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Mongolian National Spatial Data Infrastructure

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Beijing. 2014



Administration of land affairs, Geodesy and Cartography

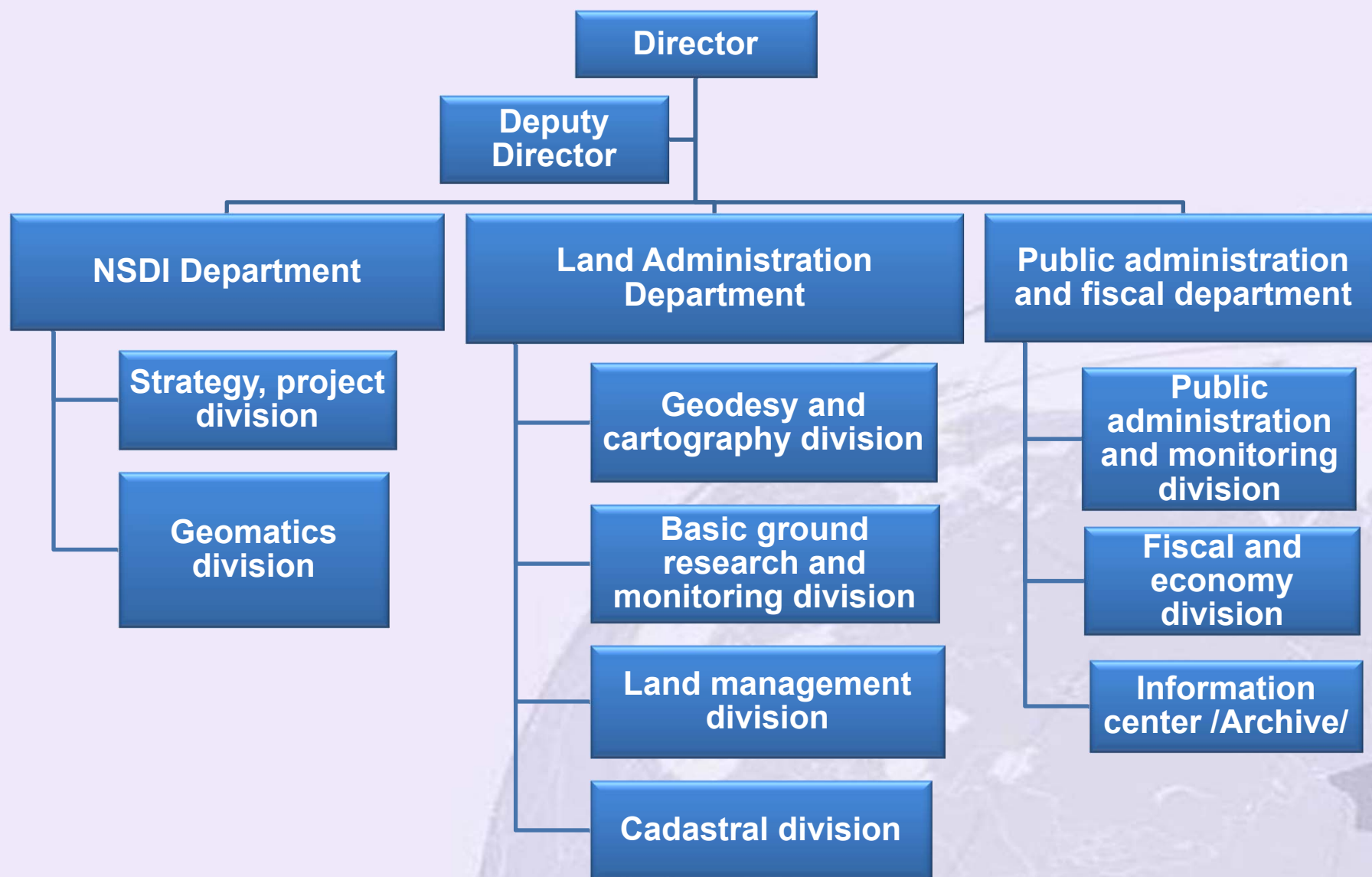
- Implementation agency of the Government of Mongolia
- Since 2004, under the **Ministry of Construction and Urban Development**
- In charge of:
 - definite surveying and mapping of Mongolia, including horizontal and vertical geodetic reference systems,
 - establishment of national spatial data infrastructure,
 - implementation of state policy,
 - cadastre and land management,
 - making of data and information available except those in confidential mode and transparent government services to the public.



