Digital challenges

What it takes for decision-makers to harness digital technologies for managing climate risks effectively.

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Research-based policy solutions that sustainably reduce poverty and end hunger and malnutrition.

Opportunities and challenges

Digital opportunities

- Real-time monitoring data.
- Predictive analytics to plan protective measures.
- Improved public information systems, digitally connecting stakeholders and monitoring policy impacts.

Challenges

- Digital divide

  Digital infrastructure does not reach those who can benefit the most.

- Inadequate information

  Decision-makers lack access to timely, reliable, and actionable information.

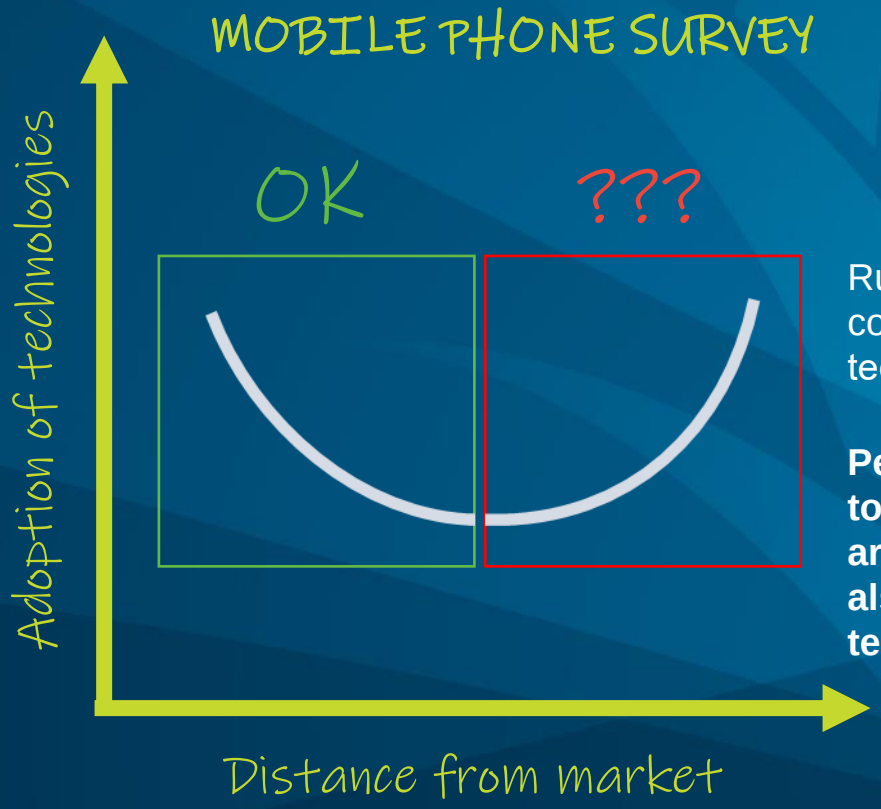
- Limited capabilities

  Digital capabilities need to strengthen to best utilize data and information for making evidence-based decisions and actions.

Digital divide

What we know about rural communities can be very inaccurate

- The potential of digital technologies is clear, yet its reach is not universal.
- Rural communities are often underrepresented in information systems.
- Strategies for collecting groundtruthing data (i.e., sampling frames) should be carefully evaluated and continuously revised to ensure the rural population is properly represented.

