

Geospatial Value Study Inventory (GeoVSI)

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UN·IGIF
INTEGRATED GEOSPATIAL
INFORMATION FRAMEWORK

Agenda

- Purpose - What is the GeoVSI and why is it needed?
- Exemplar Studies – some examples of the type of existing studies
- What is included in the inventory?
 - Features and Functions
 - How to use it to help Member States justify investment in the IGIF
- Further development



Purpose

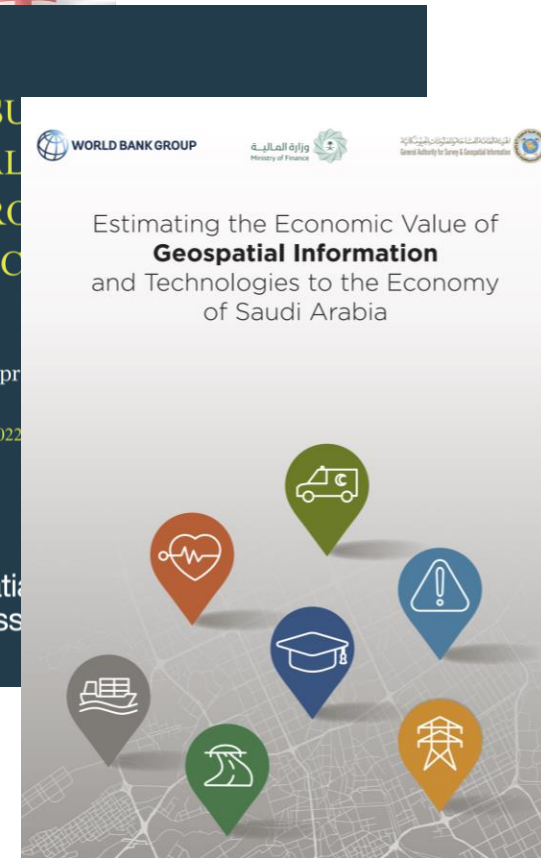
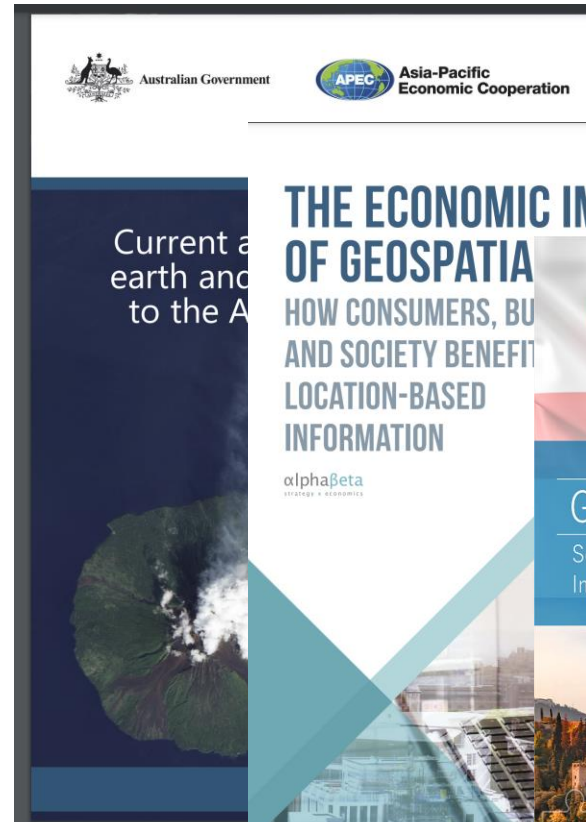
- Almost IGIF Country Action Plans require Investment to realise their outcomes, this maybe in data, human resources, equipment, services or training – all have associated **costs**.
- In order to convince decision makers to provide the finance, national mapping and cadastral agencies need to provide justification that explains the **benefits** of these investments.
- Although this may be possible by advocacy linked to key national priorities it is in our experience made easier by estimating the **value of both the costs and benefits**.
- A Socio-economic Impact Assessment (SEIA) is the generic term used to describe such value analysis.
- It answers a **need identified at UN-GGIM event held in New York in August 2022**, for a resource to assist Member States to access existing studies.
- The GeoVSI provides **direct support to the objectives of the IGIF guide to Sustainable Finance**.



Exemplar Studies

The following are amongst 75 studies currently included:

- APEC – value add across multiple marine industries
- Google – global willingness to pay
- Georgia – cost-benefit Analysis of SDI investment
- UK Geospatial Commission – cost-benefit analysis and case studies
- Saudi Arabia – use cases benefits



Some uses of the Inventory:

The inventory is designed to support users to:

- Quickly find relevant socio-economic impact values for geospatial products and services
- Identify studies to apply **value transfer** and generate defensible estimates of value.
- Compile information for meta-analysis - using data from independent studies of the same topic area to determine likely return on investment.
- Conduct literature reviews.
- Explore and compare valuation techniques to see what is most applicable to a particular need.



