



Exploring the Potential and Challenges of Voluntary Carbon Markets in Africa

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Background

- Carbon Markets -> Carbon finance
-> Low carbon transition
- Article 6 -> NDC
- VCMs -> institutional interest and engagement



Promise capital injections into developing countries, yet,

- Uncertainty around transparency, integrity (additionality) and credibility of credits generated (West et al. 2002, PNAS)
- Lingering concerns regarding potential implications for marginalized populations.

Country Case Study Approach

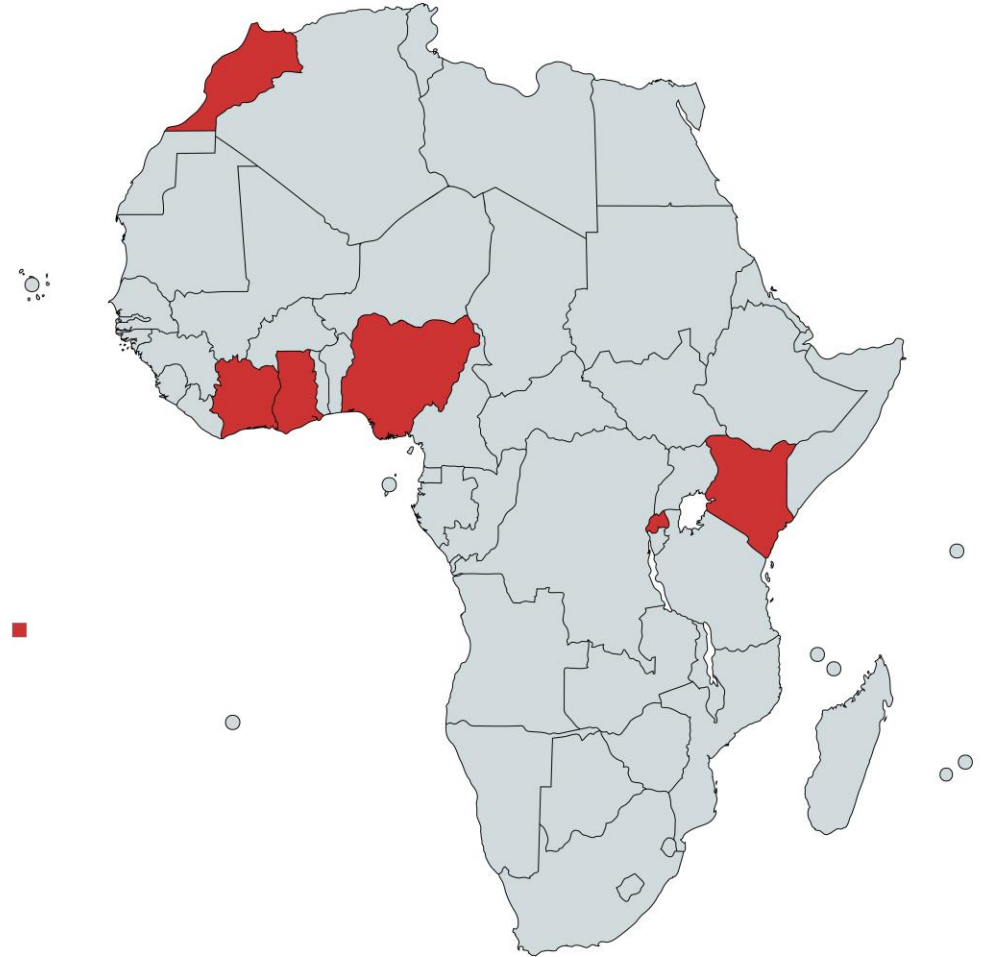
Criteria:

- Experience with carbon markets
- Government interest in carbon markets
- EfD & AETS researcher capacity

Country Selection:

