

Capturing evidence-based knowledge – what role for knowledge systems beyond science?

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Overview of CGIAR research modality

- Participatory approaches
- Farmer knowledge & experience
- Research in development as key feature of Strategy & Results Framework 2016-2030; opportunities?

CGIAR Research Centers

Research conducted by 15 non-profit research Centers with 10,000 scientists and support staff in over 70 countries.

Close collaborations with national and regional research institutes, civil society orgs, academia, development orgs and private sector.



CENTERS

- 1 AfricaRice
- 2 Bioversity International
- 3 Center for International Forestry Research (CIFOR)
- 4 International Center for Agricultural Research in the Dry Areas (ICARDA)
- 5 International Center for Tropical Agriculture (CIAT)
- 6 International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)
- 7 International Food Policy Research Institute (IFPRI)
- 8 International Institute of Tropical Agriculture (IITA)
- 9 International Livestock Research Institute (ILRI)
- 10 International Maize and Wheat Improvement Center (CIMMYT)
- 11 International Potato Center (CIP)
- 12 International Rice Research Institute (IRRI)
- 13 International Water Management Institute (IWMI)
- 14 World Agroforestry Centre (ICRAF)
- 15 WorldFish

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CGIAR
STRATEGIC
GOALS



REDUCE
POVERTY



IMPROVE
FOOD AND
NUTRITION
SECURITY



IMPROVE
NATURAL
RESOURCES AND
ECOSYSTEM
SERVICES

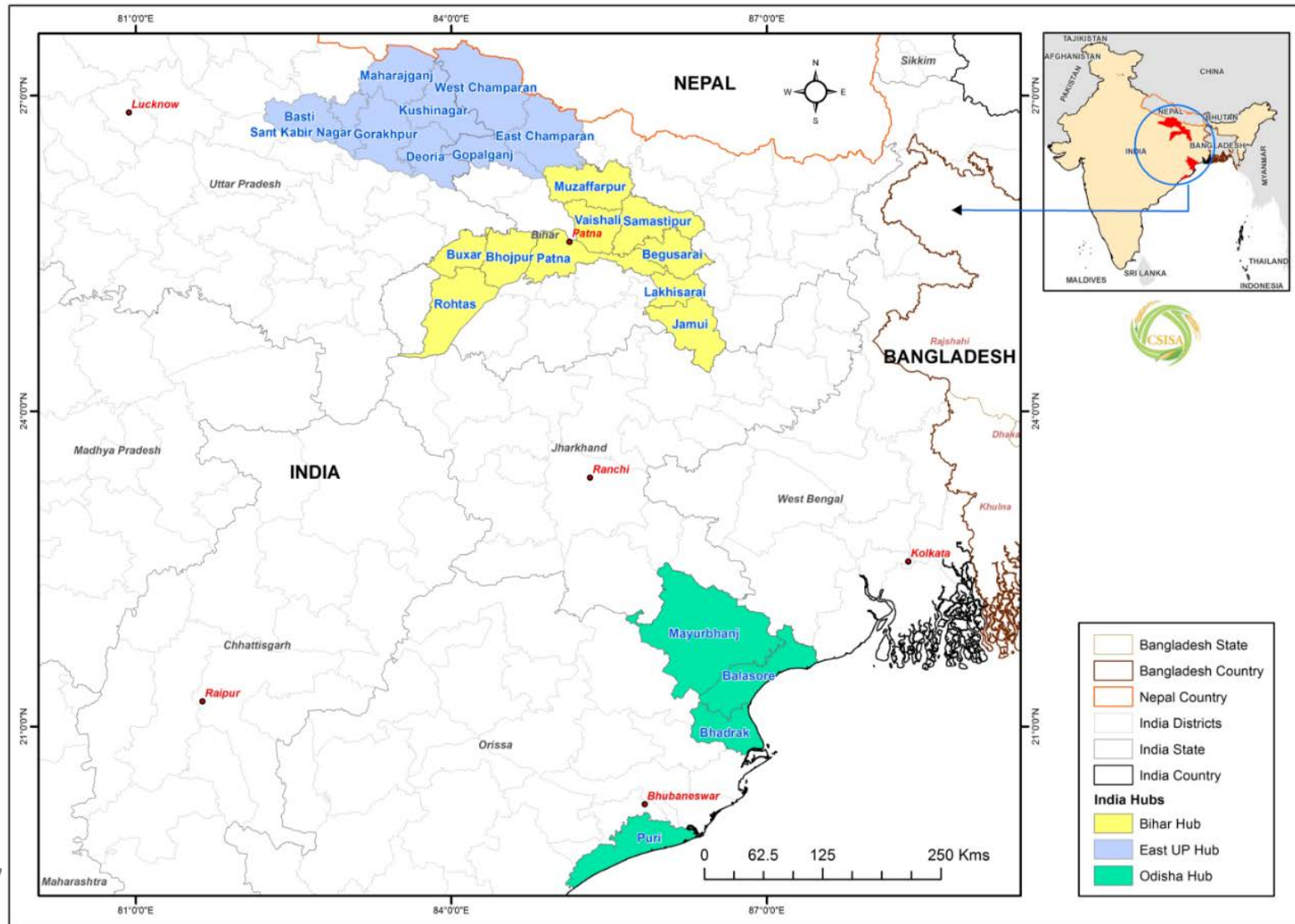


