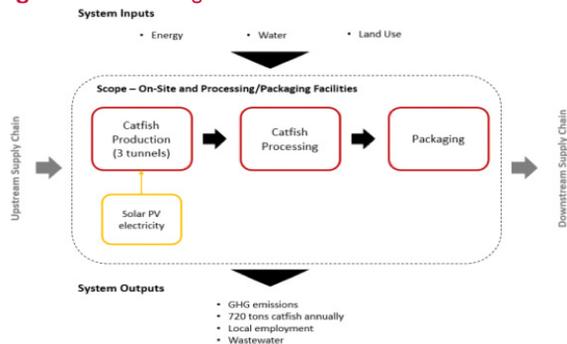


## An Example from Karoo Catch

Karoo Catch is an innovative aquaculture project in Graaff-Reinet, Eastern Cape Province, South Africa that is in the process of scaling-up their production and packaging of catfish for the local market. SA-LED assessed the project using the MBA Framework to identify socio-economic and environmental impacts of the project.

1. Referencing the define scenarios for the project, SA-LED developed causal diagrams to identify specific impacts, indicators, and assessment period boundaries (Figure 2). SA-LED developed both status quo and project expansion scenarios
2. SA-LED used a likelihood matrix (e.g. Table 2) to determine the significance of impacts and stakeholder consultation to inform this process.
3. SA-LED qualitatively described impacts. Indicators determined to be significant were calculated to provide estimates of project impacts. SA-LED produced an impacts summary (e.g. Table 3).

**Figure 2. Causal diagram**



## Key Strategies for Implementing the MBA Framework

There are a number of strategies that can be helpful when implementing an MBA, particularly since quantifiable data may not be available for every indicator.

### Lean on existing stakeholder relationships

- Stakeholders can help identify benefits.
- Stakeholders can help identify data sources.

### Refer to guidance and utilize existing tools

- Several guidance documents and tools from SA-LED are available for implementing MBAs. Utilize these existing tools to inform the assessment and aid in analysis.

### Refer to case studies and existing literature

- Case studies, like Karoo Catch, can help provide explicit examples about how to implement the assessment as well as provide understanding of the final assessment product.
- Relevant literature and reports can provide information about potential impacts and provide relevant estimates and proxy data if project specific data are not available.

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## Multiple Benefits Assessment Framework for Low-Emissions Development Projects in South Africa

School staff and community members attend training on how to install and use biogas in schools.



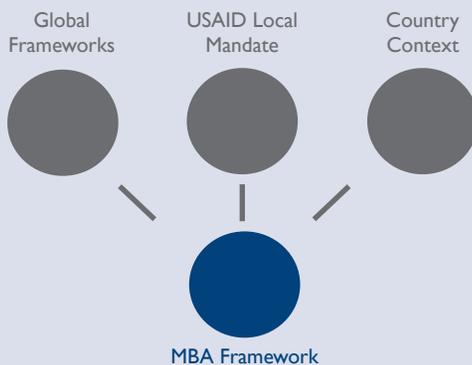
## What is the Multiple Benefits Framework?

USAID's South Africa Low Emissions Development program (SA-LED) developed a uniquely South African Multiple Benefit Assessment (MBA) framework. This is to identify, evaluate, and quantify development impacts of an activity that reduces greenhouse gas emissions and includes the social, economic and environmental benefits.