- Morocco
- Cote d'Ivoire
- Ghana
- Nigeria
- Rwanda
- Kenya

Plus: Economic Community of West African States

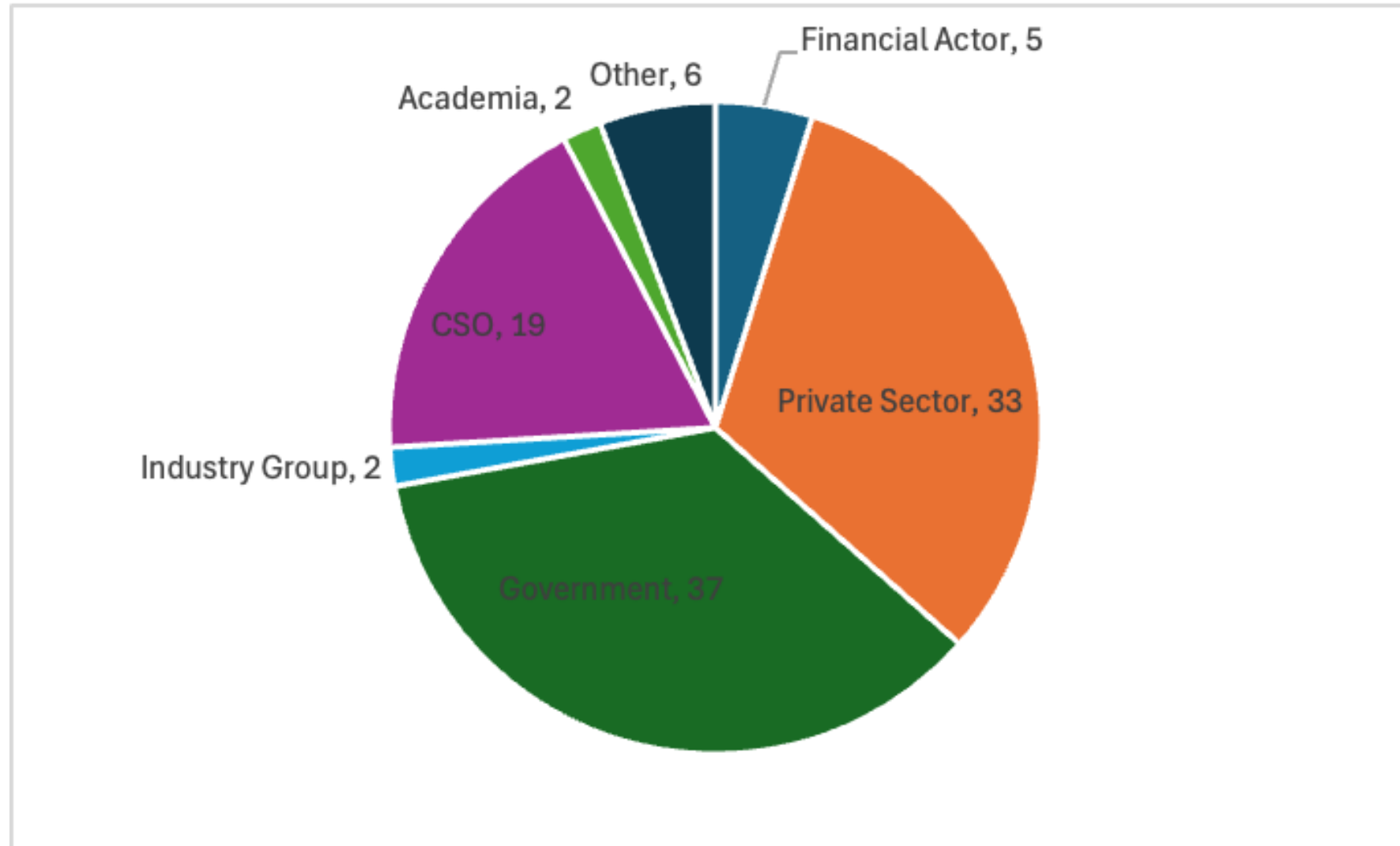


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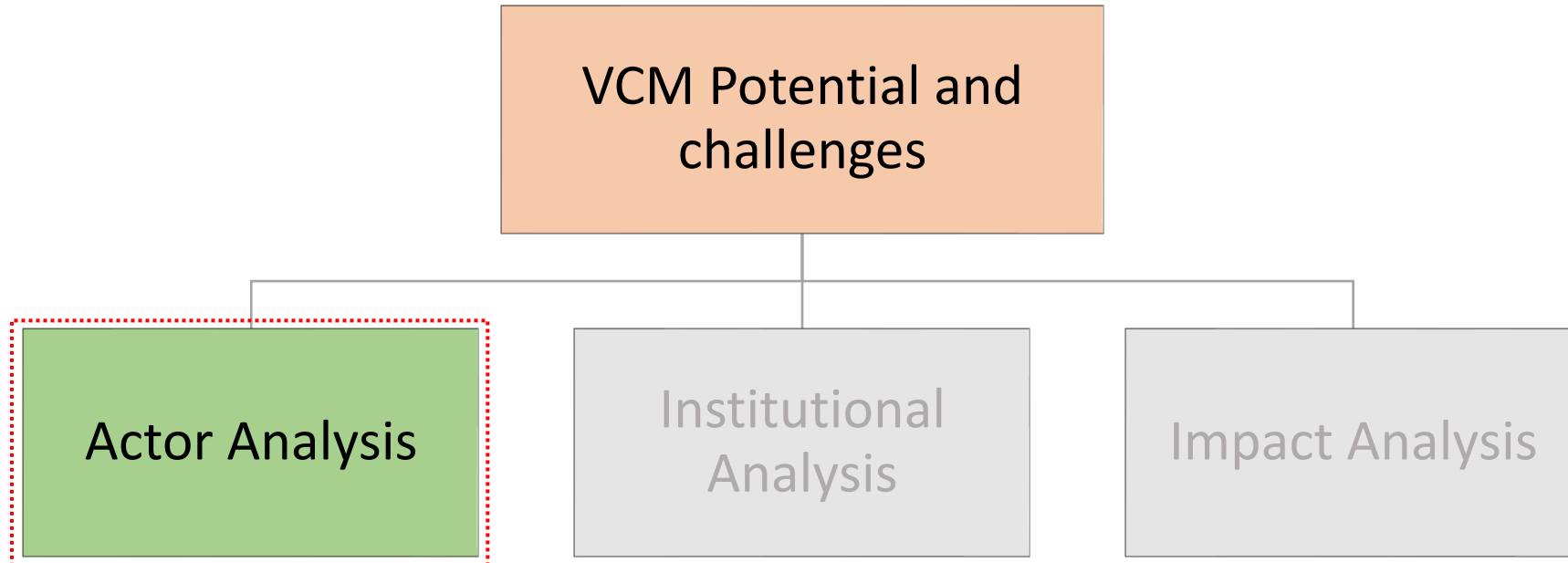
Literature identifies objectives and gaps

