Asia Knowledge and Innovation Lab

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The World Bank – PNPM Support Facility

Presented by Ramda Yanurzha

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Background

To increase existing ICT initiatives and accelerate new innovations for development and poverty reduction in Indonesia and Asia.

Current State

Pre-pilot phase

Operates as a project team anchored in the PNPM Support Facility

Activities

- Experimenting with instant feedback loops on quality of service delivery
- Testing of use of smartphones and tablets to foster web 2.0 applications in rural Indonesia
- Accelerating survey data collection for through use of mobile technologies and real-time analysis
- Sponsoring developer competitions, testing the most effective ways to engage with volunteer and professional developer communities
- Developing of applications responding to development problems and/or using open data as fodder.

Development Data in Indonesia

- Mostly traditional data
  - Economic, demographic
- Owned by respective ministries & agencies
  - Researcher play active role for data availability
- Limited sharing & collaboration
  - Restrictive formats & access methods
- Solid but limited legal basis (2008 law on FoI)
- High demand from private sector

Geospatial & Climate Data in Development Context

Economic impact of climate change

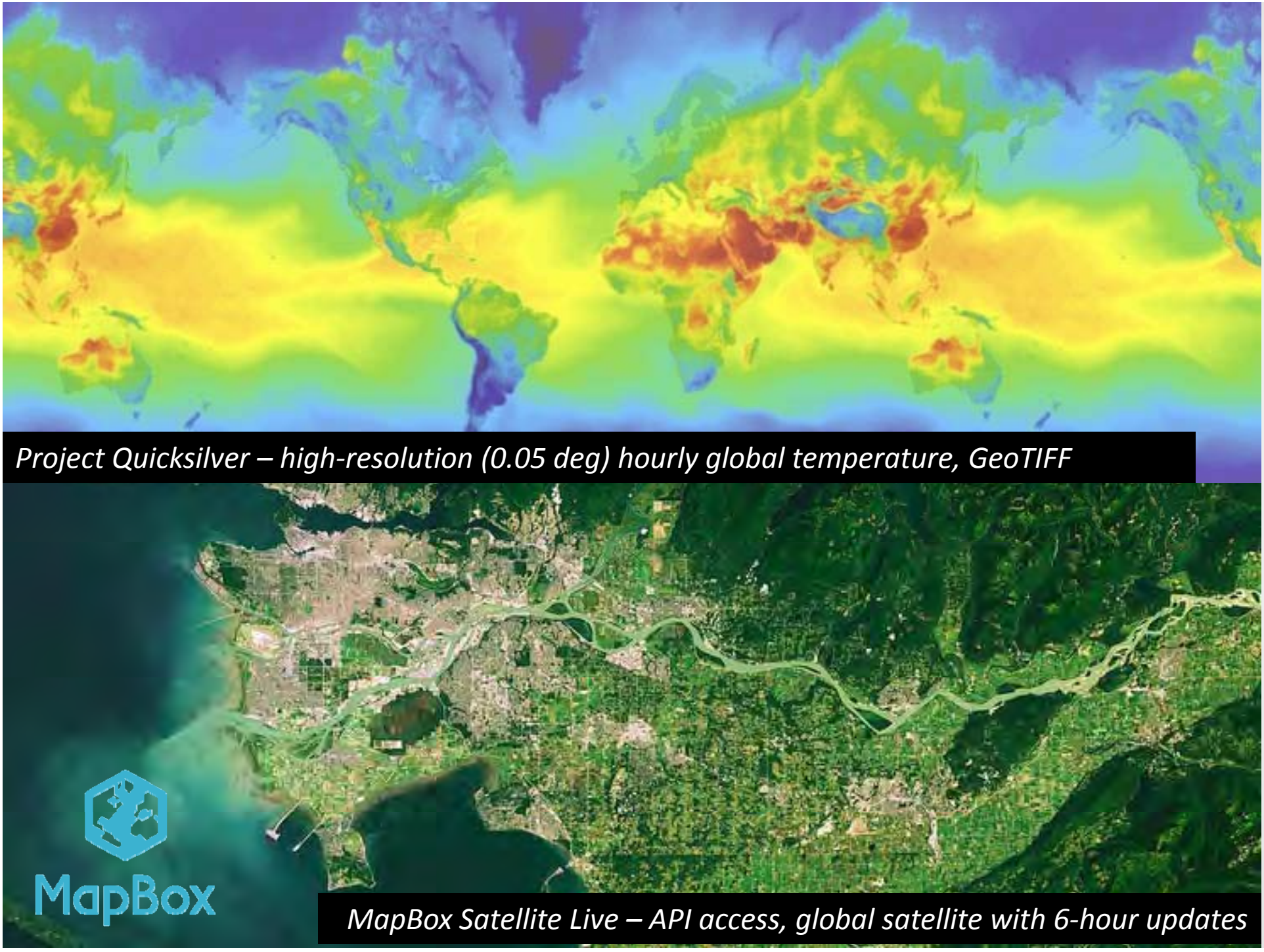
- Agricultural, fishing industry
- Directly impacts esp. rural Indonesian
- Migration, shift of economic activities

Environmental impact of local activities

- Example: forest concession, infrastructure construction
- Remote assessment
- Data collection → field report from public
- Socioeconomic impact

