



THE UNIVERSITY  
OF RHODE ISLAND



## Women Shellfishers and Food Security

Empowering Women for  
Shellfish Management, Food Security  
and Biodiversity Conservation  
in Estuarine Ecosystems of West Africa

TOOLKIT



# The first practical guide for the design and implementation of women's shellfish co-management in West Africa

### Co-Management

A process of management in which government shares power with resource users.



# Toolkit Objectives


- **Share the evidence base**
- **Increase awareness**
- **Equip stakeholders to adapt and apply successful approaches to co-management of shellfish by women in West Africa.**



## **Contributes to achievement of:**

- United Nations Sustainable Development Goals (SDGs)
- FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication
- USAID's Global Food Security Strategy (2022-2026); Biodiversity Policy; Gender Equity and Women's Empowerment Policy



Key Stakeholder	Toolkit Use and Benefits
<b>Resource User Groups and Associations</b> 	<ul style="list-style-type: none"><li>• Organize and initiate action at the community level to improve resource management, livelihoods, food security and nutrition.</li><li>• Advocate for use-rights and resource-user led shellfisheries governance.</li><li>• Empower women as ecosystem stewards and beneficiaries of improved shellfisheries value chains.</li></ul>
<b>Government agencies responsible for fisheries, forestry, environment, gender</b>	<ul style="list-style-type: none"><li>• Adopt and use the toolkit.</li><li>• Achieve cross sectoral objectives with limited resources and capacity by facilitating resource-user led rights-based co-management of shellfisheries.</li></ul>
<b>Research and academic institutions</b>	<ul style="list-style-type: none"><li>• Draw inspiration from the toolkit to support routine resource user and government data collection and monitoring systems for management planning and decision-making.</li><li>• Document where little or no documentation exists.</li><li>• Share and disseminate an improved evidence-base.</li><li>• Advance studies with demand driven and participatory research and outreach.</li></ul>
<b>Local NGOs and regional institutions</b>	<ul style="list-style-type: none"><li>• Plan sustainability actions that respond to coastal livelihoods, gender, and climate change challenges and opportunities.</li></ul>
<b>Donors</b>	<ul style="list-style-type: none"><li>• Develop priority investments for the short and long term.</li><li>• Identify no-regrets, nature-based solutions for biodiversity, food security, resilience, and climate change adaptation and mitigation investments.</li></ul>



# Toolkit Rationale

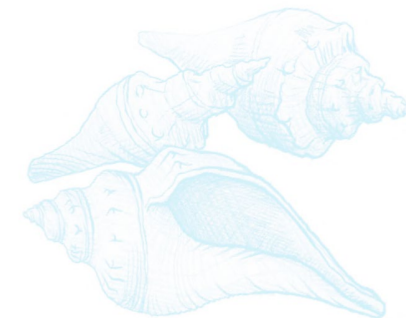
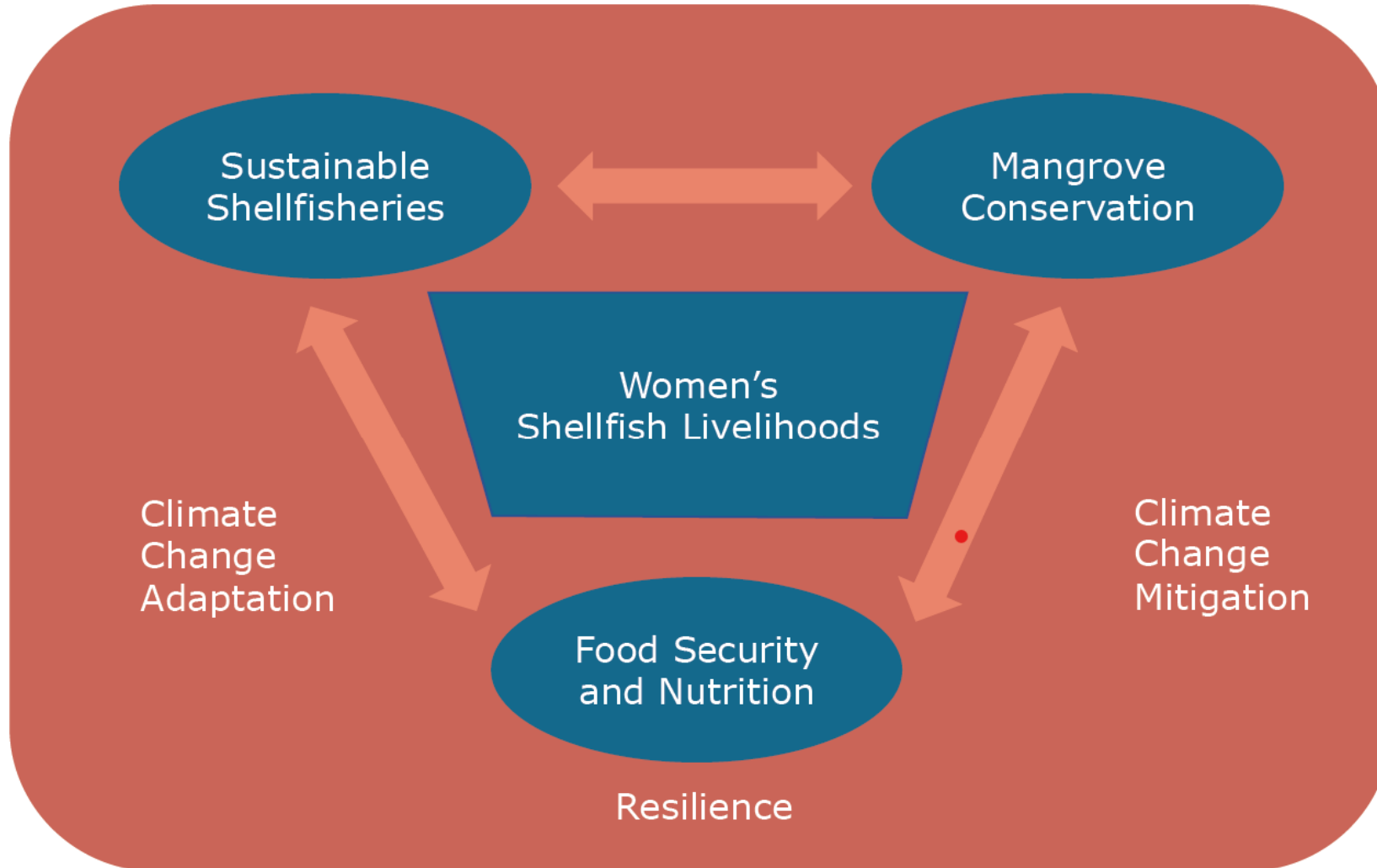
**An urgent need to facilitate locally driven and locally based livelihoods that enhance rather than degrade natural resources management, benefit women, and engage them in decision making**

