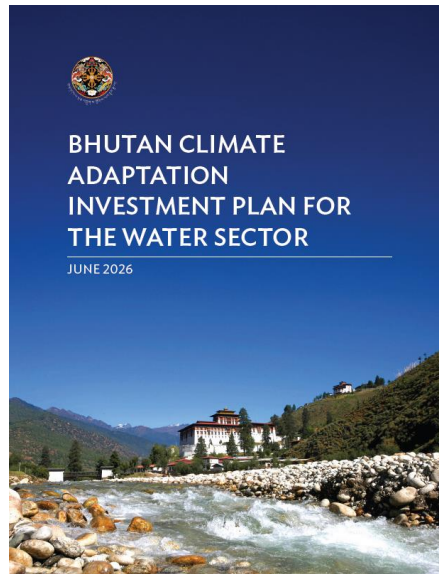
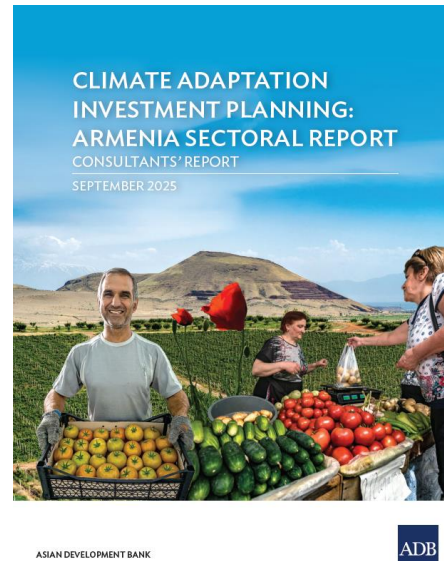
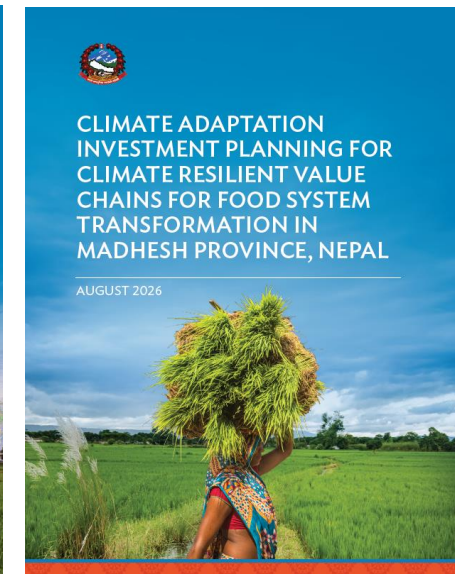


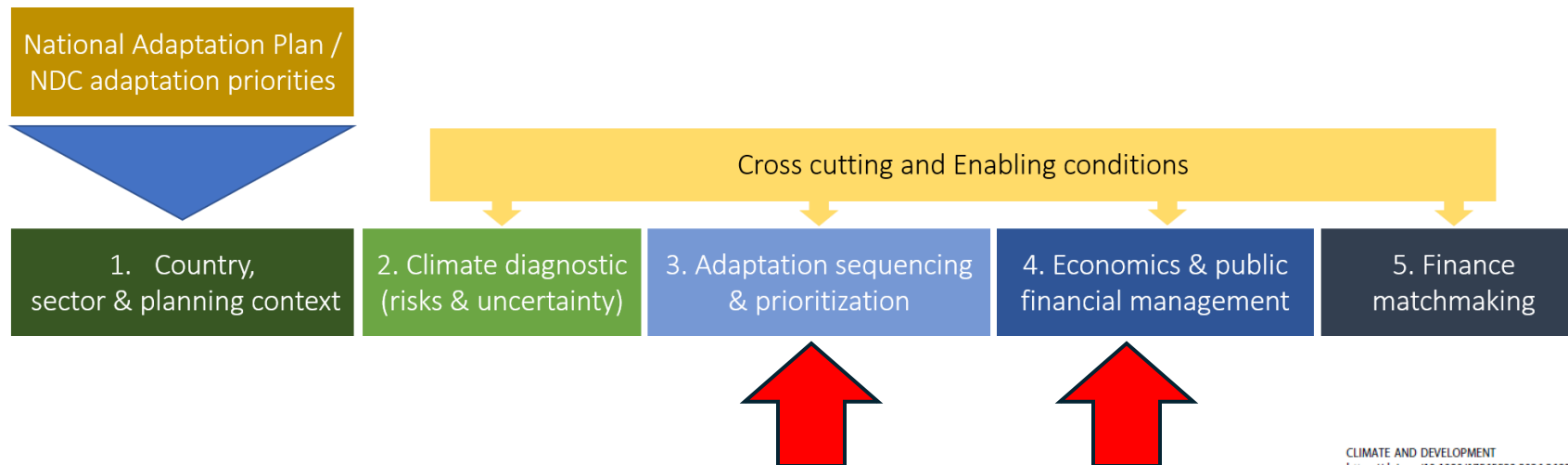
Prioritizing Adaptation Investments in CAIP



