

Doctoral Studies in GeoInformation Sciences

There are several **challenges** in Uzbekistan, where GeoInformation Sciences (GISc) may efficiently support solutions, for such issues as climate change, land degradation, water scarcity, the chronic lack of water treatment or the growing threat to air quality. The **aim** of the project is to support Uzbekistan in sustainable development by Geoinformation Science and Technology.

OBJECTIVES

- 1) Develop new doctoral programme, innovative doctoral courses and methodologies, supporting continuing professional development on the applications in geoinformatics.
- 2) Build advanced ICT-based learning and research environment, strengthening the relations between higher educational institutions (HEIs) and research institutions (RIs).
- 3) Enhance the scientific level of academic and research staff at UZ partner universities in the field of geoinformatics.
- 4) Orientate UZ scientists into interdisciplinary geoinformation science in doctoral studies and research.
- 5) Improve involvement of UZ academic staff and doctoral candidates in GISc into world-wide scientific community, strengthening internationalization of HEIs/RIs.

PARTNERS

- 1) Obuda University (OU), Hungary
- 2) Paris Lodron University of Salzburg (PLUS), Austria
- 3) Leibniz Institute of Agricultural Development in Transition Economies (IAMO), Germany
- 4) Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIAME), Uzbekistan
- 5) National Univer. of Uzbekistan named after Mirzo Ulug'bek (NUU)
- 6) Karakalpak State University named after Berdakh (KSU), Uzbekistan
- 7) Samarkand State Architectural and Civil Engineering Institute (SamSACI), Uzbekistan
- 8) Tashkent Instit. of Architecture and Construction (TIAC), Uzbekistan
- 9) State Committee of the Republic of Uzbekistan on Land Resources, Geodesy and State Cadastre (YGK), Uzbekistan
- 10) Ministry of Higher and Secondary Specialized Education (MHSSE), Uzbekistan
- 11) Supreme Attestation Commission under the Cabinet of Ministers (SAC), Uzbekistan

3. Competence development

- 15 senior staff have been trained in management and administration issues at OU, Hungary
- 20 potential scientific advisors have been trained on learning support methodologies on the field of GISc at NUU, Uzbekistan
- 20 potential scientific advisors have been trained on supervision and research methodologies at TIAC, Uzbekistan
- 8 doctoral candidates have studied (7 more doctoral candidates will study in 2021) one semester in EU countries;
- 15 potential scientific advisors have been trained on interdisciplinary doctoral courses at PLUS, Austria
- 20 doctoral students will learn the advanced infrastructure and JRC technologies in a Geoinformation Summer School in 2021



4. Regular Scientific Conferences:

- GI Conference 2018 held at NUU, October 19-20, 2018, Tashkent, Uzbekistan
- GI Conference 2019 held at SamSACEI, October 22-23, 2019, Samarkand, Uzbekistan
- GISCA 2020 held online, June 1-2, 2020
- GI Conference 2021 will be held at TIAME, January 27-30, 2021, Tashkent, Uzbekistan

5. Glossary:

- The Glossary of Geospatial Terms has been developed, recently more than 1000 entries in Uzbek and more than 6200 entries in English are included. It is the first thesaurus containing definition of geospatial terms in Uzbek. It is freely accessible (Open Access), and is suggested to Uzbek Geoinformation Science society to use. Link: <http://www.unigisopen.hu/DSinGIS/DoUT.html>

6. International GISc network:

- MoUs have been signed between all Uzbek partners and OU, similarly, MoUs with PLUS, and with IAMO.