CGIAR research for development addresses system complexity



- Multidisciplinarity; layered options
- Multi-stakeholder consultative, participatory approach (planning to implementing)
 - National, sub-national ag research and extension
 - National-level initiatives
 - Livelihoods programs; NGOs
 - National, international agricultural universities
 - Private sector (e.g., ag machinery manufacturers, dealers, local service providers)
- Active collaboration, evaluation with farmers
- Womens empowerment (numeracy, literacy)

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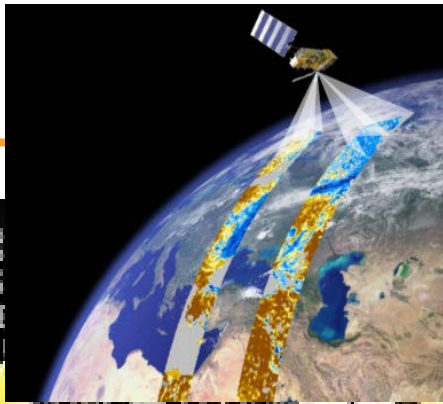
<http://www.worldagroforestry.org/news/transformation-when-good-science-and-innovation-meet>

Devko

Opportunities

- Gene revolution/CRISPR technologies
- Big data – ICTs (incl. potential for crowd-sourced info)

Opportunities



Opportunities

**Open Access to data/info
= Democratization,
transparency, improved
models, actionable info...**

**Data harmonization/
standardization**

(e.g. ontologies, metadata
stds++ across value chains)

Analytics, DSS, mapping...

Ties to credit, insurance...



**Bringing Big Data to Agriculture,
and Agriculture to Big Data**



Opportunities



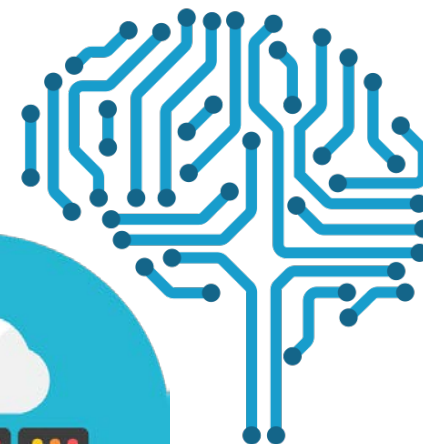
Hey Cigi, when should I plant my maize? How should I manage my crop?

Real-time **decision support** for farmers

Easy **natural language** as an interface

Smart **artificial intelligence** trained by CGIAR and partners

Leveraging multiple open, **harmonized and interoperable** databases





Thank you