## Enabling conditions

- Women harvesters at all value chain nodes
- Over 495,000 hectares already prioritized as Ramsar sites
- More than 30 women shellfisher groups already organized



# Toolkit Rationale



# Opportunities

Bivalves have advantages for small-scale, community-based management; Results can be seen in short periods of time and management units can be small.

Ministries of Fisheries working with shellfishers could be an effective entry point

Strong motivation of women shellfishers as drivers of mangrove conservation when provided with a rights-based fisheries co-management platform

Women harvesters dominate at all nodes of the value chains

Documented linkages between women's empowerment and sustainable fisheries

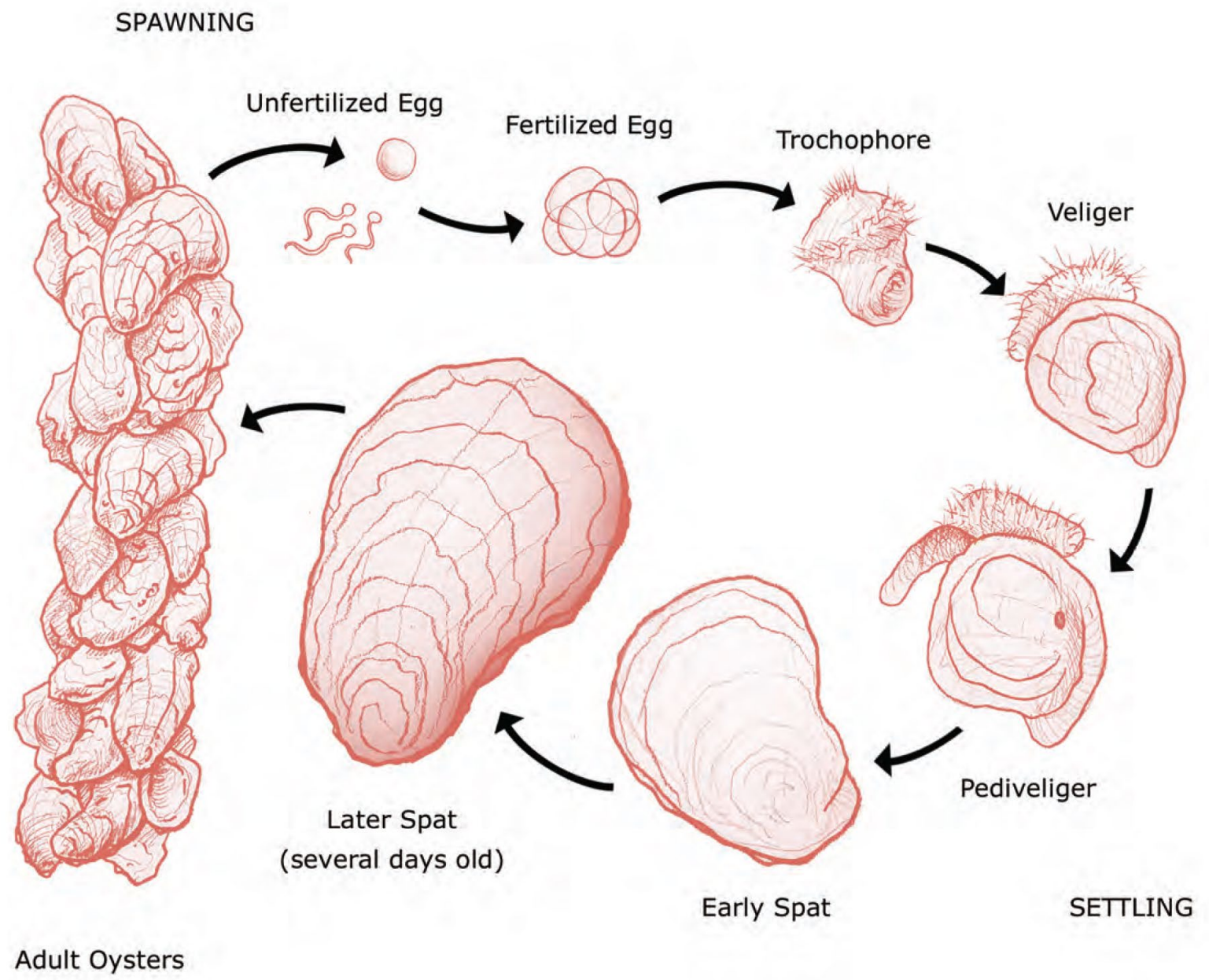
Multiple ministries with limited means can benefit from contributions to their goals and public commitments

Many Ministries of Environment, Forestry, or Parks and Wildlife in West Africa have approaches for community-based mangrove management that can also be an entry point for sustainable shellfish management and livelihoods in a positive feedback loop





