Integration of Geospatial Information for Sustainable Development

Agenda Item 8: Integrating Geospatial Information
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8th Plenary Meeting, UN-GGIM-AP
Three key approaches by UN ESCAP

- Convening and consensus building
- Technical support and capacity building
- Research & analysis
Grid-based Data Assimilation

Data input → Data QA/QC, analysis & processing → Data assimilation (e.g. within 1 ha or 1 km² grids) → Statistics integration, analysis & reporting

- Socio-economic statistics
- Satellite images
- Monitoring data, samples
- Hotspots occurrences
- Ref. Geo-Data

Disaggregate & map → Classify, aggregate & map → Extrapolate → Overlay

Polygon-based Integration
Integration for what purposes?

1) Disaster risk measurement
2) Urbanisation and population trends
3) Land cover change
4) Oceans sustainability
5) Disaggregated statistics
Population & Urbanisation: flexible scales of analysis
Flood exposure for extremely poor households in the Ganges-Brahmaputra river basin.
• Households experiencing extreme poverty are **more likely** to be exposed to flood hazard for the GBM region as a whole and in most districts

• How? Compared the estimated rates of exposure to flood hazard for general population and for populations below poverty threshold

Ref.: Methodology for Hazard Exposure and Vulnerability Assessment in the Ganges-Brahmaputra (GBM) River Basin
Geo-referencing of Primary Sampling Units (PSUs)

Red Dots: a PSU

Yellow circle: 2km neighbourhood of the PSU
Overlay PSU locations with EO data to describe the landscapes of PSUs
SEEA Pacific Ocean Accounting Portal

DRAFT Prototype Pacific Ocean Account

SEEA Ocean Test Account for the Pacific Ocean

Join the initiative to develop the first ever Pacific Ocean Environmental-economic accounting portal as a sample compilation at the regional scale.

The sample tables and analysis can be replicated and adapted at sub-regional and national scales.

https://portal-test-escap.hub.arcgis.com/
Using ARCGIS Online and ESRI Hub Technology:

Statistical inputs

Integration

Outputs

Dashboards | Story Maps | Info-Graphics

...and much more...
Integrating data
• What are the best practices for integrating across spatial units?
• What are best practices for integrating data types?

Integrating people
• What lessons can be shared from a demonstration project like the Pacific Ocean Accounting Portal?
THANK YOU
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