Integrated Geospatial Information Framework Agenda 4a: Financing IGIF Country Level Implementation Agenda 6: Learning Materials and References

April, 2022



Kathrine Kelm Urban, Resilience and Land Global Practise





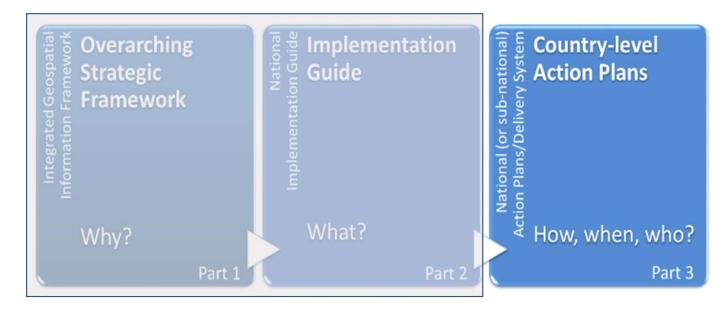
World Bank IGIF Implementation Methodology

Country-level Action and Investment Plans Link to Financing

IGIF : World Bank focus on Country Level Implementation

- **Part 1:** Overarching Strategic Framework
- Part 2: Implementation Guide
- Part 3: Country-level Action provides the 'how, when and who' approach, this document assists countries to prepare and implement their own country-level Action Plans.

3



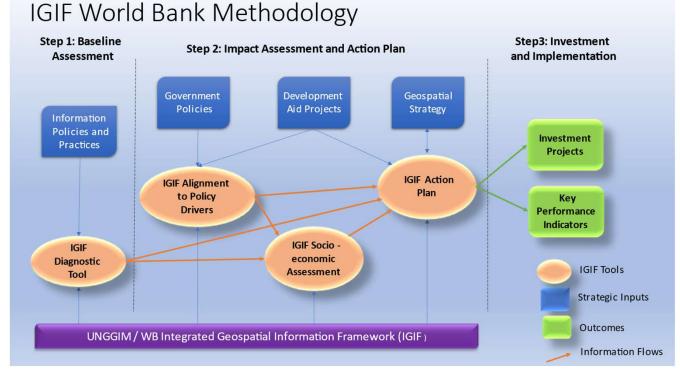


World Bank IGIF Implementation Methodology: 2017-2022

4

The World Bank Group has established an IGIF Implementation Methodology and corresponding analytical toolkit to support the use of the IGIF:

- Incrementally strengthen geospatial information management - customized to specific countries and priorities
- Link to financing: based on analytics, using standard WBG infrastructure model



The diagram shows the analytical tools (in orange), key inputs (in blue), the IGIF in purple, outcomes (in green). Arrows show the different types of information flows.



World Bank IGIF Templates



Baseline Diagnostic Tool

IGIF Baseline Diagnostic Tool (DT) and **Assessment Template** provide an assessment of the "as is" position of geospatial information management, structured around the nine IGIF pathways

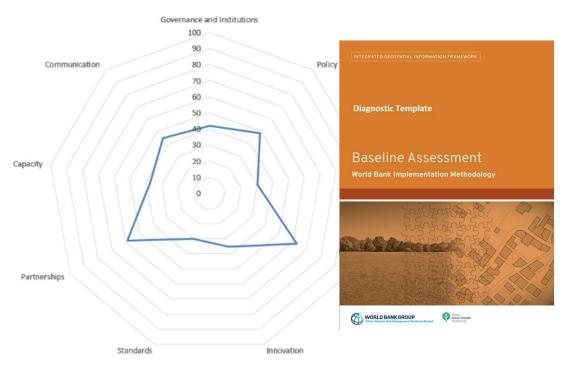
The DT is applicable to any geographical entity including city, region and country levels.

Used to engage stakeholders through a consultation and verification workshop

The Baseline Assessment Diagnostic Tool Template is available for download <u>here</u>:

The Baseline Assessment Report Template is available for download <u>here</u>.

Ъ	
_	





Geospatial Alignment to Policy Drivers

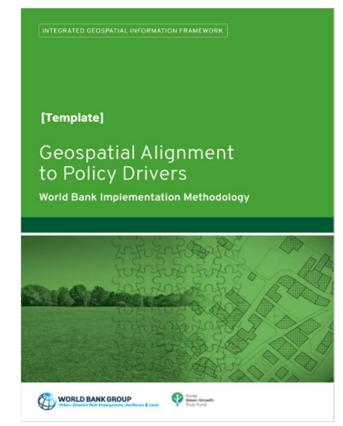
Geospatial Alignment to Policy Drivers Template is used to align the Government's strategic objectives and international commitments to specific spatial use cases (applications) and then prioritizes them based on how well they support and accelerate achieving these strategic objectives.

