Analytical report of Central Asian countries on current land statistics and its relevant challenges using statistical and geospatial data, 2019

Research summary

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The UN Expert Group on the **Integration of Statistical and Geospatial Information (UN EG-ISGI)** was established by the UNSC and **United Nations Committee of Experts on Global Geospatial Information Management UN-GGIM** with a mandate to develop an international statistical geospatial framework.

The Global Forum on the Integration of Statistical and Geospatial Information, convened in New York in August 2014, identified that:

“There is an urgent need for a mechanism, such as a global statistical-spatial framework, to facilitate consistent production and integration approaches for geo-statistical information.”
Location as a link between society, the economy and the environment

Objectives of research

1. Analyze current systems and capacity levels of Central Asian countries on using statistical and geospatial data, with a focus on land statistics and accounts.

2. Good practices in the region analysis.

3. Relevant challenges and recommendations on further policies and actions based on key findings.

Period of research: October – December, 2019

Countries: Kyrgyz Republic, Republic of Uzbekistan, Republic of Tajikistan
Research plan

1. General country briefing
2. Country analysis: Kyrgyz Republic
3. Country analysis: Republic of Tajikistan
4. Country analysis: Republic of Uzbekistan
5. Key findings of research, relevant challenges
6. Recommendations (proposals)
Sources

1. UN-related activities documents
   - United Nations System of Integrated Environment and Economic Accounting (SEEA)
   - UN-GGIM Framework for Integration of Statistical and Geospatial Information
   - Asia Pacific Plan of Actions for Space Applications for Sustainable Development 2018-2030

2. Available open data of Central Asia Countries

3. Publications, conferences materials, analytical reports

4. Experts interviews

5. Polls results
Methodology

1. Statistics system
2. Land accounting system
3. Spatial data, NSDI, remote sensing
4. Data integration

View points
- Law
- Datasets
- Services
- Programs
- Future plans
Kyrgyz Republic
Statistics system (1)

1. Regulatory organization: National statistics committee
2. New law No. 82, 2019 in statistics will come into force in 2020
   - No mention of geospatial data in law
   - New term “identificator”, that can be optionally contain geographical information
3. Part of statistic data can be marked as “confidential” (Law No.27, 1998)
4. Agricultural land statistics forms every 10 years and available in generalized form, does not contain geospatial data as necessarily part
5. Statistics in water usage (act No.19, 1995) does not contain geospatial data as necessarily part
6. GIS-technology used for developing thematic maps for statistic reports (2016)
7. National statistics consist of 2 reports about agricultural lands: “Agriculture” and “Green growth”, does not contain geospatial data and territory segmentation. 

8. National program of national statistic system development 2015-2019 (gov.act No. 144, 2015) includes law, IT, management, methodology, metadata improvements (geospatial data applications missed)

- Project “Development of ecology accounts” included
- New 5-year national statistics program will be approved in 2020
Land accounting system

   - Competency: geodesy, cartography, geomatics, geographical names, cadaster and land resources, land law


4. Web-portals, systems and services:
   - Common system for state cadaster, rights registration and deals (n/a)
   - State geographical information system (GIS) for property (n/a)
   - National integrated cadaster system (2017) (<10 services):
     http://www.cadastre.kg/svc-portal/main/index.do
Spatial data (1)

1. Regulatory organization: Government agency for land resources
   - Competency: geodesy, cartography, geomatics, geographical names, cadaster and land resources, land law
2. Law No.43 (2002) about geodesy and cartography
4. Government directive No.245-p about “Digital Kyrgyzstan 2019-2023” consist NSDI:
   Important milestones:
   - 2021 – state geoportal launched
   - 2021 – geospatial data systematically used in statistic system
   - 2022 – cartographic and geodetic basis development
Spatial data (2)

5. Topographic maps produced in scales: 1:10 000, 1:25 000, 1: 50 000, 1: 100 000, 1:200 000, 1: 500 000, 1: 1 000 000

6. 2018, Signed CIS-convention about space research and usage, incl. remote sensing

7. There is no information on the available remote sensing data sets

8. All spatial data stored in State cartographic and geodetic data funds (without geoportal or service)
Republic of Tajikistan
Statistics system (1)

1. Regulatory organization: National statistic agency
2. Primary Law No.588 (2010) in statistics
   - Includes term “location” in codification system for grouping statistic data
3. Law No.523 (2009) about population census
   - Local government bodies (municipal level.) supports spatial data: administration borders, addresses and provides cartographic materials for census
4. Act No.294 (2012) about additional actions about agricultural census in 2013
5. 5-year programs of statistic monitoring consists part “Statistics for agriculture, natural resources and environment. Land farming statistics”
6. Agricultural statistics presented only on Tajik language
7. No geospatial data usage found in available statistics
Statistics system (2)

