UNESCAP’s big data project – the big picture

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Project overview

Why?

- Gender-environment indicators building on the SDG (UN Women, UNEP, UNESCAP, International Union for Conservation of Nature (IUCN))
- Pilots to explore how big data can help with priority data gaps
- Wider demand for NSS's to use big data

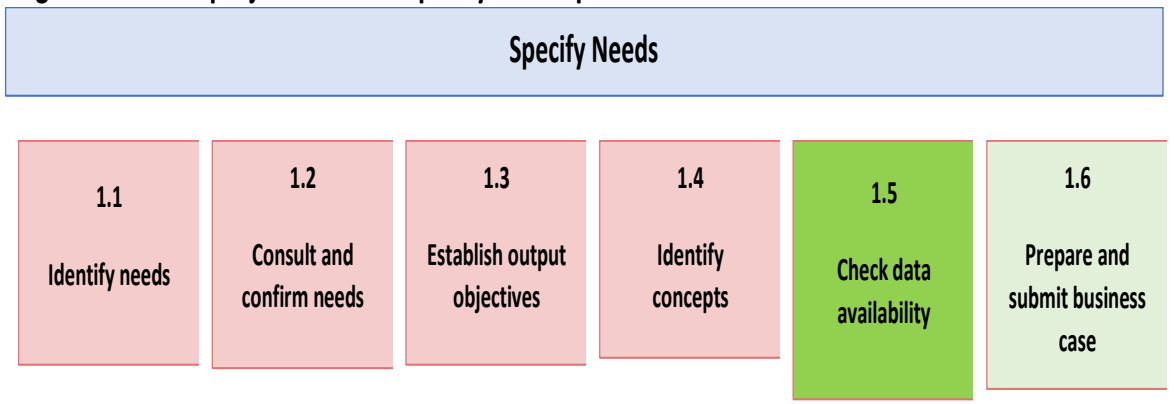
What?

- EO data sources selected to match indicators
- Training
- Development of data production models; combining EO with survey and admin data
- Testing and reporting
- Disseminating and strategising

Big data – some key strategic issues

- Data gaps – gender
- Being demand driven, not supply driven
- Responding, not promising
- Costs and benefits – and compared to other data sources
- Partnerships, new ways of working

Alignment of the project with the Specify Needs process of the GSBPM[1]



Overall Conclusions

Technical

- Good rate of overall success using EO data
- Further work needed for operationalisation
- Technical solutions identified
- Geospatial foundation (only) for gender-environment nexus data

Strategic

- ***Partnerships*** to access technology, skills, and data (producers and users)
- ***Partnerships*** for more research and learning
- ***Partnerships*** for learning and decision-making tools?
- Improvements of traditional data in parallel
- Opportunities

Overview of using free access Earth Observation data

Open Sources Data

- Google Earth Engine (GEE)
- Google Earth Pro
- SAS Planet

Processing Platform and software

- Google Earth Engine (GEE) Platform (Javascript language)
- QGIS (with Oreo Tool Box plugin) ---free download

Quality Assurance

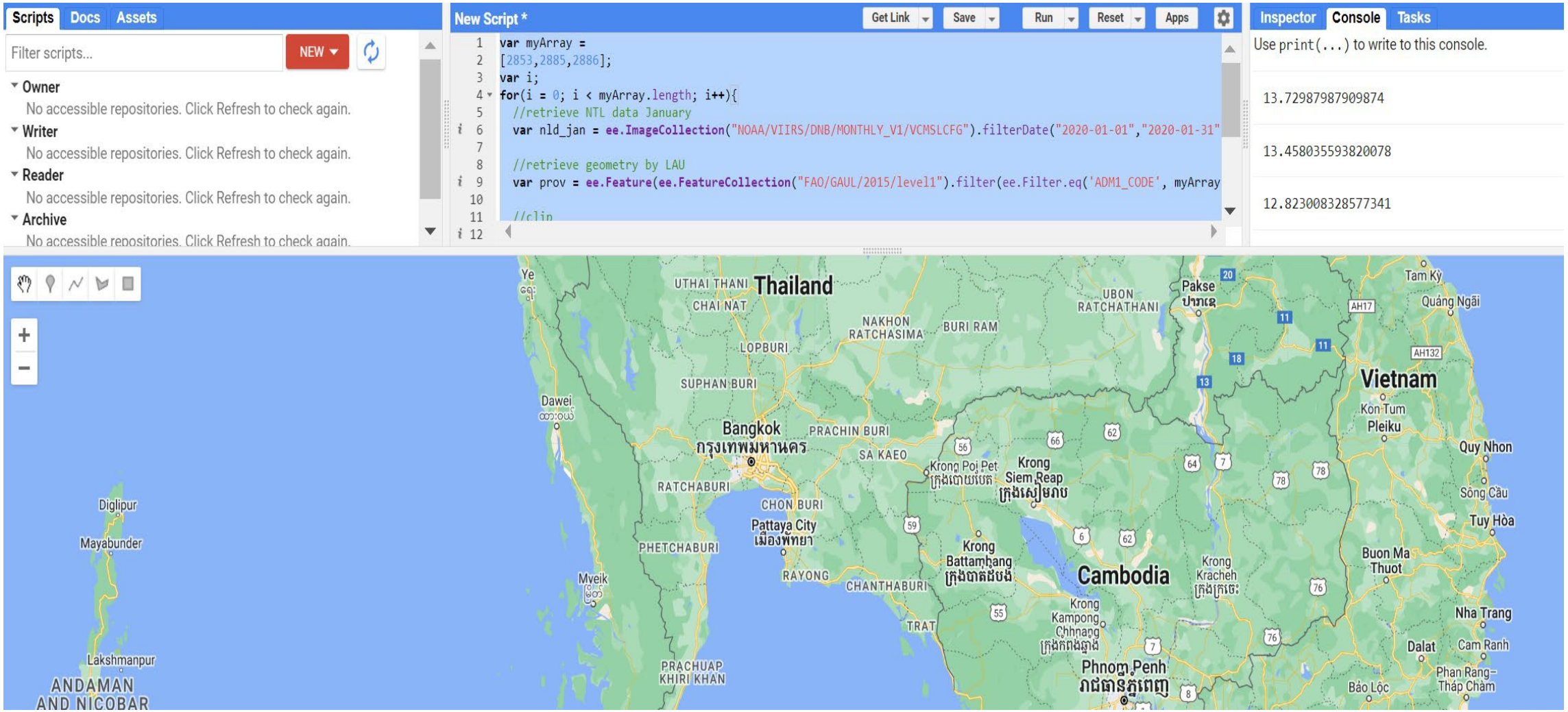
Manual

- NQAF (UNDESA)
- Big Data QAF (UNECE)

Common errors with EO data

- Cloud cover
- Low resolution
- Missing image

GEE Platform



Quantum GIS (QGIS)