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Brief introduction about Mongolia



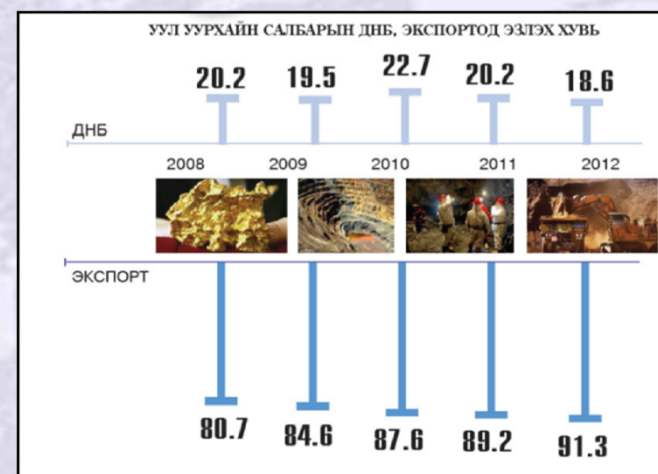
1. Location: in the Central Asia.
2. Territory: 1,564,116 км² /after Iran and 19th place of the word/
3. Population: 2.9 million /2013/
4. Capital city: Ulaanbaatar
5. Official language: Mongolian
6. Religion: Buddha
7. Currency: Tugrug
8. Political system: Parliamentary type of governance
9. Located at an average altitude of 1,580 meters.
10. Highest point: Cold mountain Altai Tavan Bogd / sea above 4,374 m /



Major economic sector

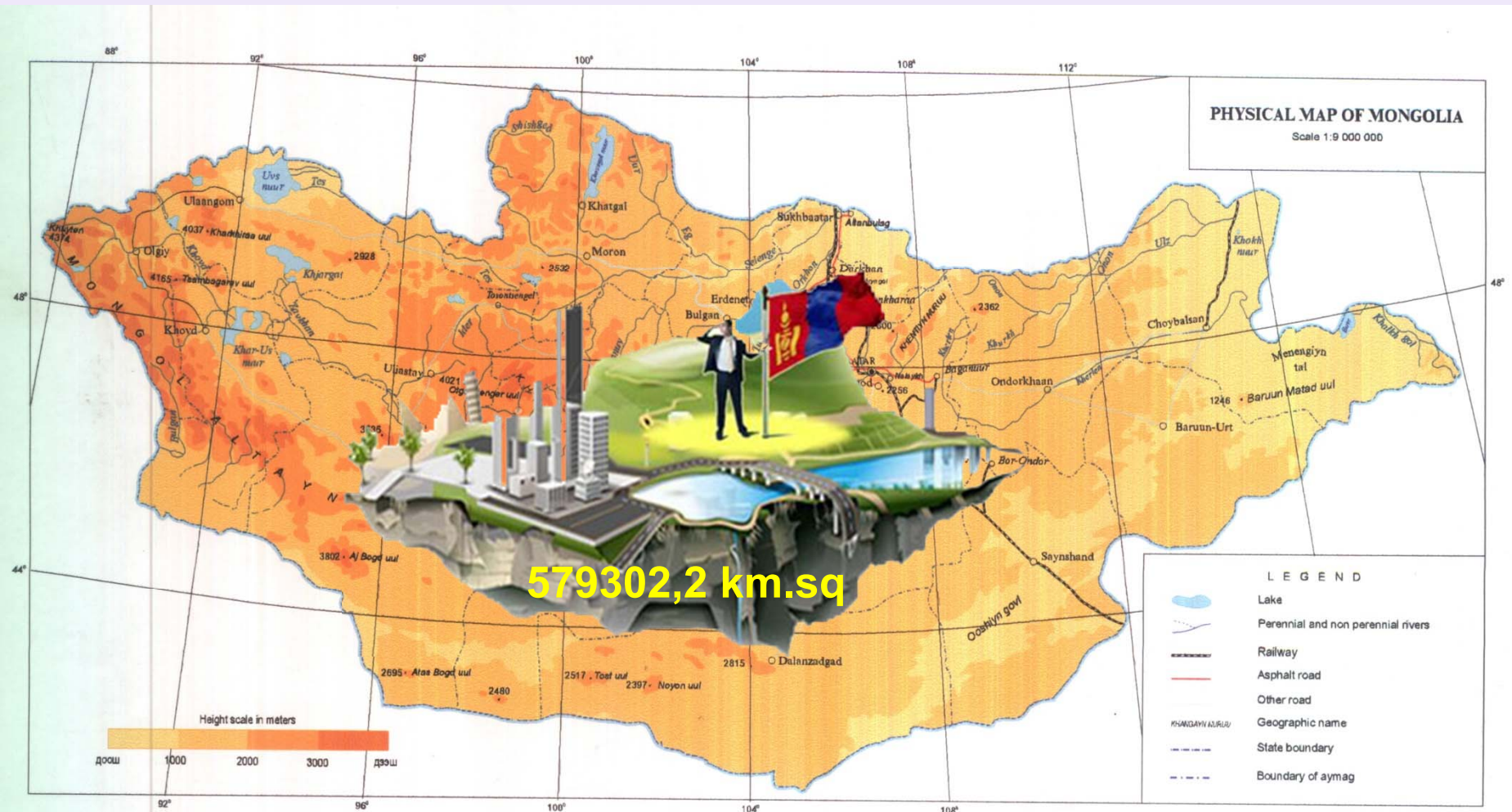
Agriculture:

- ❖ 20,6% of gross domestic product
- ❖ 12.5% of total exports
- ❖ 80.2% of products produced from livestock sector.
- ❖ the livestock sector, the working age population, which accounts for 30 percent, or 389.8 thousand.



Character of the Mongolia

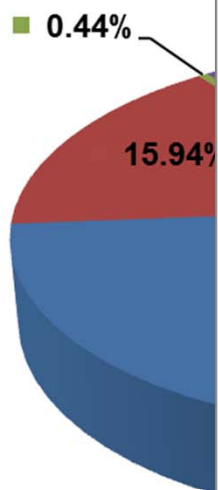
1. Vast areas - a small population



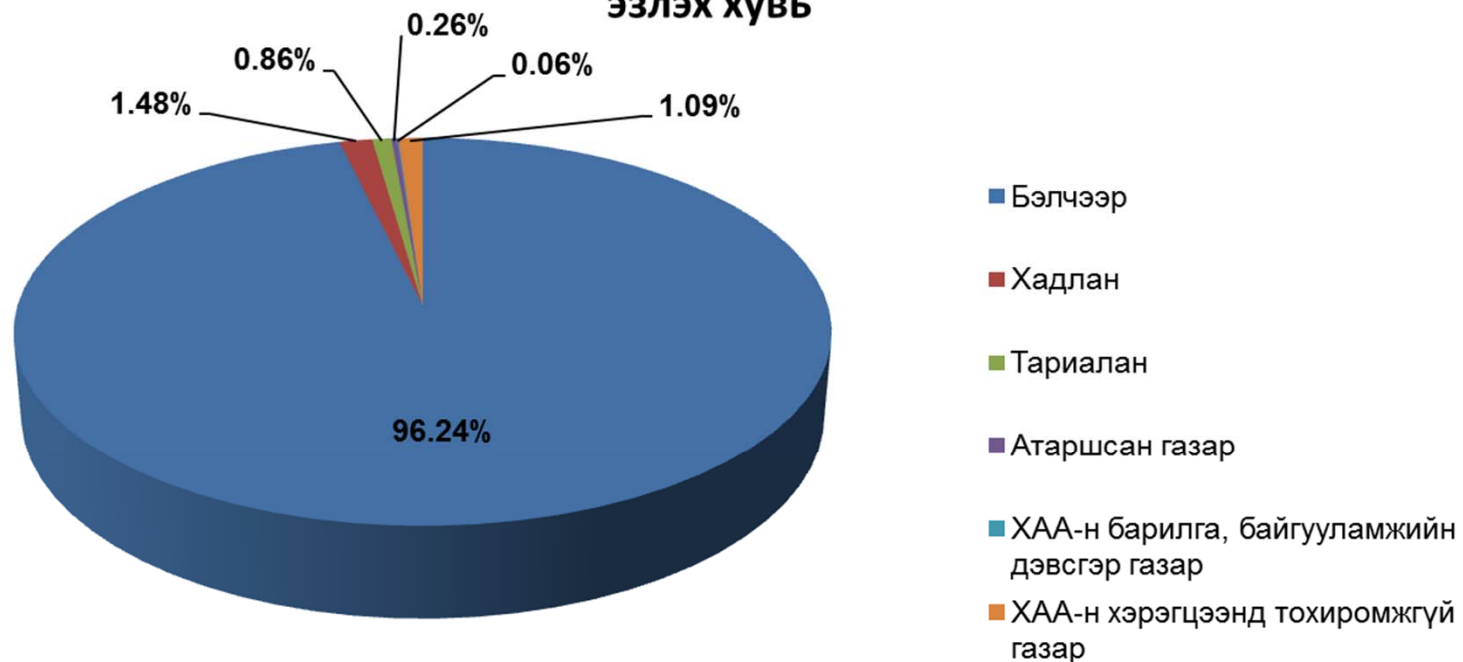
Character of the Mongolia

2. Much of it consists of pasture land.