- Actor **roles, objectives and incentives** are crucial
- Institutions are driven by key objectives:
 - Reducing Carbon Emissions,
 - Legitimizing the VCM,
 - Securing LMIC Investment,
 - Protecting Local Revenues,
 - Addressing Co-Benefits
- Impacts focus more -> **integrity of emission reduction**
few on **standardising economic and social benefits** (equity and justice implications).

Interviewed Actors Types

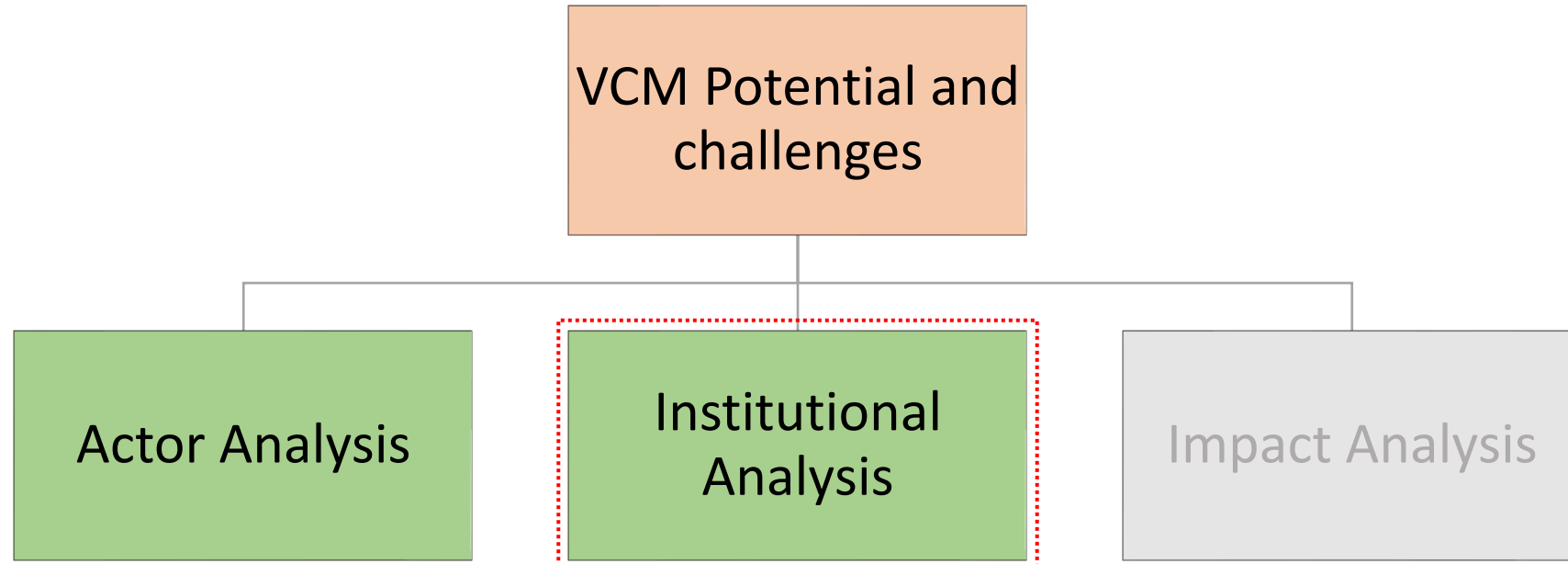


Study Design and Research Questions



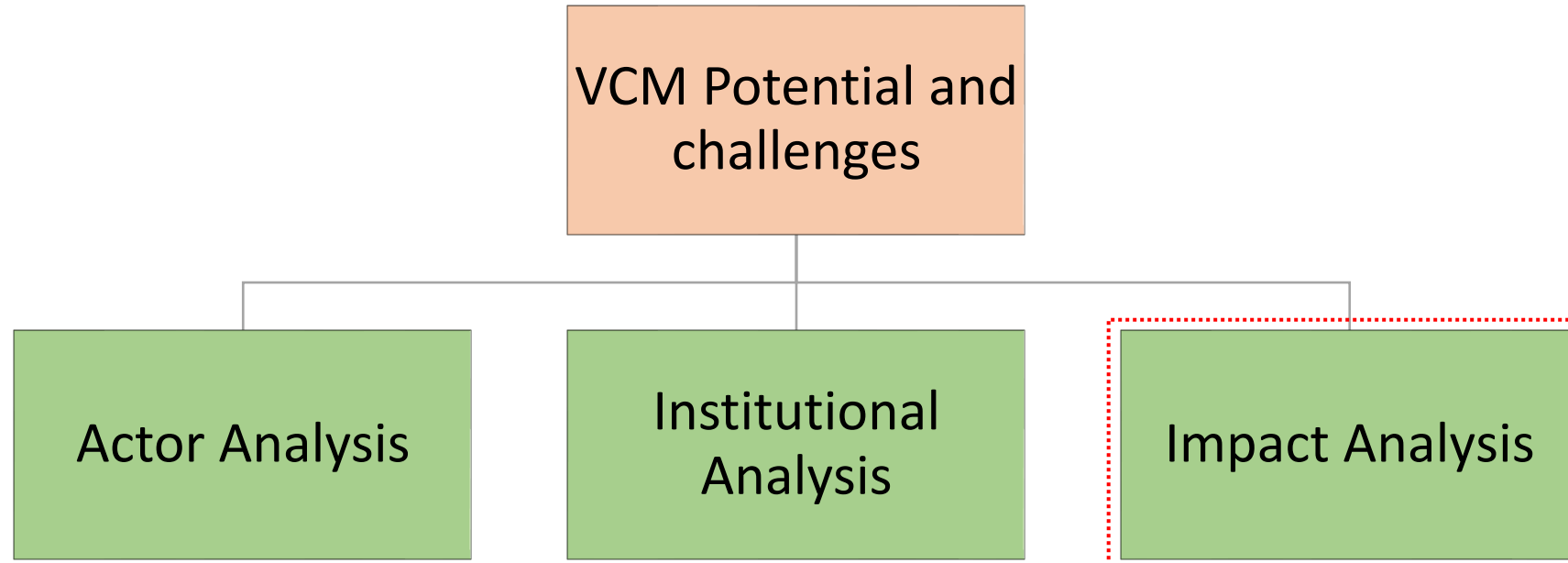
- Which actors are most influential in African voluntary carbon markets?
- And what are the implications of that influence for environmental, economic and social outcomes?

Study Design and Research Questions



- What is the current state of the governance systems needed to engage with carbon markets in the country?
- And what steps are needed to reach a state of market readiness?