Paul Watkiss

Outline

- The first round of CAIPs (7) are now finished and second round are well-advanced
- These provide lessons and insights on steps 3) and 4) of CAIP



CLIMATE AND DEVELOPMENT
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Taylor & Francis
by Informa

Check for updates

COMMENT

Climate adaptation investment planning: insights from applications in developing countries

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What is the aim of these steps

The key objectives of steps 3 and 4 are to:

- Move from long list of individual actions in NAP/NDC to adaptation packages
- Assess benefits of adaptation as well as costs
- Assess the potential economic returns and signpost private opportunities
- Sequence and prioritise on what gets taken forward

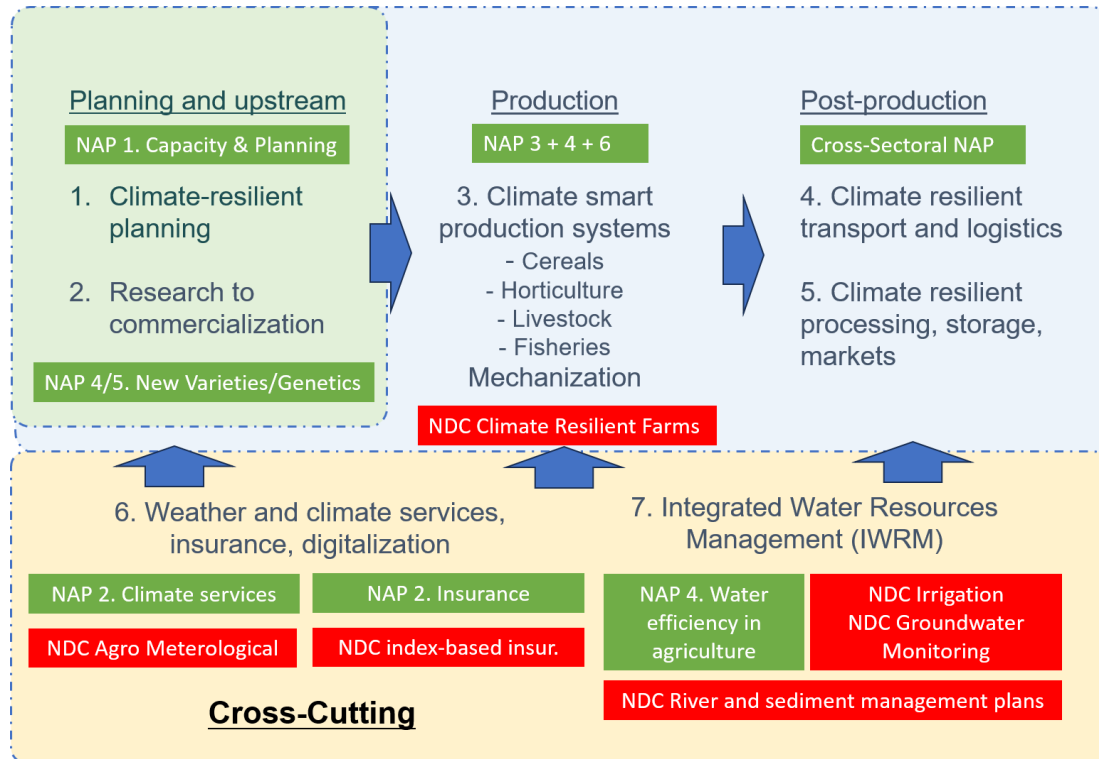
Packages

We start (input) with NAP /NDC adaptation actions

- CAIPs are mostly implemented at a sector level – to allow necessary level of detail
- This step aggregates individual actions into investment packages with common characteristics – to provide the necessary scale and move beyond small projects
- Introduces a more strategic approach – moving beyond actions that sit with one line Ministry to capture relevant activities at the system level
- Starts to think about specificity and implementation modality – not just a technical list
- Lesson. Useful to align packages to political economy (governance, 5-year plans).
- Lesson. Package formation is an opportunity to bring in more private perspective