Газрын нэгдмэл сангийн үндсэн ангилал тус бүрийн эзлэх хувь



Хөдөө аж ахуйн газрын ангилал тус бүрийн эзлэх хувь





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Character of the Mongolia

4. 42.3% of the population, or 1,227 million / 2013 / in the capital city and the rest live in scattered rural areas.





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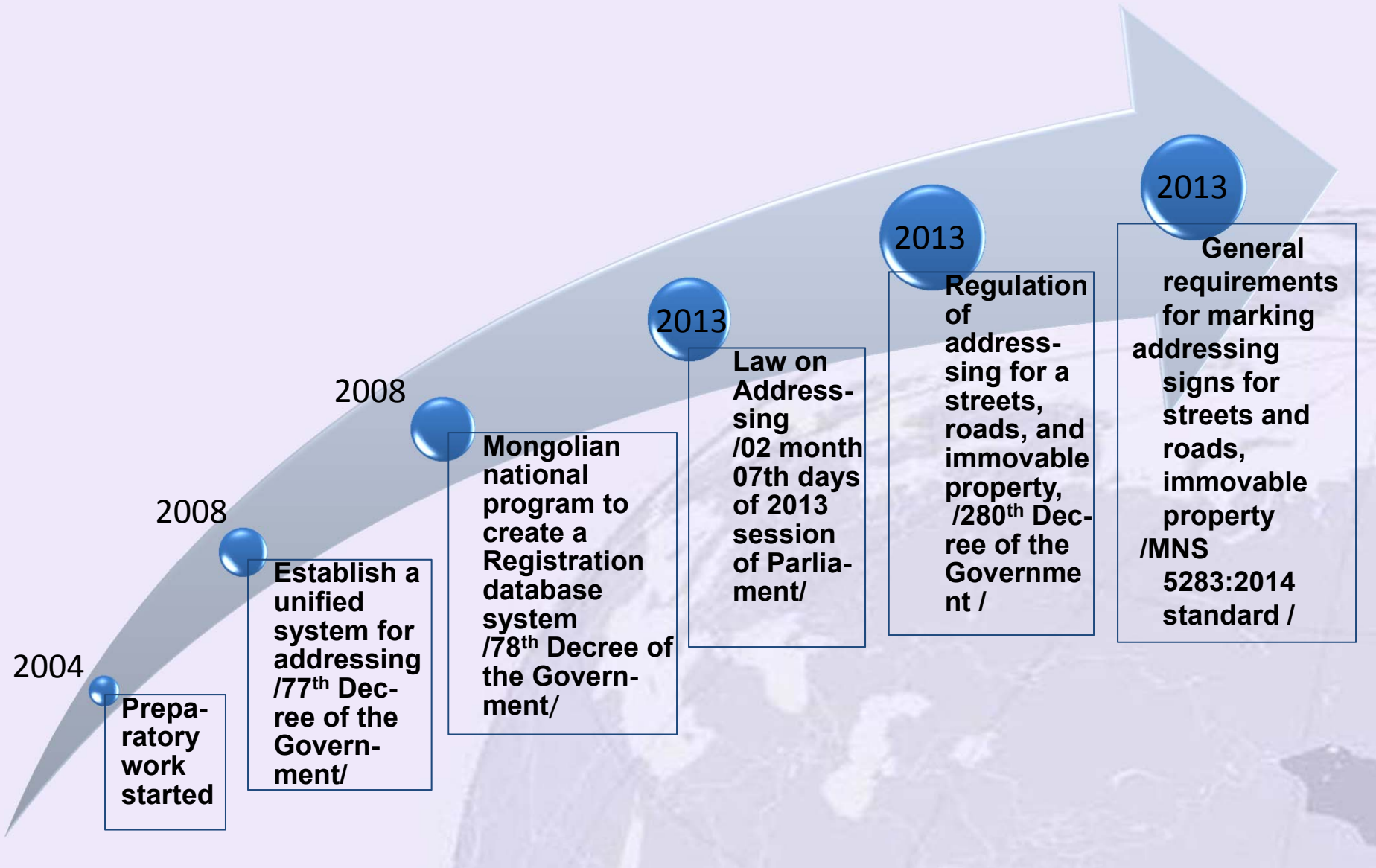
Mongolian National Spatial Data Infrastructure



