Importance of capacity building and education towards strengthening spatial data infrastructure in Mongolia

Agency of Land Administration and Management, Geodesy and Cartography (#ALAMGC):

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Context

• Brief introduction to Mongolia
• Priorities
• Challenges
• Conclusion
• References
Brief introduction to Mongolia

- Area: 1,564,116 sq.km
- Population: 3,256,176
- Official language: Mongolian
  - Монгол Улс
Priorities

• Raise awareness of GIS from early age
• Increasing number of students, have interest in geospatial science
• Developing higher education program curriculum
• MOOC and workplace training
Challenges

- New concept

- No GIS/RS subject

- Instructors’ skill (High school)

- Low salary for advanced staff

- HR problem: GIS+IT

- Awareness Raising

- Formal Education

- Entrepreneurship

- Professional Workplace Training
Top 10 jobs in next 5 years in Mongolia

- Marketing manager
- IT engineer
- Chef
- Building engineer
- Civil engineer
- Plastic surgeon
- Mining engineer
- Architect
- Geologist
- Project manager

Source: “Daily News” newspaper

Stakeholders we really need to cooperate

1. Government
2. Citizens
3. Students
4. Staffs
“INTEGRATION OF SDGs INTO GEOGRAPHY TEXTBOOKS”

Source: Uranchimeg G., Batchuluun Ye., Tsogbadral Kh., Ser-Od Ts., Munkhtsetseg., MNUE “Integration of SDGs into Geography textbooks”
Braille maps for special children

Leave no one behind!
To hire fresh graduates....
Total graduates (Remote sensing and GIS)

- 46% Government institutions
- 26% Local government
- 18% Academia
- 5% Private sector
- 3% Studying
- 2% Other sectors

<table>
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<th>Major</th>
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Source: National University of Mongolia
Workplace training
• Utilization of geospatial data will be increased

• Hackathon and R&D projects

• "To nudge" high schoolers’ choice

Raise awareness

Formal education

Entrepreneurship

Professional workplace training

Conclusion

Training, training and training...
“I’m still learning.”

Michelangelo at age 87
References

• “Daily News” newspaper [https://ikon.mn/opinion/19ke](https://ikon.mn/opinion/19ke)

• Uranchimeg G., Batchuluun Ye., Tsogbadral Kh., Ser-Od Ts., Munkhtsetseg., MNUE “Integration of SDGs into Geography textbooks”

• “Survey of graduates in remote sensing and geographic information institute” Bolorchuluun Ch., Tsogtdulam M., NUM-School of Arts and Sciences
Thank you