Study Design and Research Questions

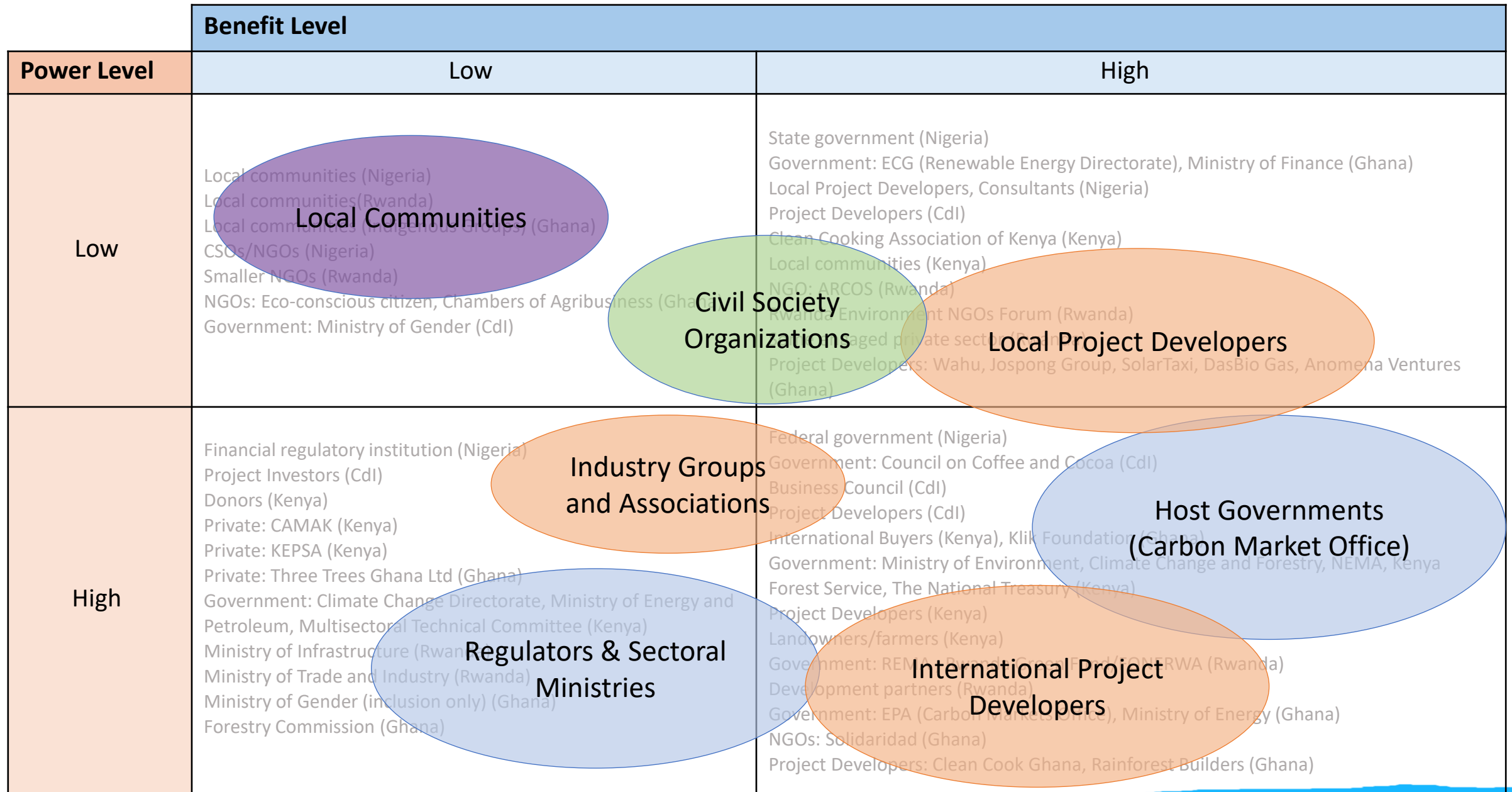


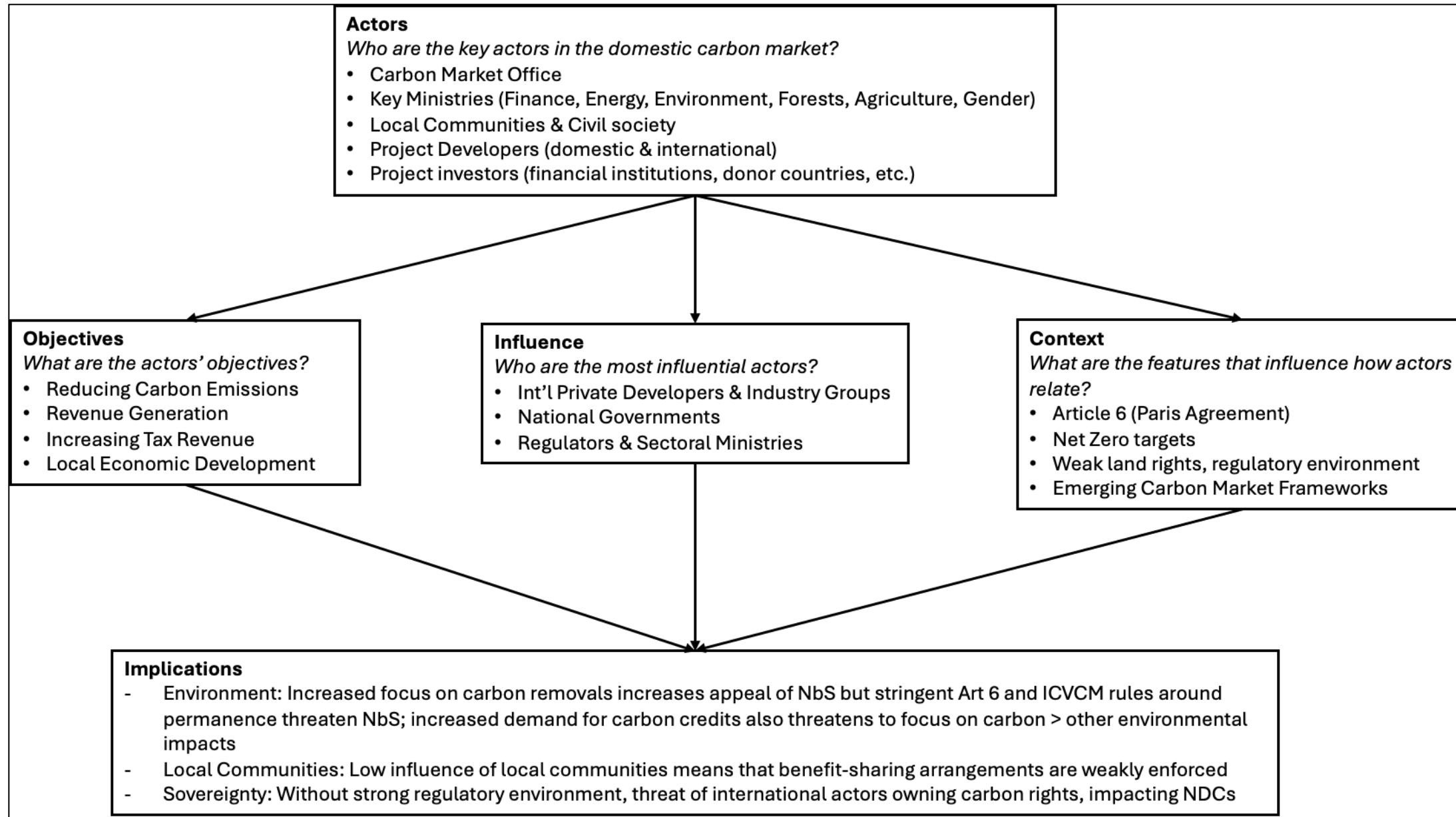
- What are the major impacts of nature-based and technology-based carbon credit project in your country?
- How have these impacts been created – causal mechanisms?