This work is **key for communications and awareness** raising with decision makers.

The Geospatial Alignment to Policy Drivers Template is available for download <u>here</u>.







7

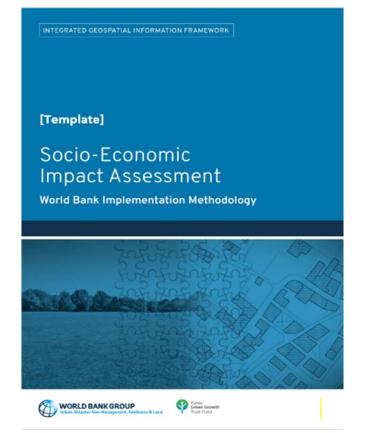
Socio-Economic Impact Assessment

Socio-economic Impact Assessment Template delivers an assessment of the socio-economic business case for investment in an SDI from both qualitative and quantitative perspectives. It is informed by the outputs from the two tools outlined above.

The Socio-economic Impact Assessment Template is available for download <u>here</u>.

	D	
Ξ	·	
=		
-		





BENEFITS: SECTORS, USE CASES, ACTIONS

Tra SECTORS	Urban Planning ansport Land Envir Community Services Mining	Health onment Law Water Touris	Disaster Managem Security Governm Administra m	nent	Marine?
USE CASES Transport Modelling Traffic Operation Road Safety Street Wor Ride-sharing Apps	Network State La Ks Census Cadast	stre Permittin Management Ed nd Business nd Registration SmartCities	ng co-tourism Energy Sourcing eGovernment Community Servic	Location-based Services Livestock ces Manageme	L)evelonment

ACTIONS/INVESTMEMTS

Positioning e.g. GNSS Network Imagery Acquisition e.g. Satellite and Drone Imagery Data Capture e.g. Land and Building cadastre Data Integration e.g. Street Address Data Sharing Geoportal/Policy Business Intelligence e.g. AI and Machinelearning Applications

9

Additional Tools for the Socio-economic Impact Assessment 10

Green Growth Use Cases

INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK

Socio-Economic Impact Assessment World Bank Implementation Methodology





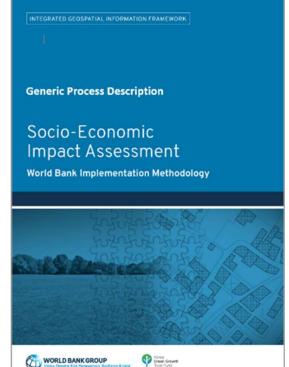
Cost Benefits Analysis

Socio-Economic Impact Assessment World Bank Implementation Methodology







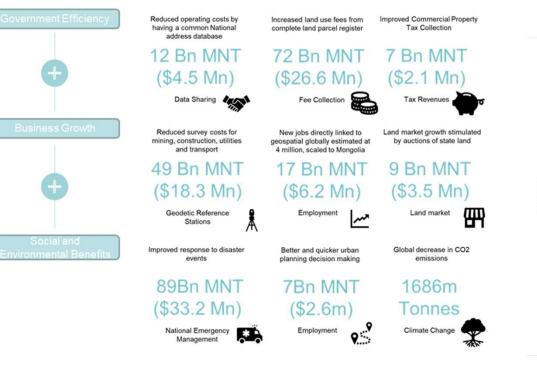


Generic Process Description

Creat Great

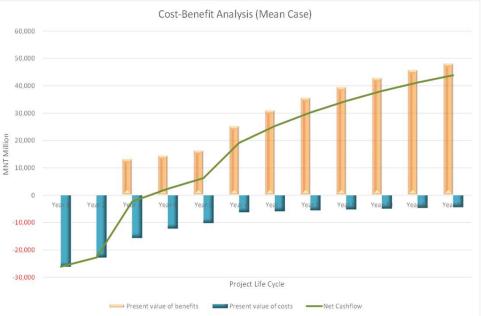
Socio-Economic Impact Assessment: Financing Justification

Benefit to Cost Ratio: 2.5: 1 Return on Investment: 250% Net Present Value: US\$ 66,1 million



World Bank Infrastructure Project Model:

- Project Life Cycle:
 5 years development
 7 years operation
- Discount Rate: 6%



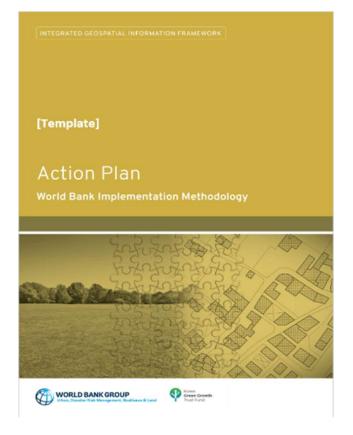
Country-level Action Plan

Country-level Action Plan template outlines the actions and investments in a sequenced and structured manner. It builds on the previous deliverables to create or update a high-level geospatial strategy and a corresponding costed roadmap for SDI enhancements, presented as a series of interdependent policy interventions and implementation projects.