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History of the Mongolian NSDI





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Strategic plan for creation Mongolian NSDI

Principles

1

- Provide opportunities for collection and easy integration the spatial data from all the sources such as government organizations, scientific academies, private sectors and higher educational institutions. .

2

- Prepare the latest, standards-compliant data with accuracy and scale meeting requirements of government organizations, scientific academies, private sectors, higher educational institutions and society.

3

- Ensure the privacy and security of citizens' private information and ensure the accuracy of the citizens' statistic data. .

4

- Pursue the open spatial information policy available for public information to access and get data.
- Protect the licensed data and information..

5

- Provide access to data of variety of sources using a format making data readable to computer by ensure the integrity of information systems.

6

- Use the spatial data for decision-making at different levels.

7

- Spatial data and information should be collected once and be used multiple times.
- Deliver the correct data to right person at the right time with the proper forms and ways.



The first goal: Create a basic database for the national NSDI that meets the quality requirements and standards. (2014-2016).

- Work out standards, guidelines and manuals for processing the basic data;
- Process the national topographic digital image accordance with standard and the instructions;
- Create the *Geographic Information System (GIS)* and Spatial database for processing the basic data with metadata in accordance with standard and instruction.

The second goal: Create the Integrated gyeoportal for spatial data. (2016-2018)

- Create the Spatial integrated information database, the Data Warehouse.
- Create the Integrated gyeoportal for spatial data

The third goal: Establish the National Committee of the NSDI and create the National Spatial Data Infrastructure for data exchange between the governmental organizations. (2018-2024)

- Establish the National Committee of the NSDI
- Create the legal environment to insert data into the NSDI
- Develop the standard for data exchange and use the shared data in the NSDI
- Establish the NSDI
- Organize the trainings



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ҮОЗМДБ байгуулах стратеги төлөвлөгөөг хэрэгжүүлэх үе шатууд

Planned activities	Time	Results
The first goal: Create a basic database for the national NSDI that meets the quality requirements and standards. (2014-2016)	2 years	The Spatial Data Infrastructure of the Land sector or the first version of the SDI will be created.
The second goal: Create the Integrated geo portal for spatial data. (2016-2018)	2 years	Established the Data exchange infrastructure for distributing the Spatial Data Integrated Fund of the Land sector to the end users or the next version of the SDI including the Data Warehouse and Geo portal will be created.
The third goal: Establish the National Committee of the NSDI and create the National Spatial Data Infrastructure for data exchange between the governmental organizations. (2018-2024)	6 years	SDI shall be introduced in the nationwide. In this manner we shall create the first version of the NSDI and introduce throughout the country.



Challenges and Further Goals

- To establish **NSDI**,
 - To complete the acquisition and collection of **framework geospatial data (2013-2016)**,
 - To establish **Addressing system (2014)**,
 - To study experiences of cadastre of the developed countries and improve and develop the **cadastral system and land information system**;
 - To accomplish Legal environment regards to geospatial information;
 - To enhance land use planning and management,
 - To develop LBS including street view, car navigation etc.
 - Capacity building of the SDI Departments:
 - human resource
 - hardware, software
 - surveying equipments;



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Thank you for attention