Actor Analysis



Benefit Level		
Power Level	Low	High
Low	<p>Local communities (Nigeria)</p> <p>Local communities(Rwanda)</p> <p>Local communities (Indigenous Groups) (Ghana)</p> <p>CSOs/NGOs (Nigeria)</p> <p>Smaller NGOs (Rwanda)</p> <p>NGOs: Eco-conscious citizen, Chambers of Agribusiness (Ghana)</p> <p>Government: Ministry of Gender (Cdl)</p>	<p>State government (Nigeria)</p> <p>Government: ECG (Renewable Energy Directorate), Ministry of Finance (Ghana)</p> <p>Local Project Developers, Consultants (Nigeria)</p> <p>Project Developers (Cdl)</p> <p>Clean Cooking Association of Kenya (Kenya)</p> <p>Local communities (Kenya)</p> <p>NGO: ARCOS (Rwanda)</p> <p>Rwanda Environment NGOs Forum (Rwanda)</p> <p>Some engaged private sector (Rwanda)</p> <p>Project Developers: Wahu, Jospong Group, SolarTaxi, DasBio Gas, Anomena Ventures (Ghana)</p>
High	<p>Financial regulatory institution (Nigeria)</p> <p>Project Investors (Cdl)</p> <p>Donors (Kenya)</p> <p>Private: CAMAK (Kenya)</p> <p>Private: KEPSA (Kenya)</p> <p>Private: Three Trees Ghana Ltd (Ghana)</p> <p>Government: Climate Change Directorate, Ministry of Energy and Petroleum, Multisectoral Technical Committee (Kenya)</p> <p>Ministry of Infrastructure (Rwanda)</p> <p>Ministry of Trade and Industry (Rwanda)</p> <p>Ministry of Gender (inclusion only) (Ghana)</p> <p>Forestry Commission (Ghana)</p>	<p>Federal government (Nigeria)</p> <p>Government: Council on Coffee and Cocoa (Cdl)</p> <p>Business Council (Cdl)</p> <p>Project Developers (Cdl)</p> <p>International Buyers (Kenya), Klik Foundation (Ghana)</p> <p>Government: Ministry of Environment, Climate Change and Forestry, NEMA, Kenya Forest Service, The National Treasury (Kenya)</p> <p>Project Developers (Kenya)</p> <p>Landowners/farmers (Kenya)</p> <p>Government: REMA , Rwanda Green Fund/FONERWA (Rwanda)</p> <p>Development partners (Rwanda)</p> <p>Government: EPA (Carbon Markets Office), Ministry of Energy (Ghana)</p> <p>NGOs: Solidaridad (Ghana)</p> <p>Project Developers: Clean Cook Ghana, Rainforest Builders (Ghana)</p>





Implications

1. Government actors take a stronger role

- Pros: Authority, consistency and transparency
- Cons: Top-down – undermine local ownership

2. Weak power of local communities

- Bad news for enforcement of benefit sharing

3. (International) actors have strong influence across the ecosystem

- More experience; High financial investment; power consolidation
- Weaken national and carbon sovereignty