The Country-level Action Plan Template is available for download <u>here</u>.







IGIF Action/Investment Plan: Mongolia

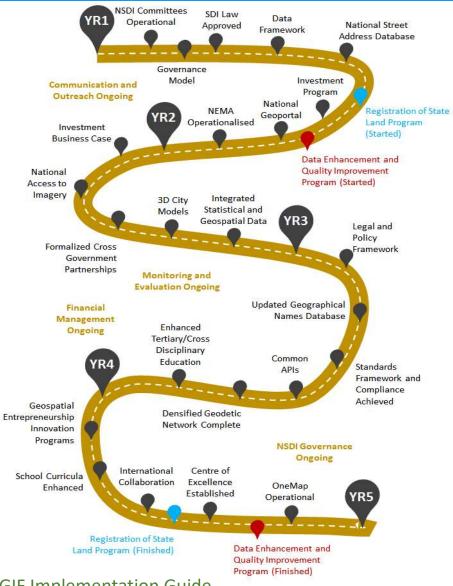




WORLD BANK GROUP

Vision: Geo-driven eGovernment and innovation that empowers efficient and effective use of geospatial information towards national sustainable development and economic growth.

Potential financing through the new WB- financed Digital Development Project: Delivery 2022



IGIF Implementation Guide

											0.50.50	8° /5
Exa	Example from Colombia IGIF Action Plan											
Ref	Task Ty	IGIF Pathway	Priority	Description	Total Investment (US\$)	Financial Capital or Recurrent	Funding Source	Year 1		me 💮 WORLDAWN Year 3	Year 4	Year 5
		Financial										
3.1	Create an NSDI Business Model		Med		35,000	С	WB					
4.1	Create inventory of existing data	Data	High	See also overlap with 6.3	30,000	С	WB					
4.2	Train and Guide data owners to complete metadata		High		50,000	С	Gov			a		
4.3	Define fundamental dataset & custodians		High	Consultancy advised	50,000	С	Gov					
4.4	Invest in data themes, prioritised to demand		High	Depending on theme and de	mand							
	Cadastral Parcels - MPC		High	MPC Subcomponent 3.2	19,500,00	С	WB					
	Functional Areas	· · · ·	High	Consultancy advised	500,000	C and R						
	BaseMap		High	Consultancy advised	500,000	C and R						
	Address Database		Med	Consultancy advised	500,000	C and R						
	Security / Safety		High	Consultancy advised	50,000	C and R						
4.5	Create digital archive of historical data and imagery		Low	Could be a PPP	500,000	C and R						
		Innovation										
5.1	Ensure real time GNSS corrections are available		High	System testing	20,000	С						
5.2	5.2 Evaluate imagery for updated topographic base maps		High		20,000	С				6		
5.3	Develop a Geospatial Centre of Excellence (CoE)		Med	Assumes Head, 2 x trainers	250,000	C and R						
5.4	Assess Geospatial Innovation start-up scheme		Med		20,000	С						
5.5	Improve access to key registers	Demonstrator	Med		50,000	С						

Action Plan Includes Priority Investments

IGIF COUNTRY LEVEL IMPLEMENTATION

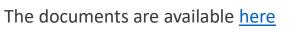






Recent Country IGIF Examples - Moldova









Financing IGIF Implementation: World Bank Project Cycle

Easiest and 'immediate': Add in to or Guide existing projects

- Land Administration: Colombia, Moldova, Guyana, Serbia
- Disaster Risk Management: Seychelles

Projects in the Pipeline (12-24 months)

- Cambodia: national (solid waste mgmt project); sub-national (Phnom Penh urban dev.)
- Nicaragua: land administration
- Liberia (analytics under existing land project; new financing under urban project)

* Swedish Grad student introduced via Landmateriet leading IGIF Diagnostic in coord. with Liberia Land Authority and WB urban/land team

Mongolia: Digital Development project – IGIF reference in Project Appraisal Document

New Financing: 18+ months

- Most projects start with analytics (IGIF tools/Templates provide basis)
 - Senegal



World Bank Online Learning and Webinars for IGIF Implementation

IGIF Self-paced Online Learning Virtual Knowledge Exchange Series 1 Virtual Knowledge Exchange Series 2

More Information

For further information regarding this PowerPoint and associated World Bank Templates, please contact:

Kathrine Kelm, Senior Land Administration Specialist

Urban, Disaster Risk Management, Resilience and Land Global Practice

The World Bank

1818 H Street, Washington DC, 20433, USA

Email: kkelm@worldbank.org | Web: www.worldbank.org

