



G20 Global Agriculture Monitoring Initiative

GEOGLAM

Science Priorities

Food Systems Science Cluster Meeting

Living Planet Symposium

May, 23, 2022

Post 2022: Mounting Policy Challenges

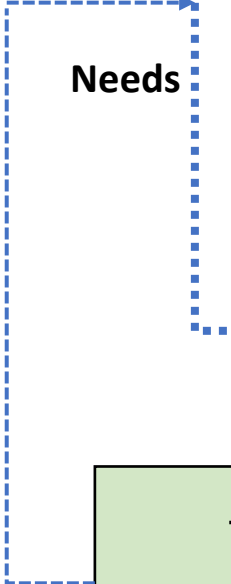
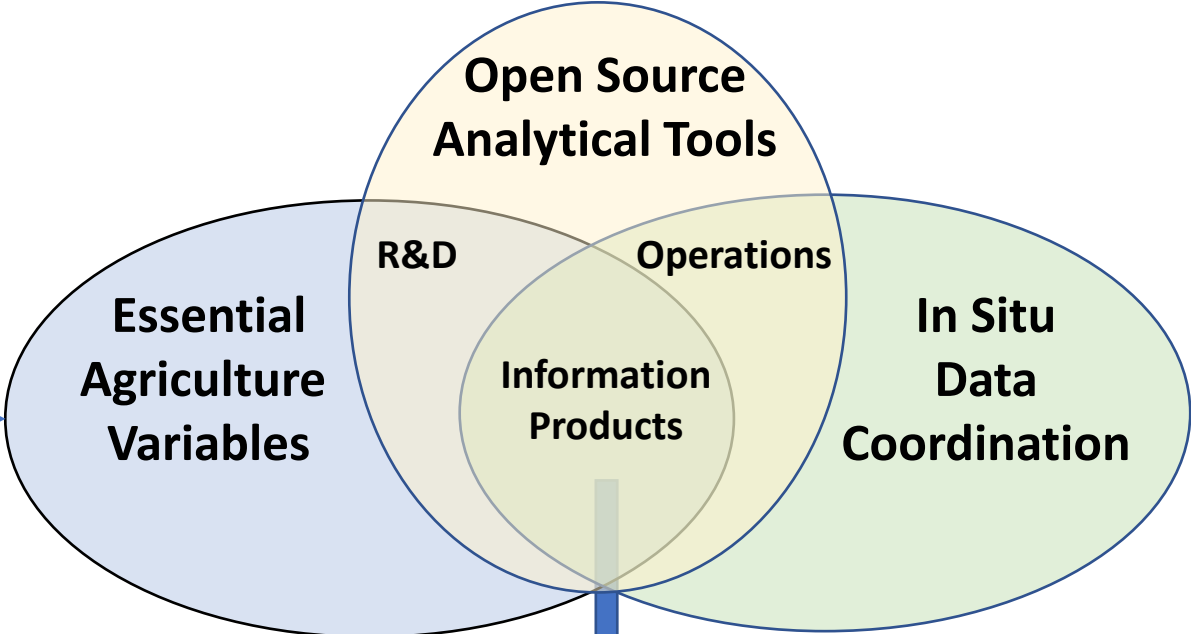


Key actions to rise to the challenge

- New Science challenges
- Need for sustained solutions with continuity
- Scale up co-development efforts to less developed nations
- Better integration across sectors and science discipline's
 - Essential variables, terrestrial monitoring framework, align with modelling community

GEOGLAM Vision

Addressing Policy Challenges



Capacity (co) Development Guidance
(National and International)

<p><u>Adaptation</u> National Adaptation Plans (NAP) UNFCCC Supplemental NAP Guidance</p>	<p><u>Mitigation</u> AFOLU Roadmap Global Stocktake (GST) Nationally Determined Contributions (NDCs)</p>
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<p><u>Early Warning & Food Security</u> Crop monitor for early warning - Seasonal Forecasts - Special Reports</p>	<p><u>Market Information</u> Agricultural Markets Information System (AMIS) - Commodity Crop Conditions - Seasonal Forecasts</p>
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Policy Priorities
Climate & Food Security

Selected Science Priorities

GEOGLAM Specific

- SAR for Agriculture Monitoring, going the last mile to operations
 - Sen2Agri, Sen4CAP and Stats type approach to the development of open SAR tools
- Operations 2.0, Resilience of Observing Systems
- Product Validation and intercomparison
 - Making sense out of the plethora of products available
- Yield Estimation, Forecasting and Gap
 - Understanding and Monitoring Crop Yield particularly in Smallholder Systems
- New Missions and Constellations
 - E.g. Hyperspectral (PRISMA, ENMAP, etc)

Integrated Challenges

- Development of change methods and metrics
 - Moving from one-off products to rigorous change assessment
- Systematic approaches to information development
 - Essential Variables - State and Change
 - Continuity and Sustainability of products for decision support
- Integration across the AFOLU Sectors
 - Information integration
 - Development of a terrestrial monitoring framework