Information for Agriculture, Food and Water Security – Digital Earth Africa

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What is Digital Earth Africa?

- Program covering the entire innovation value-chain
- Multiple continental scale operational services
- Extensive library of Jupyter notebooks, including SDG-oriented tools
- Product co-design with end users
- Training activities and networking
Digital Earth Africa, Association for Strengthening Agricultural Research in Southern Africa (ASARECA), and Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA), supported by the Australian Centre for International Agricultural Research (ACIAR) working to:

- support consultations to understand the needs, opportunities and gaps for using Earth observations (EO)-based services;

- develop a Roadmap for Digital Earth Africa (DE Africa) to deliver services tailored to these needs to improve productivity and build resilience.
Consultations

● Initial consultation and ‘deep dive’ workshops conducted in:
  ○ Botswana
  ○ Ethiopia
  ○ Kenya
  ○ Rwanda
  ○ South Africa
  ○ Uganda
Findings

● Themes:
  ○ There is demand for **training** among NGOs and service organizations

  ○ There is a genuine interest in **connecting to farmers**, but it remains unclear how that will be achieved - different interfaces? Conduit - e.g. private sector, extension officers?

  ○ Products need give **tangible agricultural information**: e.g. crop type maps, yield estimates, water use requirements. Something that farmers can relate to
Customizable, crop type workflow:

1. Sampling design - notebooks
2. Field data collection – ECAAS ODK toolkit.
3. Data preparation - notebook
4. Feature extraction - notebook
5. Feature exploration - notebook
7. Review of trained model on test areas - notebook
8. Production of crop type map for area of interest – notebook
Thank you

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