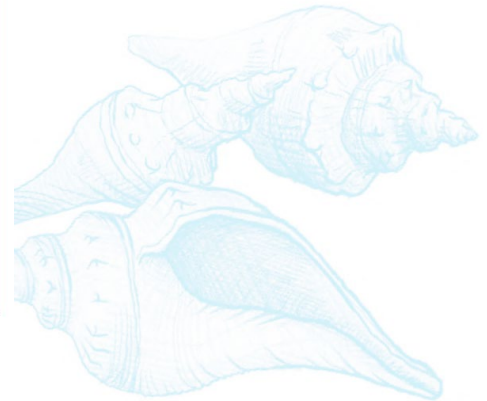




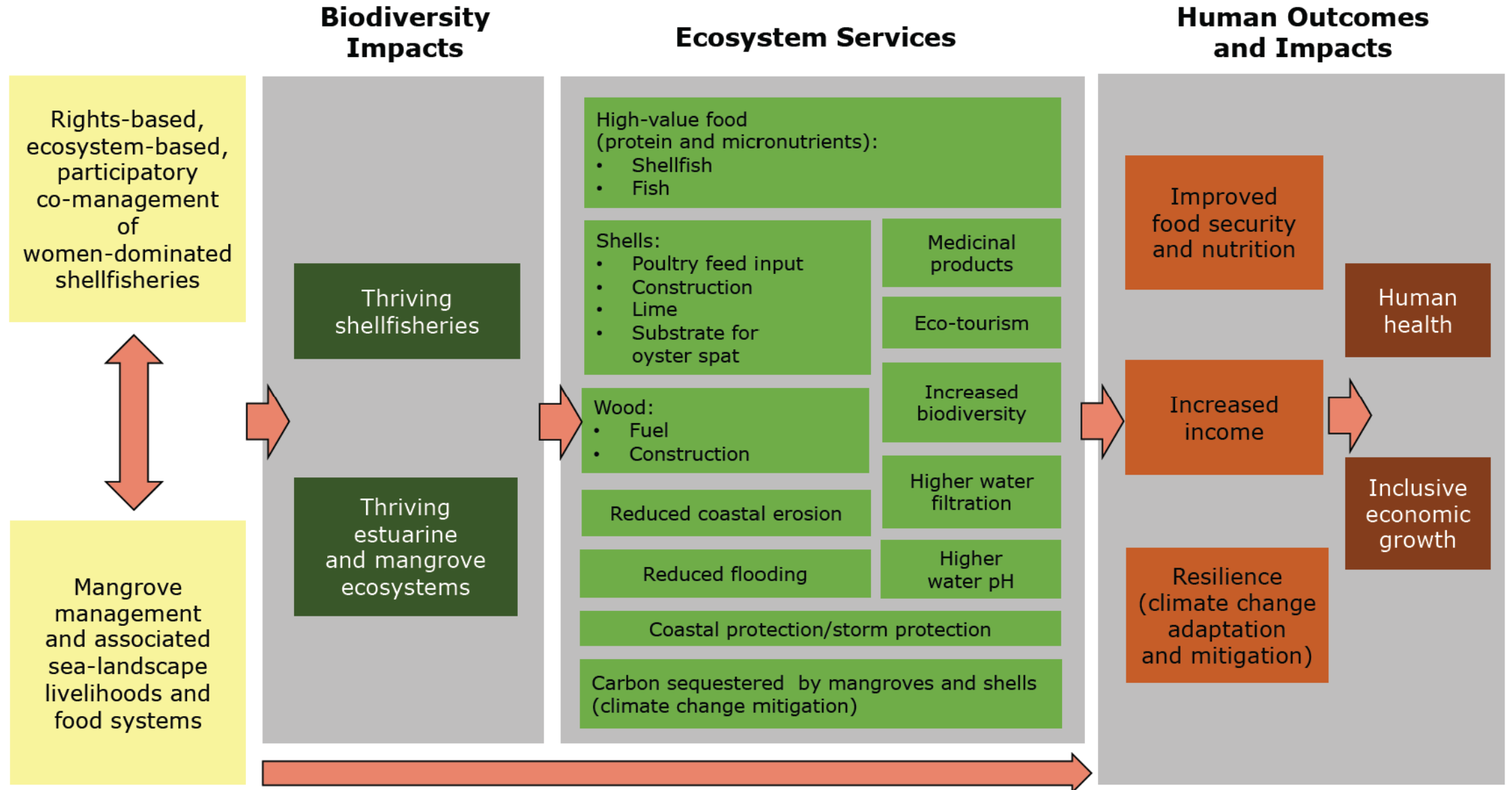
**Figure 4: Life Cycle of the Mangrove Oyster**



**Figure 5: The Bloody Cockle (left) and the West African Periwinkle (right)**



# Model Approach and Best Practices



# Model Approach and Best Practices

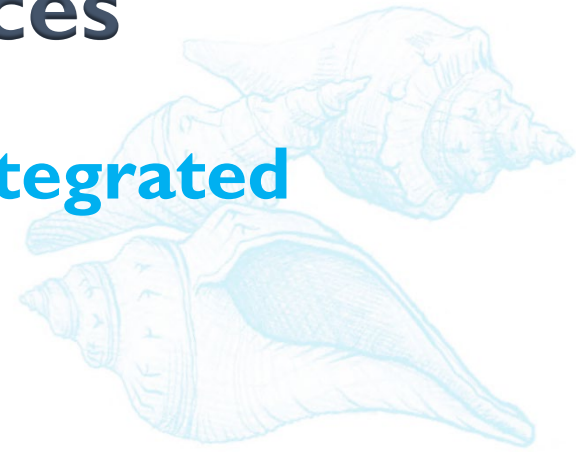
## Ostrom's Design Principles

1. Clear boundaries of the resource and effective exclusion of unentitled parties
2. Match rules governing use to local needs and conditions