Institutional Analysis



Challenges and Solutions

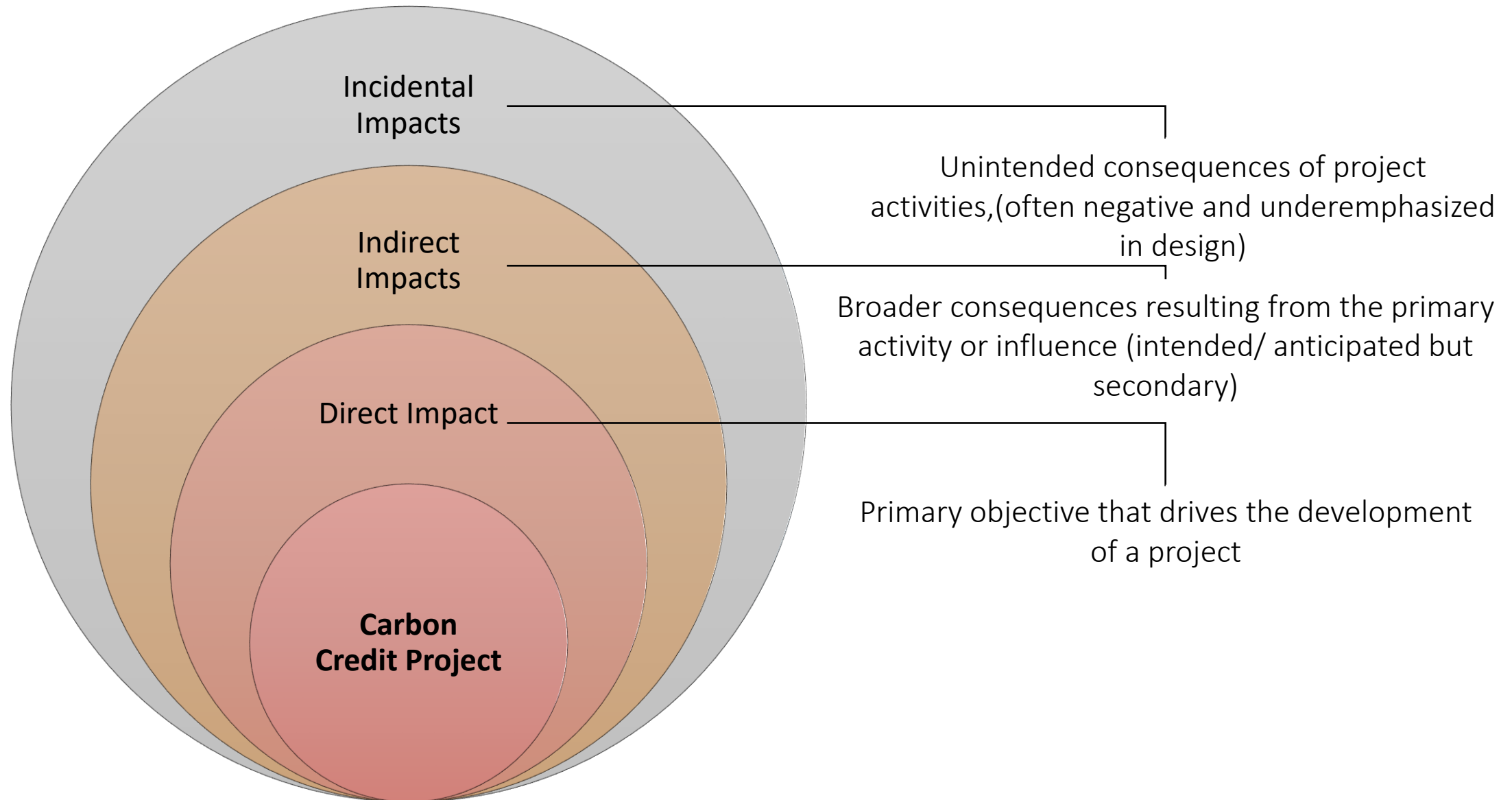
Challenges	Solutions	Actors that need to be involved
1. Low awareness of carbon markets	Awareness in the public + private sector	Academic institutions, Donor countries, Ministry of Education, National Carbon Office
2. Institutional and regulatory uncertainty	<ul style="list-style-type: none"> Strengthen legal frameworks, Outlining role of government, private actors and communities 	Carbon Markets Office; Ministry of Finance; Ministry of Environment;
3. Limited local private sector engagement	Increase access to expertise and finance	Carbon Markets Office, Ministry of Finance, Private developers, Financial Institutions
4. Lack of early-stage finance	Create concessional financing and carbon incubation mechanisms	Carbon Markets Office; Ministry of Finance; International (private) finance actors

Challenges and Solutions

Challenges	Solutions	Actors that need to be involved
5. Bureaucracy	Streamline the authorization and approval process	Relevant ministries (Min of Environment, Min of Finance, etc.)
6. Limited domestic capacity in MRV	Develop and finance local/regional VVBs	Carbon Markets Office, Academic institutions, Development partners, Gold standard/Verra
7. Unclear benefit-sharing mechanisms	<ul style="list-style-type: none">• Establish legal frameworks defining carbon ownership and revenue allocation• Design standardized, transparent, and enforceable benefit-sharing models• Ensure communities are aware of the benefits-sharing agreement	Local communities, Standards Setting organizations, National governments