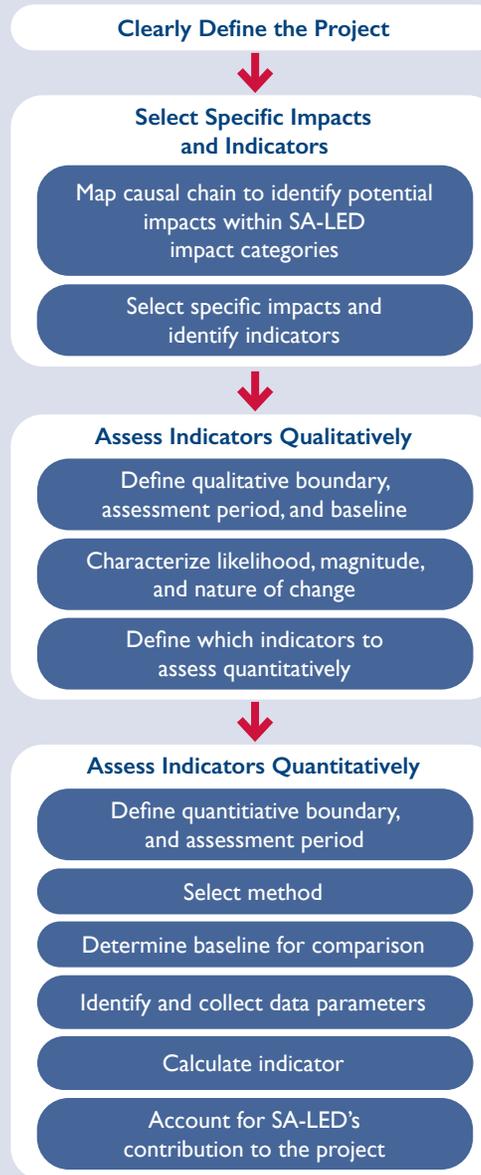
The framework also primarily provides a methodology for standardizing the identification of low-emissions development (LED) project benefits, which can help encourage investment in LED programs, aid the expansion of existing LED projects, and support decision-making of new LED projects by identifying multiple benefits.

### FROM GLOBAL TO LOCAL

SA-LED created the MBA framework by analyzing and integrating global frameworks developed by the United States Environmental Protection Agency, the World Resources Institute, and the UN International Climate Action Transparency framework, and tracking frameworks for the UN Sustainable Development Goals (SDGs).



**Figure 1.** SA-LED Multiple Benefits Framework



**Table 1.** Illustrative examples of assessment concepts, from impact categories to measured parameters, used to evaluate key indicators.

Impact Categories	Specific Impacts	Indicators	Parameters
Gender Youth Jobs	Increase in direct jobs Increase in indirect jobs Increased skills/training	Trainings held People trained Person-hours of training	List of events Length of event Number of attendees

## Key Flexibilities of the MBA Framework

The SA-LED approach is flexible because it can be applied to many types of projects and it allows assessments to proceed within their context. As a result, emphasis can be placed on the impacts that are relevant for the local context. Additionally, if data are not available to allow for quantitative evaluation of indicators, the qualitative assessment can still be undertaken.

Municipal projects that have already utilized the framework include the expansion of Karoo Catch Fish Farm, Garden Route District Municipality organic waste management plans, and biogas digester use at schools in the Eastern Cape.

**Table 2.** Likelihood matrix that can be used in the qualitative assessment phase to identify significant impacts that should be assessed where possible.

		Magnitude		
		Major	Moderate	Minor
Likelihood	Very likely	High	High	Medium
	Likely	High	Medium	Low
	Possible	High	Medium	Low
	Unlikely	High	Medium	Low
	Very unlikely	Medium	Low	Low

**Table 3.** An example from the Karoo Catch MBA, this table provides identified indicators and the expected impact to those indicators from the proposed project.

Indicator	Change
Total annual GHG emissions	-8,600 tonnes CO2e/yr
Number of employees under 35 years	89 youth employees
Number of women employees	76 women employees
Total number of employees	105 jobs
Number of Karoo Catch employees trained and Level 1 qualified at NQF	11 trained and Level 1 NQF-qualified employees
Quantity of water discharged while cleaning the filters	4,500 m <sup>3</sup> /mo
Total renewable solar electricity generated	72,359 kWh/yr
Number of people fed by Karoo Catch production	65,000 people/yr
Amount of reused solid waste	30 tons/mo
Amount of locally produced nutritious fish production	720 tons/yr