

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

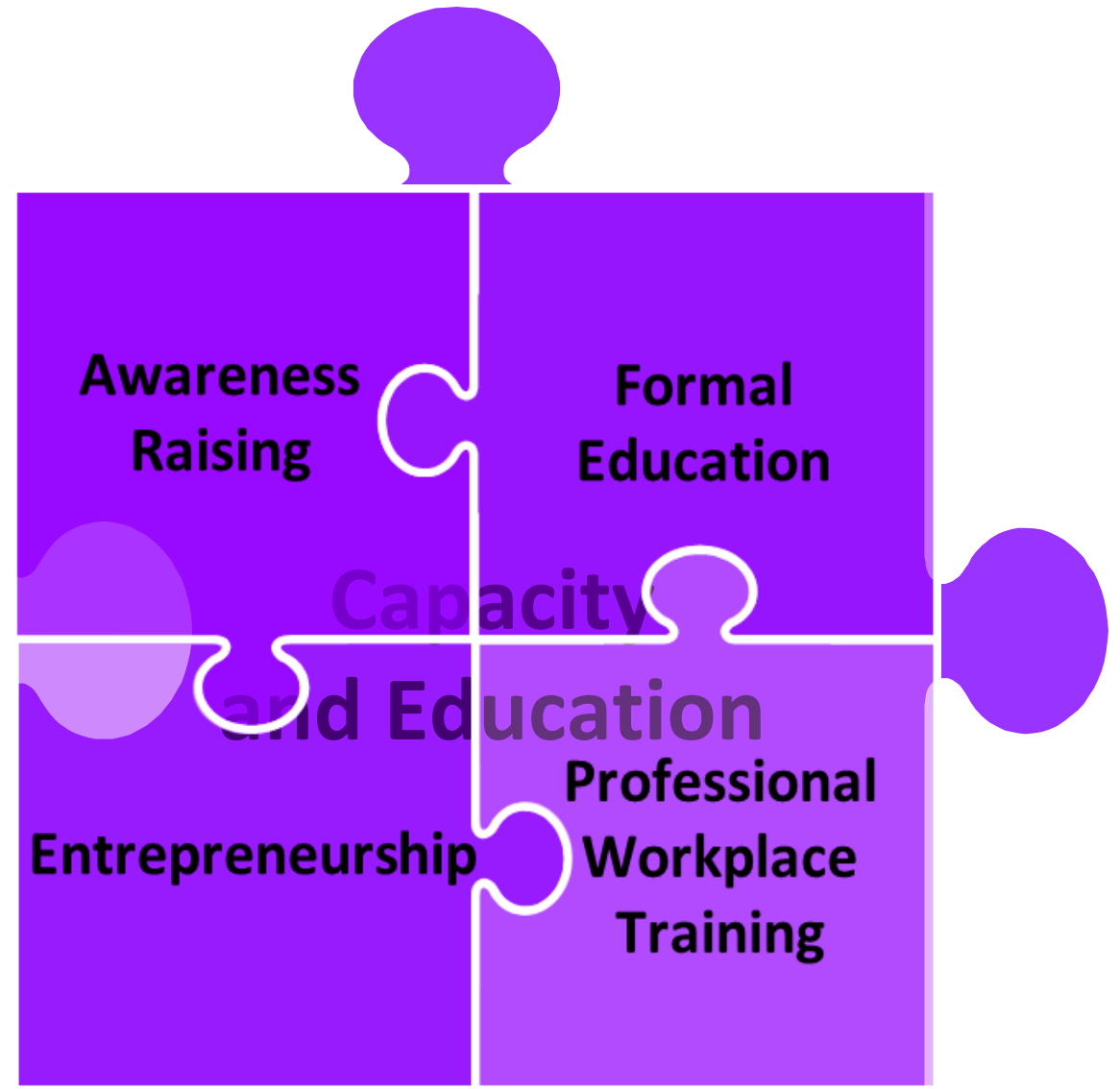


Agency of Land Administration and Management, Geodesy and Cartography ([#ALAMGC](#)):