8. Available open data sets does not consist land statistics
9. From 2015 – National statistic system development program
   - Not available as open data
11. Global partnership for sustainable development, Sustainable development goals
    - Goal 2 (agriculture), Goal 17 (data availability, data includes geographical location)
12. 2016, UN Project about technical readiness assessment to implement environment statistics linked to economy in national statistics system base.
    - Sufficient potential of National statistics agency to develop national statistics accounts has been identified
    - 2017 – pilot project, 2018-2019 project roadmap monitoring planned
Land accounting system

1. Regulatory organization: State committee for land management and geodesy
   - Competency: geodesy, cartography, aerial remote sensing, geographical names, state registration, land usage monitoring
4. Law No. 18 (2001, 2007) about land evaluation
8. Web-portals, systems and services: not available

All lands are state property
Spatial data

1. Regulatory organization: State committee for land management and geodesy
   - Compete in fields: geodesy, cartography, aerial remote sensing, geographical names, state registration, land usage monitoring
2. Law No.172 (2006, 2008) about geodesy and cartography
3. Law No. 185(2006, 2013) about geographical names
4. Topographic maps produced in scales: 1:10 000, 1:25 000, 1: 50 000, 1: 100 000, 1:200 000, 1: 500 000, 1: 1 000 000
5. 2018, Signed CIS-convention about space research and usage, incl. remote sensing
6. All spatial data stored In State cartographic and geodetic data funds
7. No available data about NSDI development plans
Republic of Uzbekistan
Statistics system (1)

1. Regulatory organization: National statistics committee
2. 1.12.2019 - New law in statistics will be published (with best international practices included)
3. National action plan about statistics information quality increase (2017-2021)
5. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan, August 19, 2019 No. 691 «About the introduction of a modern system of national accounts in the Republic of Uzbekistan», no geospatial data used
6. Program of State statistical works for 2018, 2019 and 2020-2021 (project):
   - report «The number of all lands in the territory of the republic and it's usage»
Statistics system (2)

7. 1.08.2019 – national roadmap of creating of National data management system, based on official data sources and reports integration

   - development of a tool for entering geolocation data that allows you to enter data in a standardized form or to select a point on an interactive (digital) map (deadline-July 1, 2019)
   - assigning geolocation information to geographic features in open data sets (as the data is updated)

9. Institute of advanced training and statistical research under The state Committee on statistics of the Republic of Uzbekistan: education and science
Land accounting system (1)

1. Regulatory organization: Goszemgeokadaster committee
   - Competency: geodesy, cartography, geographical names, cadaster and land resources


5. Act. of Ministry Cabinet No. 1 (2014) about developing of state procedure of property registration

6. New law in state procedure of property registration developed
Land accounting system (2)

7. Web-portals, systems and services:
   - Common system for state cadaster (state: developing) includes GIS
   - Services (> 13): http://ygk.uz/ru/node/341
Spatial data (1)

1. Regulatory organization: Goszemgeokadastre committee
   - Competency: geodesy, cartography, geographical names, cadaster and land resources
3. Law No. ЗРУ-303 (2011, 2017) about geographical names
5. Space research Agency (“Uzbekkosmos”) compete in field of space technology and science, remote sensing of Uzbekistan territory
   - Presidents directive No. УП-5806 (2019) about space activities of Uzbekistan in 2019-2020 (roadmap)
   - 2020-2030: National space program, including building satellites, remote sensing infrastructure, data processing facilities for economics development usage
Spatial data (2)

7. In 2020 remote sensing of country lands will be finished

8. Topographic maps produced in scales: 1:10 000, 1:25 000, 1: 50 000, 1: 100 000, 1:200 000, 1: 500 000, 1: 1 000 000

9. All spatial data stored in State Cartographic and Geodetic data fund
   • For storage used special database software

10. State register of official Geographical names created as a database

11. National SDI geoportal and web-based services planned in future activities (after new law will enter in force)
Research plan of actions (2019)

2. Special poll for 3 countries (optional) and assessment
3. Analyze of regional practice of land statistics, integrated with geospatial data
4. Data verification, aggregation, generalization, key findings, recommendations (proposals)
5. Final report (December)
## Assessment tool for countries

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N/A – data not available
0 - missing and not provided
1 - missing, development is planned
2 - available, development is not planned
3 - available, development is planned
Thank you!

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