of youth engagement. Amongst these challenges is the absence of systems in place that enable for collaboration and real-time information sharing among farmers, researchers, and stakeholders.

3.2. To address these challenges, the Universal Access and Service Fund (UASF) Youth Hackathon invites participants to the development of locally relevant, data-driven, and decision-making Applications including, but limited to:

- Enable farmers to optimise solutions in response to unpredictable rainfall, prolonged droughts and dry seasons.
- Identify and maximise the potential of Botswana's scarce fertile land for cultivation.
- Provide innovative solutions for livestock health, disease control (e.g., foot-and-mouth disease), and sustainable grazing etc.
- Develop accessible tools for real-time pest monitoring and outbreak containment.
- Integrate technology into agriculture to make it an attractive and viable career path, promoting youth engagement in the sector.
- Create platforms for collaboration among farmers, researchers, and stakeholders to exchange best practices and innovations.
- Enable real-time sharing of critical information such as access to markets, pest outbreaks, disease containment strategies, and market trends.
- Ensure that solutions are easy to use, accessible to all stakeholders, and inclusive of data privacy and security compliance.

4. EXPECTED OUTCOMES

4.1. Solution: Locally Relevant Technological Innovations

4.1.1. Participants are to develop data-driven & decision-making Applications tailored to address Botswana's agricultural challenges, such as, but not limited to:

- i. **Climate Change and Water Scarcity:**
Agriculture in Botswana is reliant on rainfall, making it vulnerable to unpredictable rainfall patterns, prolonged droughts and dry seasons.
- ii. **Limited Suitable Land for Cultivation**
Majority of land in Botswana is arid or infertile, making it unsuitable for productive farming. Additionally, fertile land in Botswana is scarce to find.
- iii. **Livestock Management Issues**
Botswana is facing issues of live stock management this includes overgrazing and diseases such as foot-and-mouth.
- iv.**Pests and Diseases control**
Botswana is facing recurring outbreaks of pests (e.g., locusts) with limited access to pest control resources, which are mainly foreign imports.
- v.**Youth Disengagement in Agriculture**
Agriculture sector in Botswana is often not seen as an attractive career by the youth, contributing to an aging farming population.
- vi. **Farmer Collaboration**
To build networks among farmers, researchers, and other stakeholders to facilitate knowledge sharing and collaboration such as effective Livestock management practices
- vii. **Real-Time Knowledge Sharing**
Botswana ecosystem is scarce in terms of tools that allow farmers to relay current information of local events, such as access to markets, pest outbreaks or disease control measures.

N.B. The above are just guiding principles, and participants are encouraged to propose innovative solutions to Botswana's agricultural challenges.

5. PRIZE

- i. **Grand Prize:**
 - P 50,000.00 &
 - Development support valued at P 300,000.00

- ii. **Runner Up:**
 - P 30,000.00

- iii. **Second Runner Up:**
 - P 20,000.00

- iv.**Third Runner Up:**
 - P 10,000.00

- v.**Fourth Runner Up:**
 - P 5,000.00

6. ADDITIONAL SUPPORT:

- 6.1. The winning team of the Hackathon will receive additional support and funding from both BOCRA and BTC. This support will include:
 - Incubation, Training & Subsistence
 - Equipment & Hosting
 - Commercialisation Assistance
- 6.2. The total funding for this support is valued at approximately **Three Hundred Thousand Pula (P 300,000.00).**

7. CLOSING DATE: 15 January 2025

8. APPLICATION LINK: <https://innovation.btc.bw/Challenges>