Specialist: Myagmarjargal Mendbayar

# 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

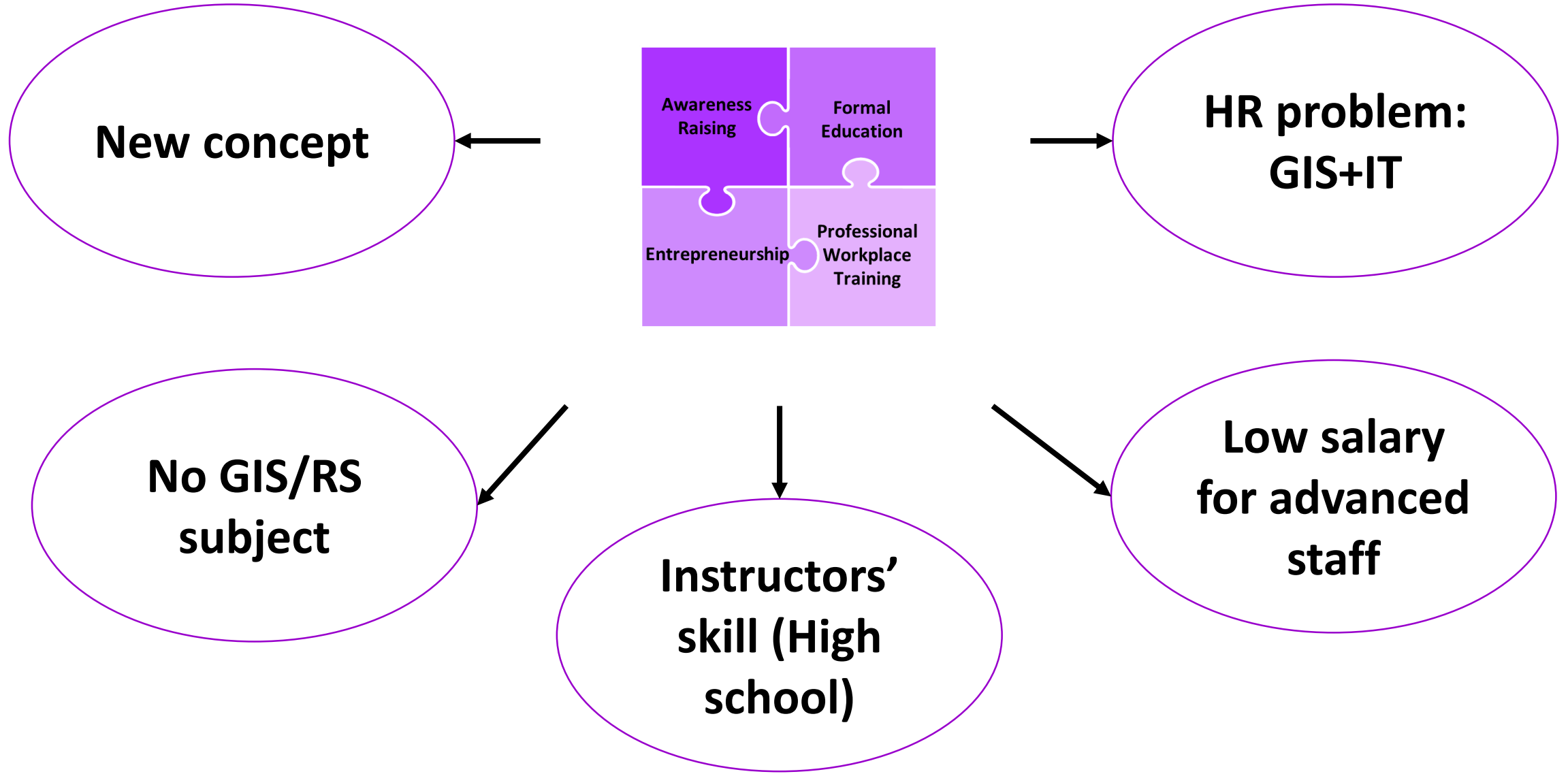
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# Priorities