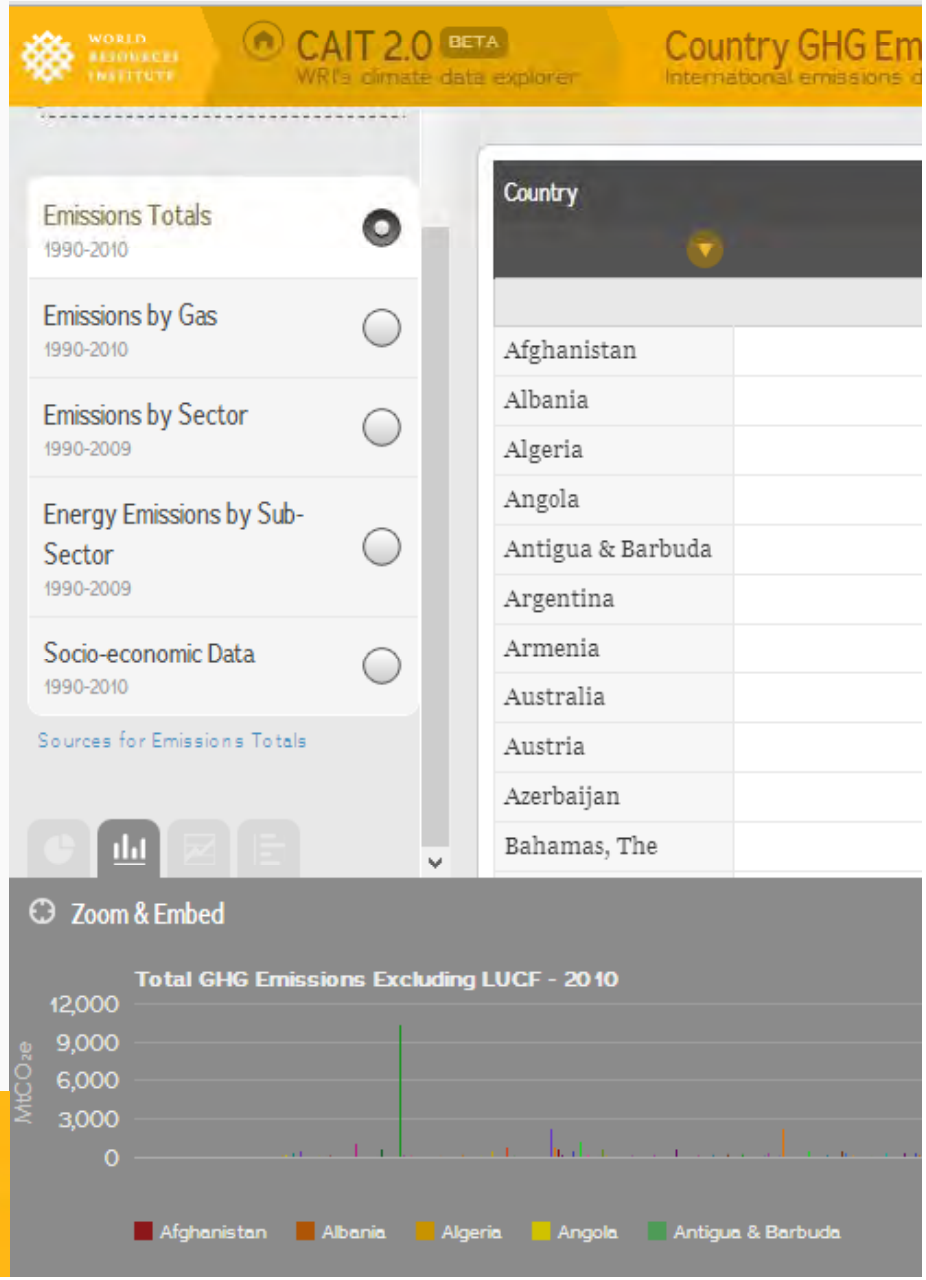
Data Analysis Approaches

- **Multiple, filtered source**
  - Combine traditional & dynamic data (e.g. high resolution satellite basemap and crowdsourced public report)
- **IT as a tool to open up and strengthen collaboration**
  - New platform & tools to make geospatial and development data easier to be combined and analysed (e.g. MapBox, CartoDB, Socrata, CKAN)
- **Focus on accessibility and reusability**
  - User-friendly frontend, robust backend, API access


Project Quicksilver – high-resolution (0.05 deg) hourly global temperature, GeoTIFF
MapBox
MapBox Satellite Live – API access, global satellite with 6-hour updates

Practical tools

- Built on top of robust platform
  - Most popular: Google Earth
- Provide simple insight
  - Data visualization
  - Short & long term issue
- Exportable/reusable data
- Context provided
  - Blog post w/ embeddable content
  - Easy to share on various medium



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Community Engagement

- Promotes transparency for general public
  - Better public awareness
  - Empower local community
  - Local approaches and solutions on environmental issues
- Strengthen collaboration between environmental and development agencies
  - Better data accessibility
- Engage ICT entities working on space and data analysis sector
  - Hackathon (e.g. NASA Space Apps Challenge)

Future Roadmap

- Establishment of ICT Hub
  - Physical convening space for government, development agencies, academia, and private sector
  - Build rapid solutions, trial new approaches
  - Knowledge transfer on best practices and latest ICT innovations
  - Local, national, & regional connection
- Independent establishment
- Transformation into regional initiative

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