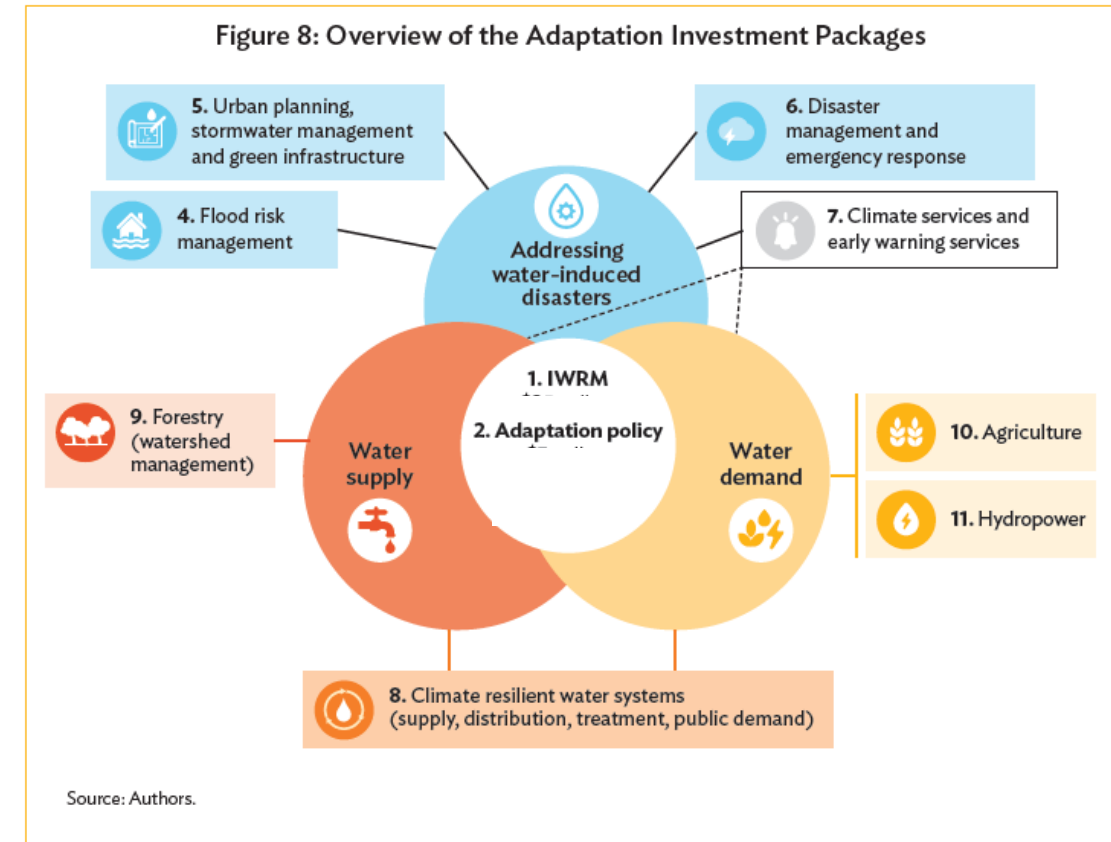
Examples of packages

Agriculture in Nepal CAIP



Framed around agricultural value chains
Planning production, downstream and cross cutting
Additional steps processing to markets

Water in Bhutan CAIP



Framed through an Integrated Water Resources System – captures supply, demand and water related disaster management – including water user/pricing

Benefits, including economic returns

NAPs + NDCs set out costs, but don't specify benefits – but these are critical for financing!

