Russian ODA project
‘Capacity development and technology transfer to improve the generation and use of data and information in support of monitoring the environment in Central Asia’

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Russian Space Agency, Roshydromet, SRC Planeta, National Research and Development Institute on Agricultural Meteorology (NRDIAM), Rosstat, Roshydromet, UNDP, GEMS Water, ICWC, SIC ICSD, CAREC, Zoi Environment and statistical agencies of Kyrgyzstan, Tajikistan, Uzbekistan
Project objectives

1. To raise the capacity of the government institutions responsible for the environment in Kyrgyzstan, Tajikistan and Uzbekistan

2. To equip these countries with state of the art information technology systems and build the human capacity to operate and maintain these systems.

3. To significantly increase the knowledge base to map, categorize and assess environmental information

4. To develop and produce online digitized Environmental Atlases

5. To Position the countries to be able to report easily and effectively on major MEAs and SDG 6 (Water) and SDG 15 (Life on Land).

6. To facilitate the exchange of experiences and information in order to build capacity and foster regional cooperation.
Output A: Consultation, identification of stakeholders, stocktaking and priority setting

**Detailed country consultation:**
- Country focal points
- Identify stakeholders
- Country visits
- Fact finding
- Establish national priorities

**Stocktaking of existing national capabilities:**
- Identify existing environmental monitoring networks
- Understand depth and breadth of existing environmental data and information

**Short assessment/ capacity reports**
Output B: Supply relevant IT hardware & software

- IT hardware: computers, GPS hand units, local servers
- Software: ArcGIS or open source software equivalents (QGIS), or “R”
- To deploy geographical information systems technology using comprehensive environmental data processing and visualization tools for improved land use management and sustainable use of terrestrial and aquatic ecosystems.
- A comprehensive training programme will be developed and national workshops will be held.
Output C: Environmental data, information, indicators, statistics, assessments and capacity building (1)

Establishing the environmental baseline:

- Obtain satellite data from Russian Space Agency (average 30 years’ time series).
- Obtain existing maps
- Review existing international land cover mapping products (i.e. FAO, CORRINE, Chinese, Russian remote sensing products) and compare and compliment national sources of information
- Map biodiversity hotspots, important habitats and species and boundaries (high endemism, presence of IUCN lists species, migratory bottlenecks).
- Use remote sensing to identify pressures on hydrological systems and land degradation.
- Undertake ground truthing/ verification to validate remote sensing data and improve spatial definition for important species using GPS and/ or mobile phone applications.
Output C: Environmental data, information, indicators, statistics, assessments and capacity building

UN Environment National Atlases of Environmental Change (hot spots and hope spots), and capacity building:

- Generation of baseline statistical information (i.e. changes in ambient water quality and quantity, changes in biodiversity and ecosystem services, land degradation etc)
- Can be used for the national SOER, official statistics, SDGs and reporting to major MEAs such as the three Rio Conventions.
- Publications: Produce National Atlases of Environmental Change (hot spots and hope spots)
- Develop online platform to store information on hot spots and hope spots
- Capacity building to be able to continue to generate statistics using the methods above.
  - Targeted at the organizations responsible for the environment
  - Including training in foresight methods.
  - For stakeholders to use geospatial information and the findings from the atlases to enrich and inform national state of environment reports.
Output D: Training and development of water and ecosystem/land accounts

- Capacity building and production of pilot water and ecosystem/land accounts.

Approach for each country:

- Establish a national working group (multi-stakeholder).
- Roll out training sessions on SEEA.
- Start to implement –
  (i) assessment of data gaps; and
  (ii) generate dataflows.
- Develop quality assurance framework (QAF).
- Production of pilot accounts for water and land.
- Publish findings and outreach them to decision makers.
Output E: Develop technical documents and reference materials

- Develop specific guidance documents to use for retaining institutional capacity.
- For example:
  - Environmental atlases of change.
  - Catalogue of spatial information sources
  - Catalogue of best practices
Output F: Fostering regional cooperation

• Workshops to foster regional cooperation and coordination on topics of mutual interest including transboundary issues.

• Primary foundation to bring national stakeholders together: Existing regional platforms for coordination and cooperation.

• For example:
  • Political ICSD/IFAS processes
  • ICWC processes
  • UNECE processes such as the WGEMA and the JTFEIS.
Output G: National and regional outreach and communications

- An outreach and communications strategy will be developed during the early stages of the project and will include the following:
  - National launches of the Environmental Atlases.
  - Science-policy dialogues to integrate environmental information into the decision- and policy-making processes.
  - Training local media on the importance of using geospatial mapping in the sustainable management of natural resources.
  - Showcase of the work regarding monitoring the SDG indicators by submitting voluntary national reports to the High Level Political Forum (HLPF).
  - This project will be showcased as best practice in regional workshops.

Picture Source: triple-win.fr
Thank You!

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Snow Leopard. Source: World Wildlife Fund