- 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

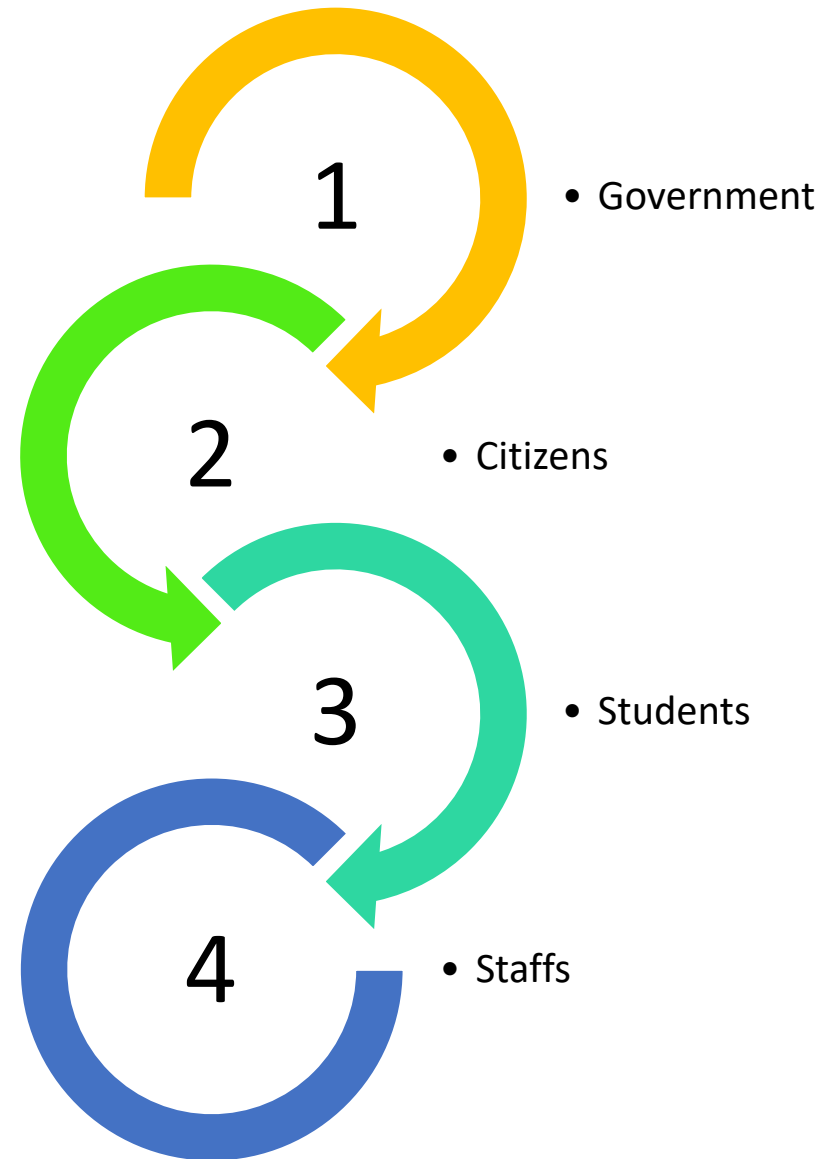
# Challenges



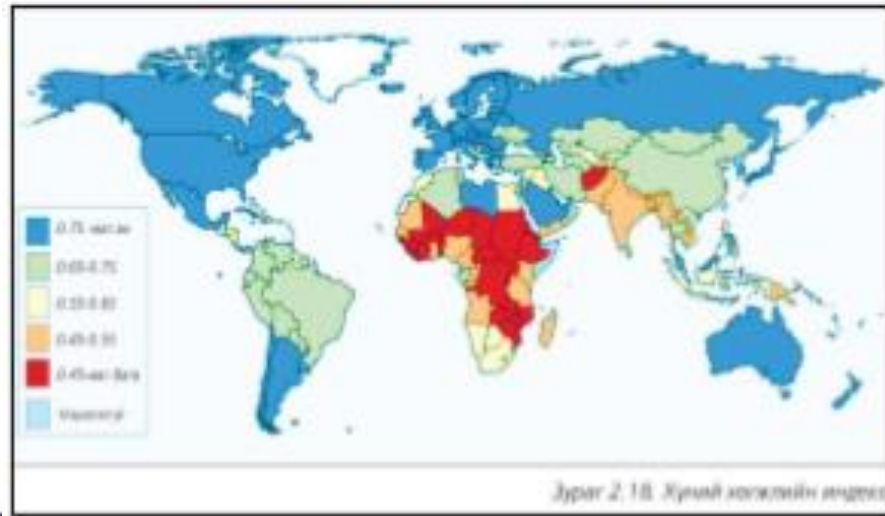
# Top 10 jobs in next 5 years in Mongolia