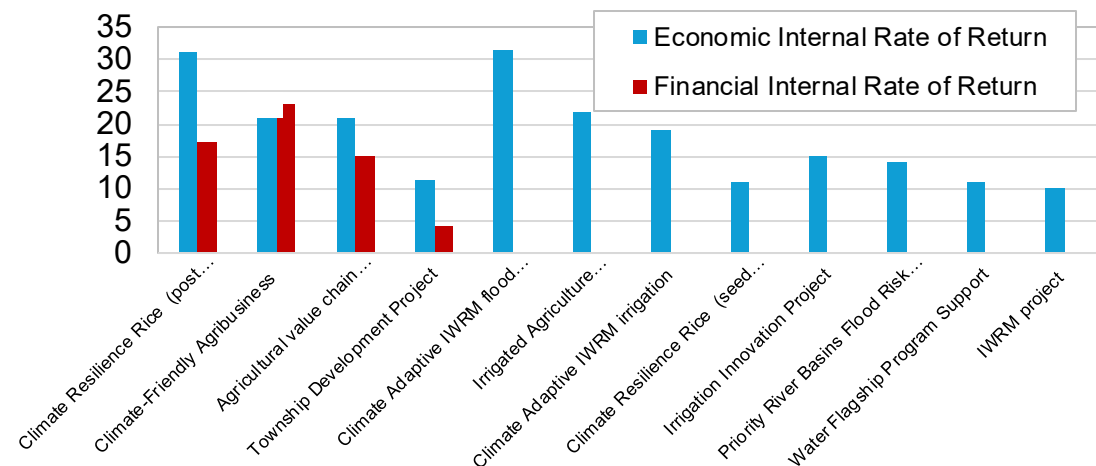
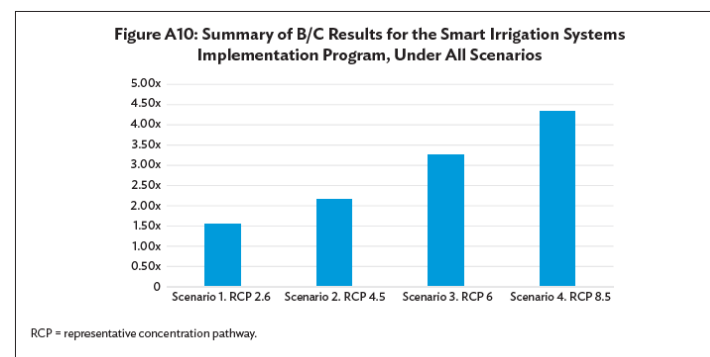
- This step assesses the benefits, including their nature, as well as who these accrue to
- Economic returns of packages are needed for public investment management process and external financing / commercial returns needed for private sector opportunities
- Approach starts with indicative light-touch economic analysis at the package level – then progress to more detailed economic appraisal as prioritise projects
- Lessons – CAIPs show high economic (societal) returns for most packages – exception is enabling actions but these are complementary (need both Rev & Non Rev)
- Financial returns lower for adaptation action that more public in nature, but can see potential positive returns for many actions and potential private opportunities

Examples

Lao DPR CAIP – initial analysis - 101 adaptation measures

Investment Package	EIRR			Benchmark BCR / EIRR	Distribution Profile
	>15%	10-15%	Enabling		
1. Knowledge for Climate Resilience	-	-	4	N/A, enabling only	Diffuse
2. Integrated Water Resources Management	4	3	8	EIRR 12–25%; flood BCR 2–5x	Mixed
3. Climate-Smart Agriculture and Food Systems	2	4	3	CSA EIRR 15–30%	Strong rural / smallholder
4. Climate-Resilient Health and WASH Services	2	4	6	WASH EIRR 12–20%	Universal services
5. Watershed, Forests and Nature-Based Solutions	2	5	6	NbS BCR 1.5–4x	Upland communities
6. Climate-Resilient Infrastructure and Energy	5	5	6	Transport EIRR 12–25%; RE 10–18%	Lowland / urban
7. Disaster Preparedness and Response	-	5	9	EWS BCR 4–10x	Universal / poorest
8. Climate-Resilient Eco-Tourism and Cultural Heritage	-	6	2	Tourism EIRR 8–15%	Upland, lowland / community