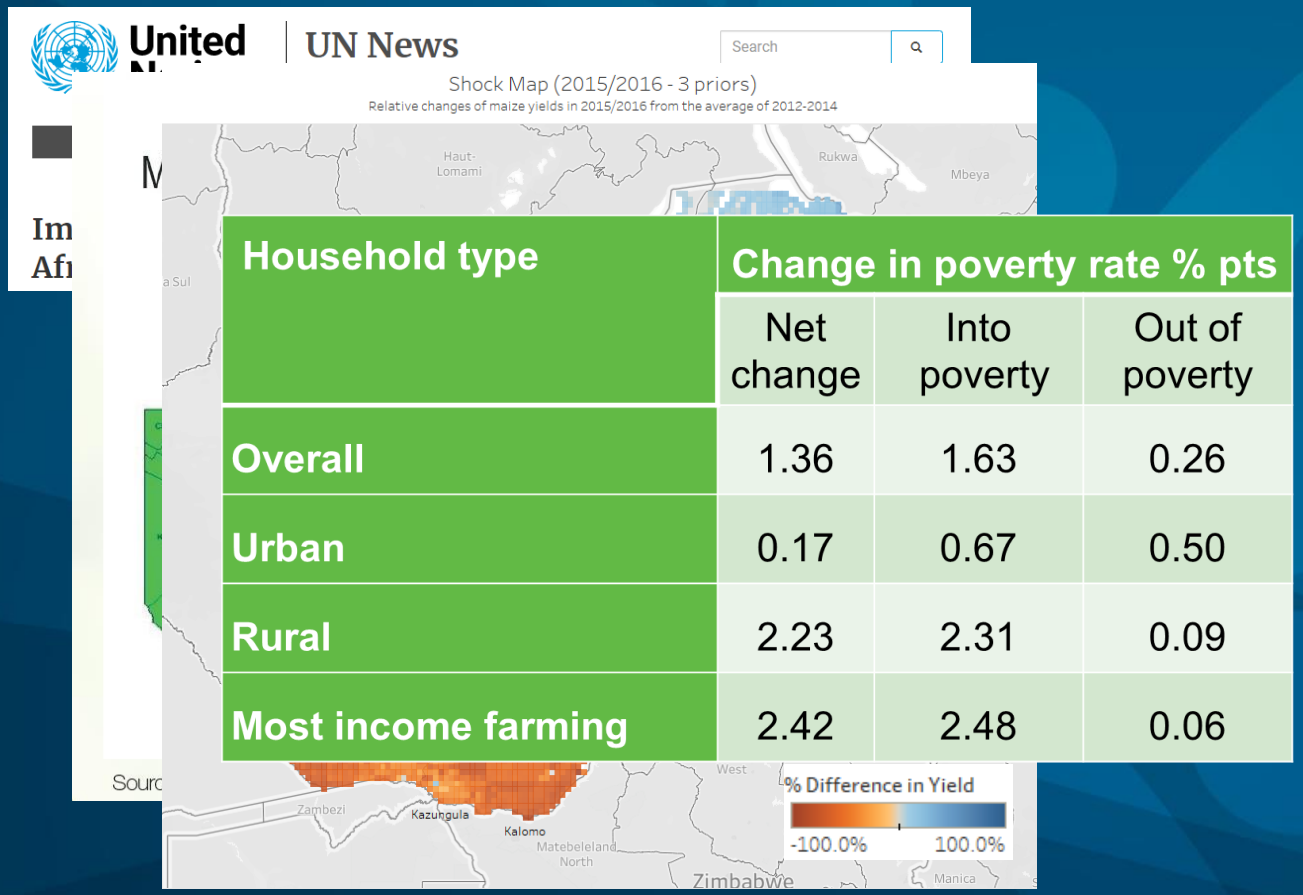


People who can afford to own a cell phone are better off, thus also afford to adopt technologies.

Inadequate information

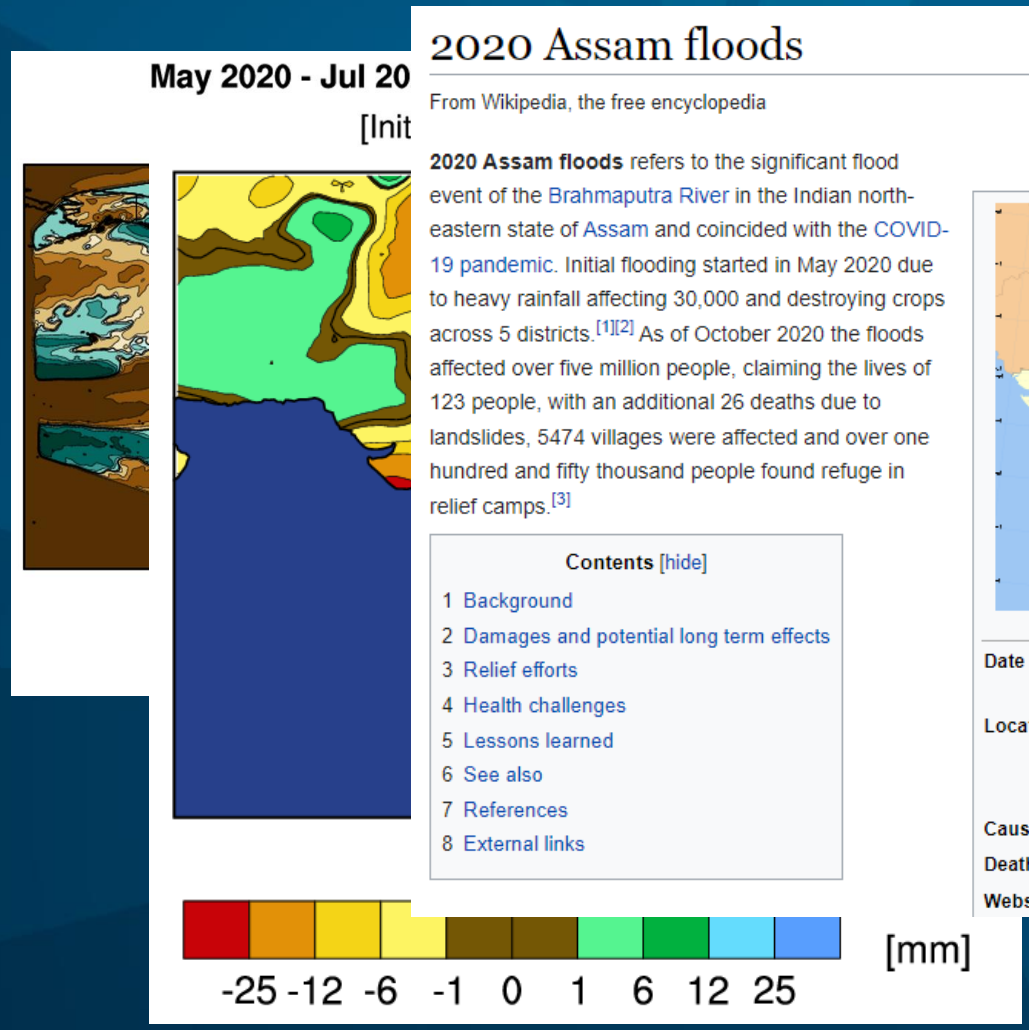
Decision-makers lack timely, reliable, and actionable information

- Weak information systems waste budget, exacerbate poverty, and slow economic growth.
- Existing knowledge is often outdated and difficult to apply in practice.
- Siloed data do not support evidence-based policy responses that can manage food system risks such as price hikes, pest infestations, floods, and droughts.



Household type	Change in poverty rate % pts		
	Net change	Into poverty	Out of poverty
Overall	1.36	1.63	0.26
Urban	0.17	0.67	0.50
Rural	2.23	2.31	0.09
Most income farming	2.42	2.48	0.06

Limited capabilities

Technology should be supplemented by investments in capabilities

- Investments in “soft” infrastructure are critical to building analytical skills and fully utilizing new information for decisions.
- Digital literacy levels are low for the marginalized, food-insecure communities, and especially women.
- Beyond promising pilots, research and co-design are needed to channel new data and evidence to decision-makers’ effective management of climate risks.