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

Stakeholders we really need to cooperate



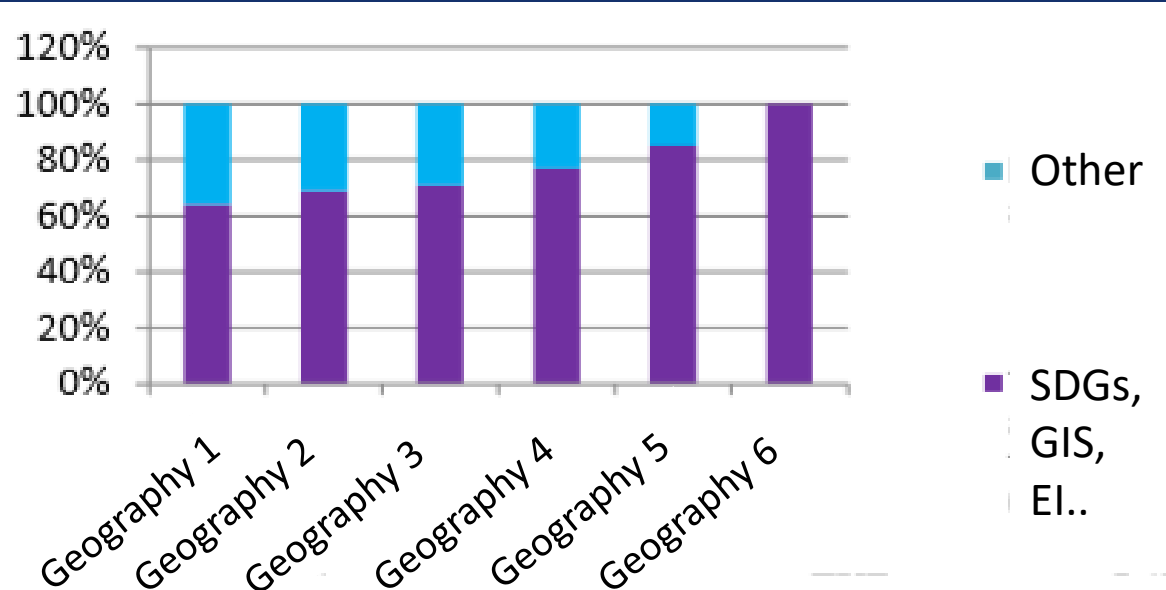
# “INTEGRATION OF SDGs INTO GEOGRAPHY TEXTBOOKS”



Улаан лоол, ерөгст хэмх тархиан тулд бид хүлэмж барьдаг. Та нар хүлэмжид орж үзсэн үү? Тэгвэл хүлэмжийн хийн нөлөө нь үүнтэй төсөөтэй үйл явц юм. 2035 онд дэлхийн температур хэвийн хэмжээнээс 1.3°C-оор нэмэгдэнэ.

Уур амьсгал дулаарч нь ямар үр дагаварт хүрэх вэ? Зарим жишээ дурдъя.

- Туйлуудын мөс хайснаас болоод далайн усны түвшин нэмэгдэнэ. Үүнээс болоод зраг орчмын газрууд усанд автах аюул нүүрлэж байна. Зураг 4.19 дээр ийм газруудыг үзүүлжээ.
- Уур амьсгал дулаарснаас болж зарим газар хуурайшиж, цэлийн талбай нэмэгдэх болжээ.



# Braille maps for special children



**Leave no one behind!**





To hire fresh graduates....