Using EIRR/FIRR to assess potential



Armenia CAIP – detailed analysis for priority project



Bangladesh CAIP – priority project

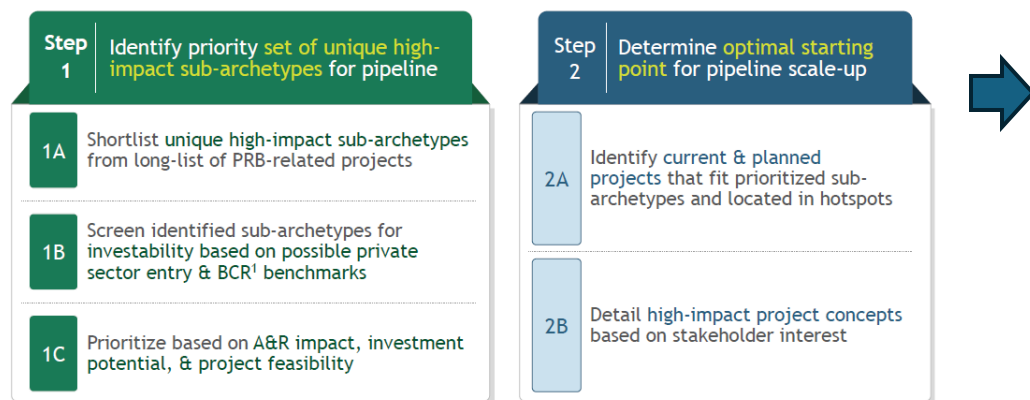
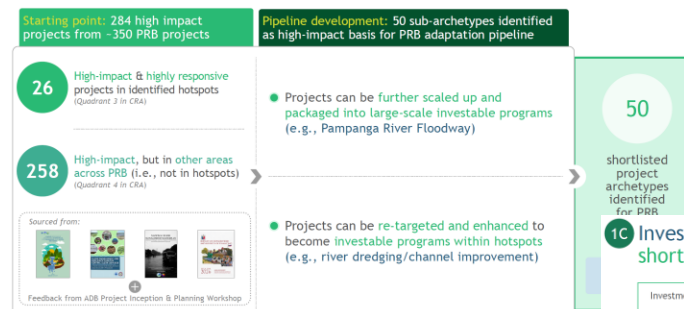
Sequencing and Prioritisation

Prioritisation is important – it is not possible to finance everything !

- The CAIPs have taken a range of approaches to prioritisation
 - Some sequenced (over time) prioritising based on urgency
 - Some applied multi-criteria analysis or other prioritisation methods
 - Some used stakeholder processes
- Lesson: Important to respect and include priorities in NDCs and NAPs during prioritisation – but ensure include public and private – some tensions
- Lesson. It remains challenging to fully integrate adaptative management and adaptation pathways within CAIP – gap on long-term financing

Examples

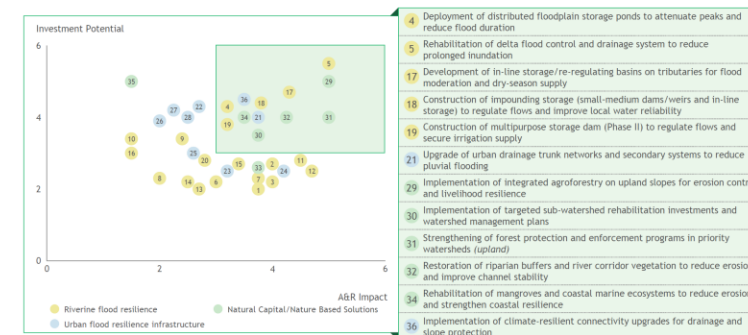
The Philippines CAIP



1B Classification deep-dive: 70% of high-impact projects identified as inv projects (V/V)

Project Exemplar	Private sector entry point(s)	Business Case
Planning of expanded protected area and buffer zone community resource management for long-term watershed protection	Operate ecotourism concessions; Provide biodiversity monitoring (MTR) (develop community enterprise model on compliance)	1-4-4-1 BCR range - watershed protective outcomes, depend on compliance
Acceleration of reforestation and assisted natural regeneration to reduce degraded lands	Supply native tree seedlings; Deliver planting and maintenance; Verify carbon and outcomes	1-6-1 BCR range - soil/land management benchmarks (median -2)
Implementation of targeted sub-watershed rehabilitation investments and watershed management plans	Conduct watershed planning studies; Implement erosion-control planting; Provide GIS data analytics	1-6-1 BCR range - soil/land management benchmarks (median -2)
Restoration of riparian buffers and river corridor vegetation to reduce erosion and improve channel stability	Supply riparian planting materials; Deliver revegetation contracting; Monitor survival with drone	2-13-1 BCR range - grass strip / vegetative buffer benchmarks
Restoration and management of wetland ecosystem functions as basin storage and biodiversity node	Deliver wetland restoration works; Install water-level monitoring; Maintain wetland control structures	2-10-1 BCR range - adaptation benchmark band; wetland-specific evidence weak
Rehabilitation of mangroves and coastal marine ecosystems to reduce erosion and strengthen coastal resilience	Supply mangrove seedlings; Implement coastal habitat restoration; Provide shoreline monitoring surveys	3-10-1 BCR range - mangrove protection high-return benchmark band

