

MODULE 4:

Setting the mapping framework

Setting the mapping framework and defining all its elements is crucial for efficient and focused data collection and consolidation.

OBJECTIVE

Confirm the final scope of the analysis, and develop a first qualitative sketch of the finance mapping for consultation with experts to refine data collection needs.

By now, after the initial scoping research in Module 1, stakeholder dialogues in Module 2, and definitional building in Module 3, the project team should have a well-defined and agreed-upon scope for the analysis.

In this next step, the team will put all of the elements together and develop a first qualitative visualisation of the potential final output. This will help confirm the scope with the project champion, including the dimensions and categories to be used.

KEY QUESTIONS

- 4.1 Which dimensions of flows should be mapped?
- 4.2 How to identify and describe key actors?
- 4.3 How do flows relate to each other?
- 4.4 What format should the output have?

TEMPLATES

-  Download Template 4 - Expenditure and investment framework
-  Download Template 5 - Mapping tax and non-tax flows
-  Download Template 6 - Key actor profiles

4.1 Which dimensions of flows are to be mapped?

After identifying the types of finance to be included, as well as the actors and instruments, the team needs to clarify how to frame the information for the final output. This has to be done before collecting data, since the framing reveals what information is needed to categorise and map actors and flows consistently.

Various frameworks can be used for mapping financial flows. However, the complexity of the framework depends on the objectives of the intended land-use finance analysis (see Module 1 on the links between objectives and output).

Figure 9 shows the life cycle of finance typically mapped in climate finance mapping exercises, highlighting the actors through which money is channelled, the instruments used to channel money and the activities money is spent on. The project team should agree on which of these horizontal headings should be included and the set of vertical categories. These categories can then be applied when data is processed. (See Table 7)

Figure 9: Conceptual overview of the life cycle of climate finance; Source: Ampri et al. 2014



SOURCES/ INTERMEDIARIES	INSTRUMENTS	DISBURSEMENT CHANNELS	USES
Central Government	Budget Transfer Mechanisms	Central Government	Mitigation & Adaptation
Local Government		Local Government	Direct & Indirect
International Development Partners	Grants	International Development Partners	
	Loans		
Funds	Equity	State-owned Enterprises	
		Private & NGO	

Mapping question	Horizontal dimension	Vertical dimension
Where and who is the finance flowing from?	Sources and intermediaries	On the public side, this may include categories like: central government; local government; public agencies; public trust funds; SOEs; public financial institutions; and international public actors including other governments, financial institutions, and other funds. On the private side, this may include institutional investors, including commercial financial institutions, (impact) funds, producers, including corporate actors and households/family farms, project developers, service providers, traders and philanthropists.
What financial instruments are being used to deliver finance?	Instruments	The following categorisation may be used: budget expenditure; grants; balance sheet finance; loans (concessional and commercial); and equity. For other purposes, it might also be interesting to map: bonds; guarantees; revenue tools, including tax instruments and non-tax instruments, such as levies, royalties, fees; or public subsidies in general, including fiscal policy tools (budget revenue/expenditure), grants, etc.
Where and who is the finance flowing to?	Disbursement channels and recipients	Most mapping exercises do not provide detail on the final recipients of finance, due to lack of available detailed information. Most exercises stop at executing or implementing on entity level, mapping categories like central government/implementing ministries; local government; public agencies; SOEs and public-private partnerships; unions/industry associations and funds; NGO; international partners; private companies; academic and research centres; and other civil society actors. It is worth noting, however, that the recipient may not always be the beneficiary of investment. Consider expenditure on technical assistance: the recipient of finance could, for example, be an NGO, which uses the capital to deliver training to smallholder farmers, the beneficiaries.
What activities are being financed?	Activities and sectors	The typology of land-use finance activities developed in Module 3 provides the framework to categorise activities financed. These activities might be grouped in sectors or policy areas. The landscape on land-use finance in Côte d'Ivoire mapped mitigation activities minimising drivers of deforestation, adaptation activities and enabling environments. The Indonesian Landscape of Climate Finance also mapped direct and indirect investments, as well as a breakdown by sector.



