Interaction with and support to national institutions in the field of LDN reporting (results of the CARB-ASIA project)

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Capacity development for climate policy in the countries of South-East and Eastern Europe, the South Caucasus and Central Asia, Phase III (CDCPIII)

This project is part of the International Climate Initiative (IKI). The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) supports this initiative on the basis of a decision adopted by the German Bundestag.
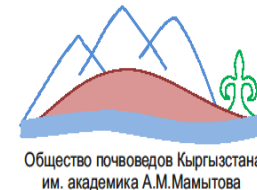
Introduction

- Rising need for reporting systems for land cover, land productivity and carbon stocks; more generally: the SDGs

  "You can't manage what you can't measure"

- But: You can't measure without management

- In the last presentation you have seen one method to measure SOC

- In CARB-ASIA, we also studied barriers and opportunities for managing measurement and subsequent information processing

- Are methods with high scientific standards accepted in practice?

- Do reporting systems admit raising adequate financial resources?

- Are there incentives to share the data and make it transparent?

- If the data is more useful, the method might be implemented more easily.

- What is the best trade-off between data quality and data provisioning costs?

➢ Are such barriers present for SOC reporting in Kyrgyzstan?

  - Empirical informational governance study rooted in economic theory

To analyze the existing institutional environment for LDN assessment, monitoring, and reporting in Kyrgyz Republic and make recommendations for formalization and implementation of the proposed methodology.

- Analysis of existing institutional environment that shapes current modes of environmental (land) data provision and use

  - Review of official documents

  - Policy analysis on land governance issues

- Qualitative interviewing and group discussions with local experts:

– Policy makers at the national level (e.g. representatives of ministries);

– Representatives of other government and non-government institutions;

– Representatives of international organizations;

– National experts from science and research.

→ 38 expert interviews

Source: CARB-ASIA Project archive

LDN operationalization

1. A standardized approach for defining LDN indicators

The importance of formalizing the new method:

- The proposed approach to record carbon stocks is a scientifically sound method adapted to international standards. The adoption and implementation of the method allows the country to meet international (LDN) reporting requirements.

- The proposed method incorporates a cost-efficient approach to get accurate data on carbon stock assessment.

- Such reliable data are essential for informed decision-making at the regional or national level and can likewise be used to:

  – determine the dynamics of organic carbon in soils in Kyrgyzstan;

  – measure natural capital and ecosystem services, thus providing the opportunity to quantify and manage trade-offs between ecosystem services;

  – conduct economic valuation of land in the private sector.

LDN operationalization

2. Development of national capacity to establish mechanisms for collecting and reporting on LDN indicators

- Identification of existing barriers and related capacity needs in managing environmental (land) data and organizing LDN processes

- Proposals to strengthen national capacities in in the management of environmental (land) data and the organization of LDN processes

A multidimensional nature of informational governance

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3 layers of information functionality:

➢ technical infrastructure, data and format layer;

➢ organizational layer;

➢ human layer.

Technical infrastructure, data, and format layer

Current capacity	Capacity development
• heavy reliance on functional aspects of information provision, i.e. development and running of the data system	• focus on the right format of data production (i.e. unified format of data collection and storage, development of different layers of access, geospatial integration)
• focus on supply side of information provision and little focus on future data usability	• focus on potential data users and impacts (e.g. the data obtained from the LDN assessment and its future monitoring provides evidence for land degradation policy development and can also be used for crop structure planning, production forecasting, and food security at national and regional levels)
• low level of data interoperability due to outdated standards for data collection and storage	• improve data interoperability across the value chain of information by setting common technical standards to increase the possibility of more efficient reuse and processing of the same data in various applications, allowing different information systems to work together
• low data reliability and quality (high level of uncertainty) and weak processes of verification	• development of a verification process involving relevant stakeholders with various competences. Consider LDN monitoring as an instrument for learning (e.g. monitoring results can serve as a basis for adapting actions to achieve the LDN target)

For more information:
https://wiki.afris.org/pages/viewpage.action?pageId=118139601&preview=/118139601/118139606/manual_carb-asia_en_02_2021.pdf