1C Investment potential-A&R Impact deep-dive: 12 project sub-archetypes shortlisted based on high investability and high A&R impact



2A Summary of multiplicity of benefits check across 26 projects identified (I/VI)

	Project Title	Economic	Social	Environmental	Mitigation
Floodplain ponds	Iliran/Pugad River Watershed - Storage Pond-Culumpit, Bulacan	Reduces local flood duration; protects adjacent assets at small scale	Reduces nuisance flooding for nearby households; improves safety during storms	Creates small standing-water habitat; requires O&M to avoid water quality issues	Delivers limited mitigation; not effect improvable with low-energy operations
	Community Based Eco-tourism Development Program	Creates community tourism/service jobs; generates revenue stream to support conservation	Enables inclusive community enterprises; outcomes depend on equitable governance and access	Supports habitat protection and visitor management; finances reforestation and stewardship	Sequesters carbon via reforestation; allows MRV if activities are aggregated
Upland agroforestry	Forestland Management Project	Builds agroforestry/PES opportunities; protects watershed services and reservoir performance	Strengthens tenure/PO capacity; creates stewardship and enterprise roles	Improves forest condition and connectivity; reduces erosion and sediment yield	Sequesters carbon via plantations/agroforestry; enables MRV through aggregation
	Community-based Forest Management Program	Provides diversified income from agroforestry/NTFPs; supports local economies	Formalizes community tenure and roles; strengthens participation and capacity	Improves forest protection/reforestation; biodiversity gains occur where implemented	Avoids deforestation emissions; sequesters carbon through restoration and protection

Source: Expert interviews, BCG analysis

Riverine Resilience

Urban Flood Infra

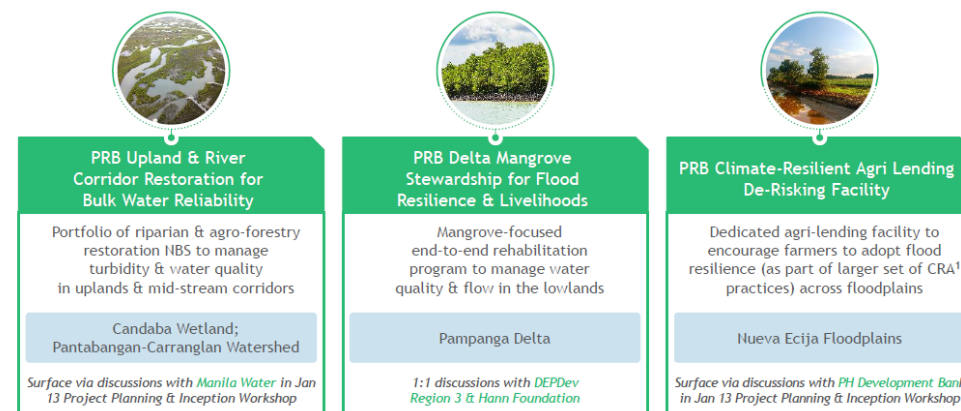
Nature-based solutions

Legend | Expected benefit:

Low

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2B 3 project concepts prioritized based on stakeholder discussions



Final reflections

- These steps are a core and critical part of the CAIP process
- In practice these steps are iterative – do a bit of early prioritisation – then some analysis – some consultation – do a bit more prioritisation
- It is not one-size-fits-all – the country context will determine best prioritisation approach – but greater prioritisation generally improves likelihood of financing
- Many CAIPs also identify short-lists of high-priority projects to undertake more detailed analysis on and move towards early opportunities for finance
 - These are then subject to great level of economic and financial analysis