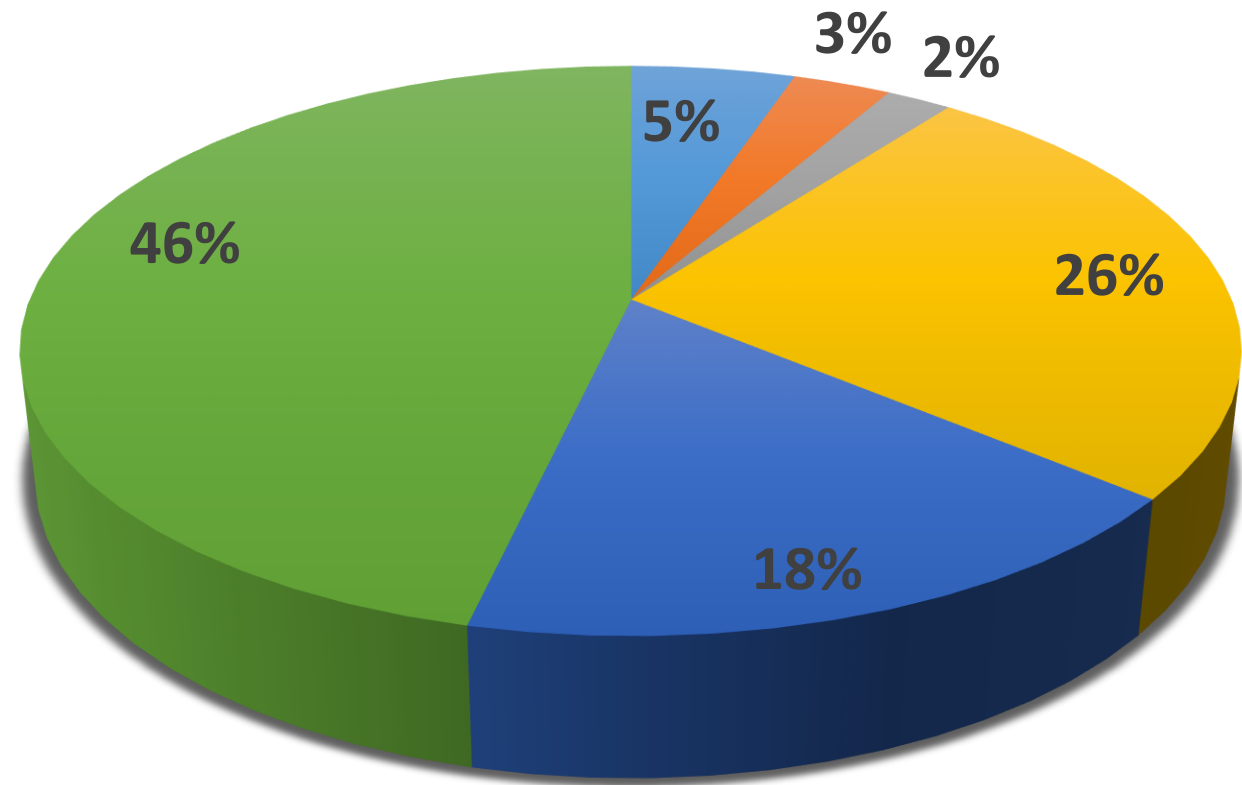


- **REMOTE SENSING AND GEOGRAPHIC INFORMATION SYSTEM**
- URBAN PLANNING
- **LAND MANAGEMENT AND CADASTRE**
- GEOLOGY
- GEOGRAPHY

- **GEODESY**
- **LAND CADASTRE**

- **LAND MANAGEMENT**

# Total graduates (Remote sensing and GIS)

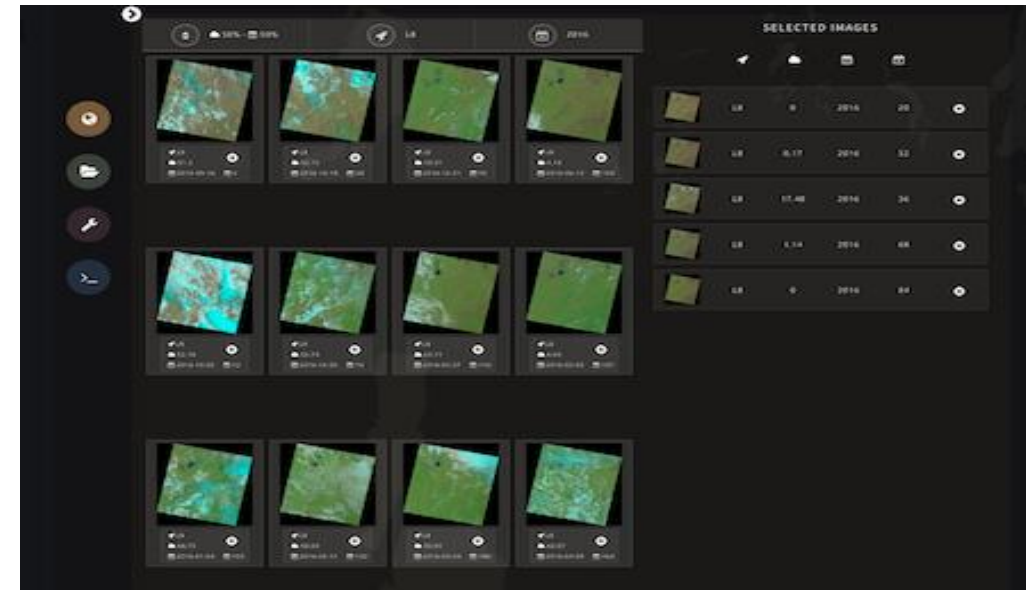


- Government institutions
- Local government
- Academia
- Private sector
- Studying
- Other sectors

Major	Year	Number of graduates
GIS and Remote Sensing	2014	17
	2015	23
	2016	23
	2017	17
Remote sensing	2018	18
	2019	11
Total		109