Table 7: Dimensions of climate finance landscape framing

Template 4: Expenditure and investment framework



Template 4 - Expenditure and investment framework

Sources/ intermediaries	Instruments	Disbursement channels	Uses
Government Revenues	Budget Expenditure	Technical Ministries	Adaptation
Treasury	Grants	National Funds	Mitigation
Bilateral Government	Low Cost Debt	Local Government	Agricultural Intensification
Bi-/Multilateral/ Regional DFI	Market Rate Debt	Public Agencies	Sustainable Forest Management
Multilateral Agency/Fund	Equity	State-owned Enterprises/Banks	Restoration/ Reforestation
Commercial Financial Institutions		Industry Associations/Fund	Sustainable Energy
Private Equity, Venture Capital, Funds		NGO's, Intl. Partners and Private	Sustainable Mining
Institutional Investors			Enabling Environments
Corporations - Producers, Traders			Land Planning
			Land Tenure
			Green Planning
			MRV, Traceability
			Research and Development
			Capacity Building

 Public
 Private

Template 4 provides possible typologies that users can use to agree on the dimensions for the finance mapping framework, and to develop lists of actors, instruments, activities, sectors, and so forth. This enables users to prepare a first qualitative view of the potential scope of key flows and attributes to be mapped. This template is a relatively simplistic and linear view of expenditures and investments.

When mapping revenues instead of, or in addition to, expenditures and investments, an alternative framing may be required – see Template 5 for an example. Government budget revenue instruments that raise funds from land-use related sectors are collected by either local or central government agencies. This focus can point to promising opportunities to address unproductive land use, and adjust fiscal policy instruments to meet revenue and land-use goals.

Template 5: Mapping tax and non-tax flows template (adapted from Mafira and Sutiyono, 2015)



Template 5 - Mapping tax and non-tax flows template

Sector	Revenue instruments	Collector	Budget
Agriculture	Tax	Regional Government Office	Regional Budget
Mining	Regional Tax	Central Government Tax Office	Central Budget
Geothermal	Income Tax	Central Government Ministries	
Land Licensing	VAT		
Forestry	Land/building		
Oil and Gas	Export duty		
	Non- tax		
	Forestry		
	Agriculture		
	Energy & Mineral		
	Land office		

4.2 How to identify and describe key actors?

Following the identification of the dimensions and groups of actors that will be captured in the land-use finance mapping, the project team should develop provisional lists of specific organisations and agencies that are most active in land-use finance in the jurisdiction, and should be included in the analysis. See Module 1.3.

Qualitative and semi-quantitative information characterising the role of different key actors/institutions and inter-relatedness with other institutions or actors can be very useful at this stage, and especially for the first land-use finance mapping exercise. Such information can help judge the relative importance of different actors, and visualise how they relate to one another.

Project champions, steering committee members and core stakeholders who are familiar with the land-use sector in the geography of interest can help identify important actors. They can also provide important context information on each, including the role played in land-use financing, source of funding and so forth. Such qualitative information can help refine the mapping framework, and later help analyse and interpret the data received about these actors (Module 7). See Template 6 to build profiles of potentially key actors.

Template 6: Key actor profiles



Template 6 - Key actor profiles

Name of the entity	[Fill in name]
Type of structure	[Ministry, Department, Agency, Fund...]
Annual budget	[On average]
Mandate	[Supporting legislation]
Resources	[Sources of funding]
Use of funds	[What are resources being spent on]
Comments	[Other observation in relation to role in land-use change that may help understand the flow of funds]

4.3 How do flows relate to each other?

Next, it is important to understand the possible financial relationships between actors and categories, and start to qualitatively assess and illustrate those relationships. At this stage, you need not attempt to quantify or illustrate the volume of finance.