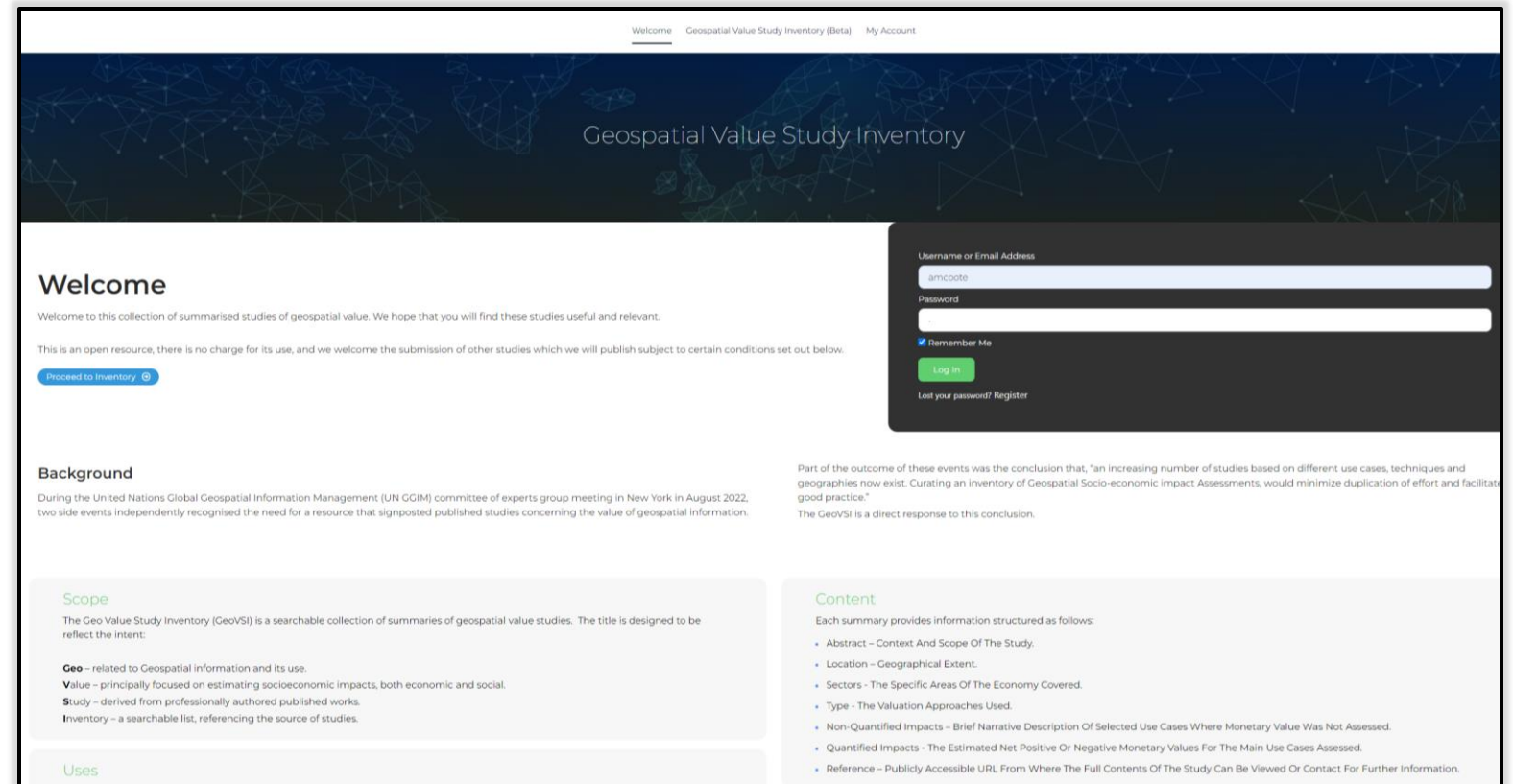
Access

A community resource – developed under direction of Sustainable Finance Working Group

Open and Free – no charge, simple email address registration to ensure legitimate

Copyright remains with authors

Curated professionally, as contribution to the knowledge sharing, by ConsultingWhere



Register at: www.geovsi.org



Content

Each entry contains:

- Overview – context and scope of the study
- Location – geographical extent
- Sectors - the specific areas of the economy covered.
- Type - the valuation approaches used.
- Socio-economic Impacts – summary of selected use cases where value was assessed in financial terms and others not quantified but with significant social value.
- Reference –publicly accessible URL where the full contents of the study can be viewed or provides a contact for further information.



Search

The content can be filtered by:

- Free text e.g. enter the term “open data”
- Economic Sector e.g. central government
- Location – by country
- Study Types e.g. case studies or cost-benefit analysis

The assistance of Esri (South Africa) is gratefully acknowledged in the development of the map interface.

Geospatial Value Study Inventory

Geospatial Value Study Inventory

Number of Studies

- More than 20 Studies
- 16 - 20
- 11 - 15
- 6 - 10
- 1 - 5
- No Study

Earthstar Geographics | Esri | Powered by Esri

The power of effective geospatial information management in South Korea: development and application (2020)
[View >](#)

Measuring the economic, social and environmental value of public sector location data (2022)
[View >](#)

International lessons learned and recommendations on business and funding models for the Mekong Delta Center (2022)
[View >](#)

Moldova – socio-economic impact assessment (2022)
[View >](#)

Search..