Organizational layer

Current capacity	Capacity development
• institutional fragmentation and weak cooperation between the authorities and non-governmental actors as well as within organizations	• strengthening cooperation across various ministries and sectors involved in land management (e.g. through establishment of a permanent LDN working group under the government, including civil society actors)
• lack of rules for data and information sharing	• adoption of a participatory approach through an organized multi-stakeholder platform (e.g. organizing regular meetings to bring together a wide range of stakeholders and sectors involved in LDN process) • establishment of a centralized land degradation monitoring and evaluation information system (e.g. geoportal under the SALR) and information policy development

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Organizational layer

Possible organizational structure of LDN			
		Assessment & Monitoring	Reporting	Implementation (achieving LDN)
„Political" organizational level		**Establishment of a permanent LDN working group under the Government** (at the initiative of the Ministry of Agriculture) • to foster inter-ministerial and cross-sectoral coordination (MAFIM, SALR (incl. Kyrgyzgiprozem and State Land Cadastre), SAEPF, NSC, Ministry of Finance, Academy of Science, KNAU, NGOs and public organizations) • to enhance participation process through creation of a multi-stakeholder platform for information exchange between representatives of all interested parties - to support and strengthen existing networks by organizing regular meetings - to engage stakeholders in the co-production of knowledge and mutual learning - to guide LDN interventions using knowledge and engagement of local stakeholders - to validate the results of the LDN monitoring		

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Organizational layer

		Assessment and monitoring		Reporting	Implementation
"Technical" organizational level	**SOC indicator**	Kyrgyzgiprozem (RPAS) • to collect and process soil data (SOC_{Stocks})	**Establishment of a centralized information system (e.g. geoportal under SALR)** Online soil database NSC data base Forest management information system	MAFIM • to assume responsibility for the fulfilment of reporting obligations as the focal point for UNCCD and LDN (supported by SALR in data production)	MAFIM/SAEPF • to ensure informed decision making on land planning and agricultural development at national and regional levels • to address national development priorities, such as food security, poverty reduction and climate change measures
	Land cover indicator	State Land Cadastre/NSC/SAEPF • to collect and process land use data (based on national land registry and national forest inventories)			
	Land productivity indicator	Arable land – NSC • to collect and process data on national yields Pasture – Kyrgyzgiprozem • to collect and process geobotanical data Forest – SAEPF • to collect and process data based on forest management inventory			
		NGOs, universities and research institutes, international organizations, etc. • to contribute to and support LDN processes, using their knowledge and resource potential			

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Human layer

Current capacity	Capacity development
• an acute shortage of specialists in the fields of soil sciences, remote-sensing, IT and data management	• strengthening human capacity by training and preparing specialists in environmental management, soil science, and computer science in close cooperation with the UNCCD and Kyrgyz national academic institutions and universities, research centers and NGOs • facilitating the sharing of lessons learned through stakeholder engagement

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1. What is the acceptance of the methodology in Kyrgyzstan?

a. Acceptance of the methodology by Kyrgyz experts
The existing knowledge, experiences and experts' opinions were incorporated.

Figure 1: Visiting the laboratory of Kyrgyz State Design Institute of Land Management
Source: CARB-ASIA Project archive

b. Acceptance of the methodology by the Kyrgyz government

Figure 2: Opening of the Kick-off Meeting with representatives of government institutions: Kyrgyz Ministry of Agriculture, Food Industry and Melioration, the National Statistical Committee, State Agency for Environmental Protection and Forestry, and Kyrgyz State Design Institute of Land Management.
Source: CARB-ASIA Project archive

c. The project was also aimed at the capacity building of students and young specialists in Kyrgyzstan and Germany

Figure 2: Fieldwork training
Source: CARB-ASIA Project archive

2. Questions for discussion:

- Are the barriers and opportunities presented relevant to your country?

- What are other reasons that affect acceptance (e.g. institutionalization, practical implementation) of such methods in your country?

- How can the acceptance of such methods be increased among national experts and governments?

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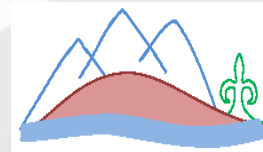Zusammenarbeit (GIZ) GmbH

On behalf of:

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Общество почвоведов Кыргызстана
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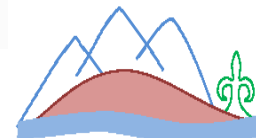F +49 228 44 60 - 17 66

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