Impact Analysis

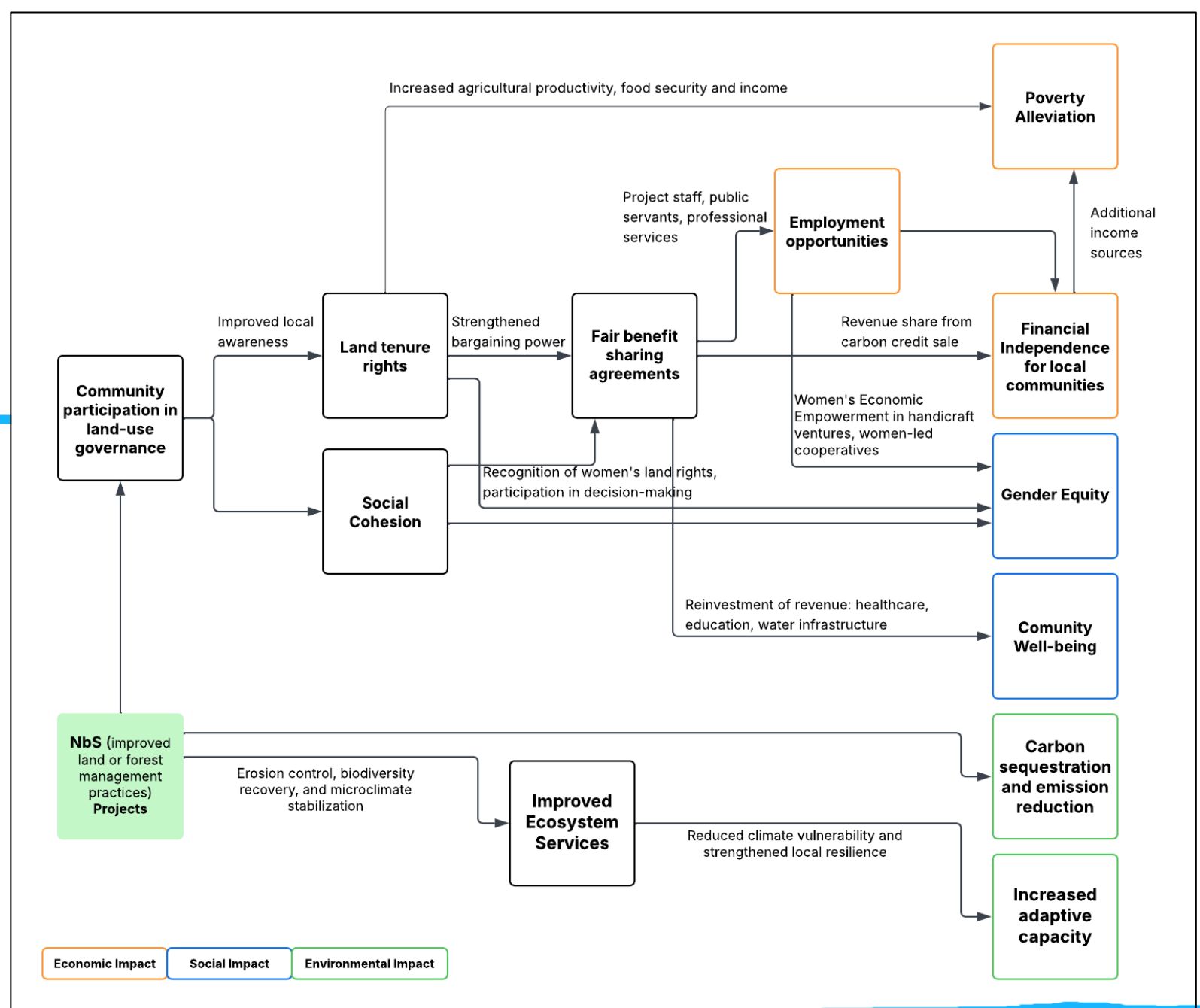




Impact Spectrum for NbS Projects

Project type	Direct impacts	Indirect impacts	Incidental impacts
Nature-based solutions (afforestation/reforestation, agroforestry, watershed and mangrove projects)	<ul style="list-style-type: none"> • Carbon sequestration • Contribution to national climate targets and NDC implementation 	<ul style="list-style-type: none"> • Job Creation • Diversified income through agroforestry products • New financial flows via carbon revenues. 	<p>Positive:</p> <ul style="list-style-type: none"> • Strengthened community cohesion • Increased awareness of land tenure rights -> fair benefit-sharing negotiations <p>Negative:</p> <ul style="list-style-type: none"> • weak FPIC and tenure safeguards -> Risk of land dispossession, “green grabbing” • Opaque revenue models -> Elite capture of revenues • Food-security and livelihood risks • Monoculture -> Biodiversity risks

Causal Impact Pathways for NbS Projects



Implications

- *Direct mitigation almost always is accompanied by indirect and incidental impacts* – project outcomes should be a comprehensive assessment
- *Positive and negative incidental impacts often co-exist* – their balance is determined by safeguards, FPIC processes, benefit-sharing rules and the broader actor power dynamics
- *Incidental impacts (particularly negative ones) remain under-governed* (standards focus more on direct and indirect impacts)

Thank You

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