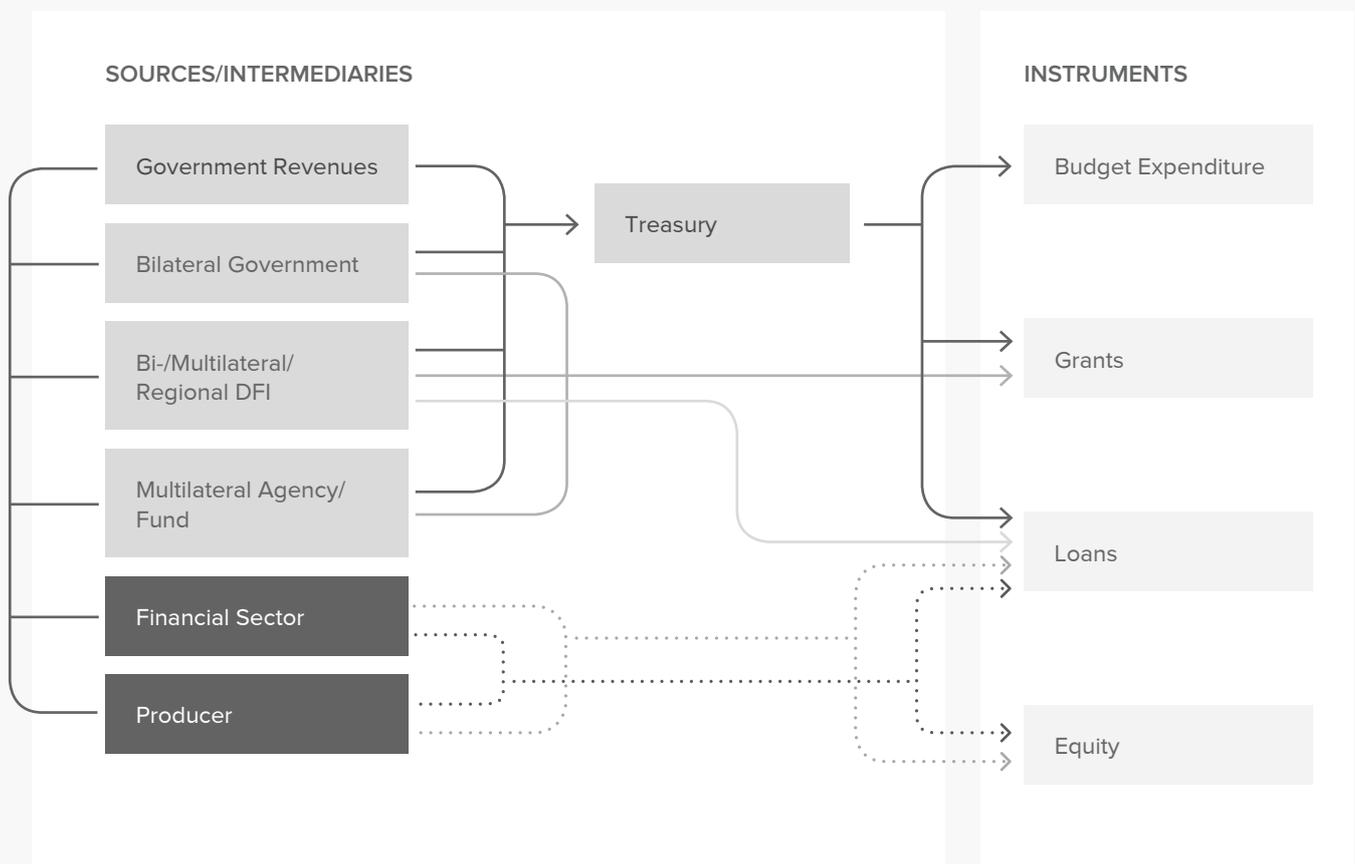
Guiding questions include:

- ▶ How do different institutions raise their capital? What are their sources of finance?
- ▶ What financial instruments do they use to raise/disburse finance?
- ▶ Are they considered an executing/intermediary, or implementing agency/disbursement channel?
- ▶ What sectors are they active in?

Sources of information that will help explain the flow of funds include: budget/finance laws; documents on budget processes and classification; annual reports of public agencies; enterprises and funds; public audit reports; and evaluation reports.

This qualitative illustration (Figure 10) will enable discussions with stakeholders about important categories, actors, financial flows or instruments that may be missing, or unimportant elements that can be deprioritised. Revised qualitative maps can support data collection. Even during data collection and analysis, categories may turn out to be (less) important, and (additional) views might be adapted and iterated again.

Figure 10: Relationships/flows within a typical climate expenditure and investment mapping framework



4.4 What format should the output have?

Determining the output format at this stage can help to focus on valuable resources during data collection and analysis. The decision on dissemination mode (report, policy brief, poster, email, blog and video) and visualisations (graph types, infographics and formatting) depends on the targeted audience(s) (national or local policy makers, international development partners, civil society, or internal team).

Preparatory questions are:

- ▶ What type of decisions is the target audience supposed to make?
- ▶ What do they know about the topic? What information do they already have available?
- ▶ How much time do they have to handle information? What format will help them to do that most efficiently?
- ▶ What additional insights can charts provide?

Most results of land-use finance analysis take the form of a report, often including supplementary analysis of climate-aligned finance. Aggregate analyses are often presented in either tabular format or via a Sankey diagram. For reasons of data confidentiality and sensitivity, only aggregate data are typically shared. However, a Sankey diagram might not reflect specific details or findings, and it might be constructive to visualise key findings in other formats (see Module 7 on types of visualisations).