Search

Economy Sector

Choose Sector

Location

Choose Country

Study Type

Choose Study Type



Sample content

Estimating the economic value of geospatial information and technologies to the economy of Saudi Arabia (2022)

Overview

The report aims to estimate the potential economic benefits that Geospatial Information and Technologies (GIT) could contribute to the economy of the Kingdom of Saudi Arabia (KSA). The General Authority for Survey and Geospatial Information (GASGI) has oversight of the geospatial sector in KSA and asked the World Bank to carry out the study.

KSA's economy is the largest in the Gulf Cooperation Council (GCC) with an estimated GDP of USD 782.5 billion in 2018. The Kingdom has the largest proven oil reserves globally and is the largest worldwide oil producer. However, in 2016, KSA announced Saudi Vision 2030—an ambitious plan and strategic blueprint to diversify the country's economy and transition away from its extractive industries.

The particular focus of the report is on how Geospatial Information (GI) will play a fundamental role in supporting the growth and development of key sectors identified by Vision 2030. These sectors include commerce (ports), infrastructure (roads), energy, health, education, public safety and security, and disaster risk management. The sectors are expected to enhance KSA's market, strengthen sustainable economic growth and help the country shift away from oil dependence.

KSA is a heavy user of geospatial data, especially across government and within the oil and gas, utilities and telecommunications sectors. The country's growing GIT sector provides a range of services including software and solutions development, consumer services, cartographic services and supports major multinational companies across the Kingdom's industries. Nevertheless, the business capacity of the geospatial sector in KSA is relatively limited and currently only comprises a small fraction of the local market. KSA is working towards the creation of a national strategy for the geospatial sector which will include the development of a Spatial Data Infrastructure (SDI) to support the Saudi Vision 2030 and prioritise investment needs.

A brief introduction of the Saudi Arabian context is given along with the main motives behind the study. The economics of geospatial information is discussed along with the role that government can play in its collection and distribution. The paper's methodology is then expanded upon followed by the estimates the authors make for the benefits of GIT to each of the identified economic sectors. The reports concluding remarks are provided with recommendations for future research.

Geographical scope

Saudi Arabia

Non-quantified impacts

Education – GIS tools will support plans to significantly by offering the ability to reliably identify and measure progress towards the government's goals. KSA will require the expansion of school buildings and bring more efficient information systems to support

Infrastructure (roads) – despite KSA's significant road network there is an estimated backlog of road fund allocation. The poor quality of roads is poor safety record. GIT can provide crucial data on the context of the surrounding environment to the lifecycle: planning, design, surveying, construct

Disaster Risk Management – Saudi Arabia is exposed to hazards such as coastal and flash flooding, earthquakes and volcanoes. KSA is increasing its Disaster Risk Management (DRM) system. GIT-based DRM efforts at every stage of the disaster response. Preparedness tools can be improved and

Quantifiable impacts

The table below summarises the range of estimated benefits that GI and technologies might be expected to deliver to KSA. These benefits were estimated by using data provided directly by KSA government ministries and agencies, adapting certain assumptions and are subject to limitations and caveats detailed in the report.

Summary of estimated benefits from GI by sector use case

SECTOR	US\$ PER YEAR
 DISASTER RISK MANAGEMENT	3.8 million – 47.8 million
 EDUCATION	63 million – 239 million
 ENERGY	564 million
 COMMERCE	56.2 – 122 million
 PUBLIC SAFETY	2.1 billion – 3.9 billion
 PUBLIC HEALTH	1.6 billion – 3.2 billion
 INFRASTRUCTURE	1.5 billion – 2.6 billion

Source: Authors' calculations

Reference

Find this article at:

https://gasgi.gov.sa/Documents/Maps/2022/March/KSA_GEOSPATIAL_ECONOMIC_IMPACT_STUDY.pdf



Next Steps

- Publicise availability (starts at this meeting)
- Reference within the forthcoming IGIF Sustainable Finance Guide
- Implement feedback on usability and enhancement



Finally, a call to Action:

The Sustainable Finance Working Group need your help to be able to help you!

We need more studies, particularly:

- Latin America and Caribbean
- Africa



Thank You

Contact Information

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Disclaimer Statement

A Community Resource

The value study inventory is designed to be an open resource for use by the community of professionals engaged in establishing the value of geospatial data, its management and analysis.

There is no charge for its use, however, to protect the integrity of the resource, users are required to register. Personal information will only be used for the express purpose of administering the inventory and will be subject to the requirements of GDPR.

GeoVSI is not designed to replace necessary research to establish the value of geospatial in a country or sector but to make it easier for users to find relevant information.

As such, the editors welcome the submission of new studies that enhance the depth and width of coverage, for inclusion in the inventory.

Suggestions on how to improve the structure or other aspects of the inventory are also welcome.

Please submit all feedback and additional studies to: info@geoVSI.org

Editorial Control

The editors of GeoVSI reserve the right to exclude material if it is viewed to be of limited relevance or beyond the inventory's intended scope.