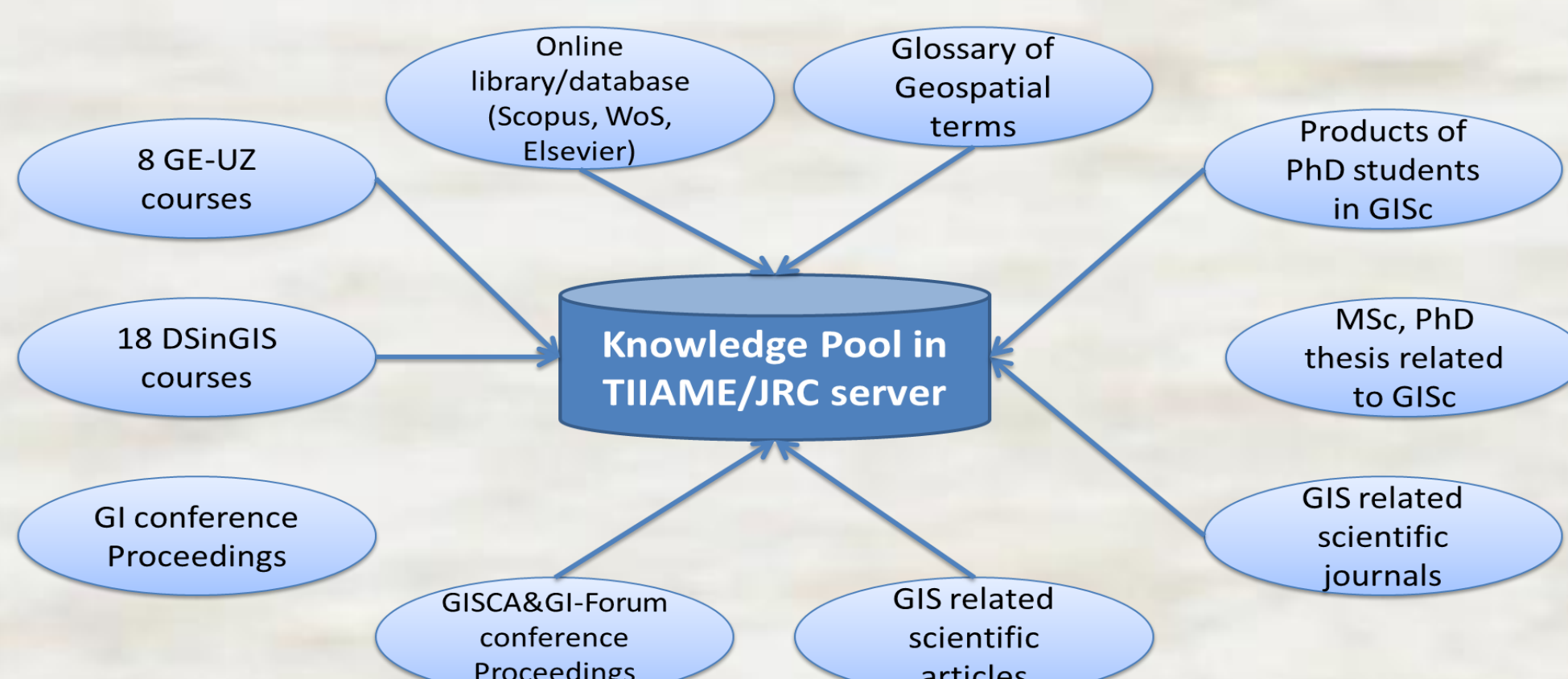
OUTPUTS & RESULTS

1. Programme Planning:

- A new Doctoral Programme in GISc: 11.00.07 - Geoinformatics
- 18 PhD courses (10 in Uzbek and 8 in English languages) have been developed using e-Learning methodology
- A new Quality Enhancement System has been developed
- A Quality Manual has been developed
- The 1st & 2nd Quality Enhancement Plans have been developed

2. IT Platform:

- 5 Knowledge Centres have been established and purchased at the partner UZ HEIs
- Knowledge Pool: <http://tiame.uz/uz/page/GIKnowledgePool>



- Joint Research Centre (JRC) will be implemented till the end of 2020, not exclusively for DSinGIS partners, but covering the interdisciplinary GISc applications in the country.
- A Business Model have been developed in order to ensure sustainability of Joint Research Centre (JRC)



For more information see:
<http://www.dsingis.eu/> &
<http://geoinformatics.uz/dsingis/>



Project Coordinator

Dr. Lorant Foldvary
Obuda University (OU)
Email: foldvary.lorant@amk.uni-obuda.hu



Uzbek National Project Coordinator

Mr. Ilhom Abdurahmanov
Tashkent Institute of Irrigation and Agricultural
Mechanization Engineers (TIAME)
Email: ilhom.isakovich@gmail.com