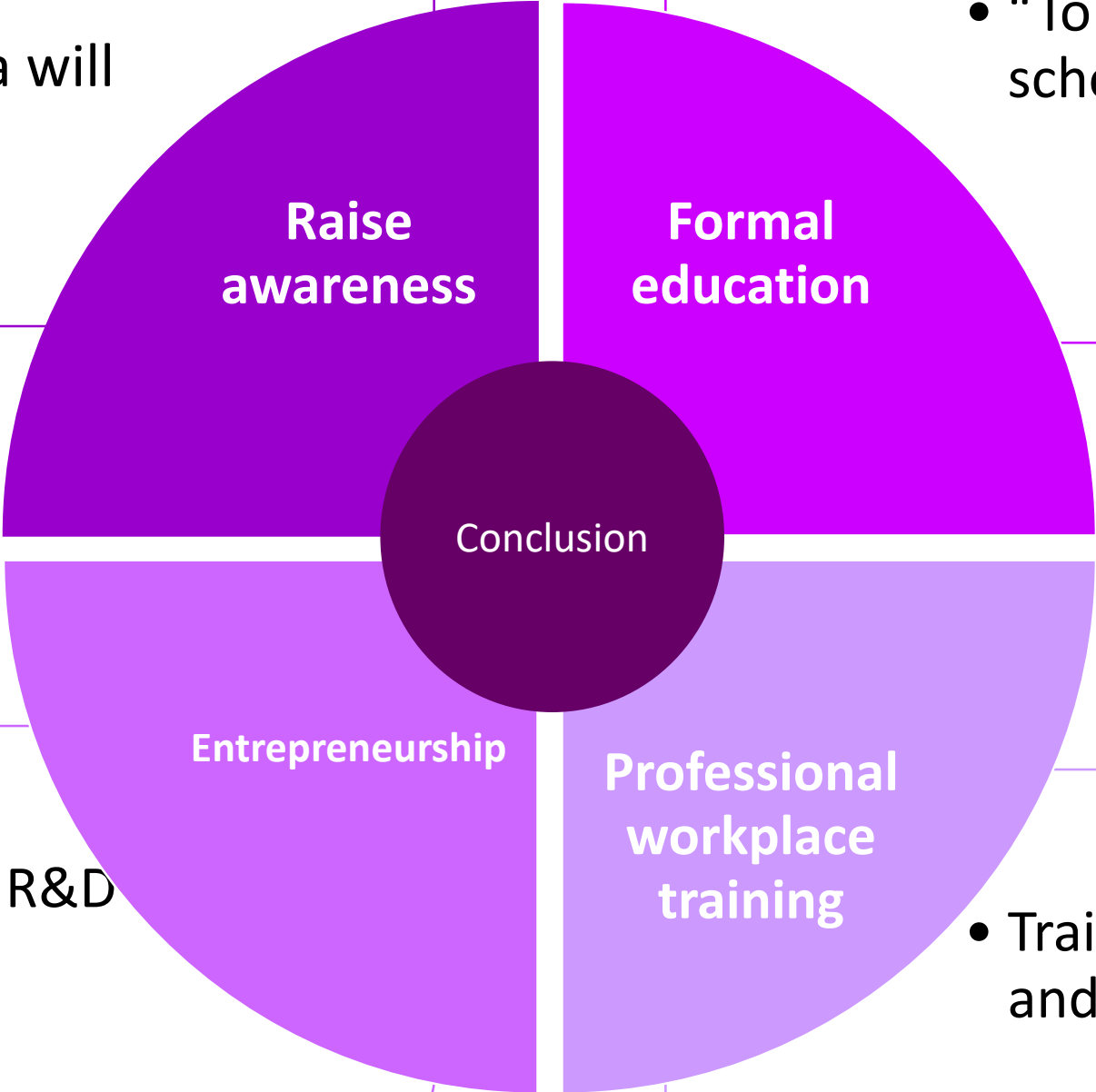
**Source: National University of Mongolia**

# Workplace training



- Utilization of geospatial data will be increased

- “To nudge” high schoolers’ choice



- Hackathon and R&D projects

- Training, training and training...

**“I’M STILL LEARNING.”**

**Michelangelo at age 87**

# References

- *“Daily News” newspaper* <https://ikon.mn/opinion/19ke>
- *Uranчимег Г., Батчулуун Ye., Тсогобадрал Kh., Сер-Од Ts., Мункхтсетсег., МНУЕ “Integration of SDGs into Geography textbooks”*
- *“Survey of graduates in remote sensing and geographic information institute” Болорчулуун Ch., Тсогтдулам M., NUM-School of Arts and Sciences*

Thank you