3. Those affected by the rules can participate in modifying the rules
4. Rule-making rights of community are respected by outside authorities
5. A system by community members for monitoring members behavior
6. Use graduated sanctions for rule violators
7. Provide accessible low cost means for dispute resolution
8. Build nested governing tiers from the lowest level up the entire system



# Model Approach and Best Practices

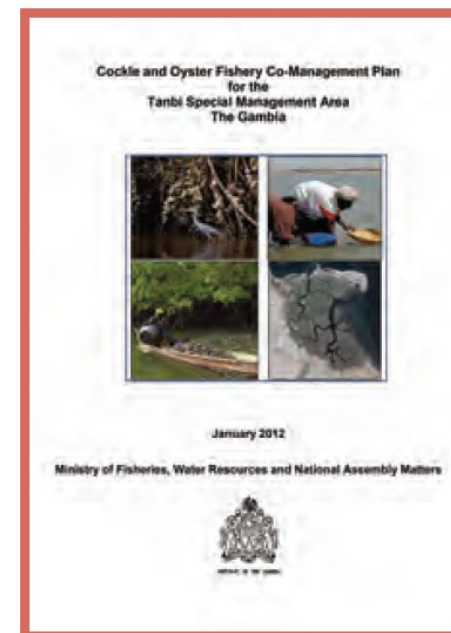
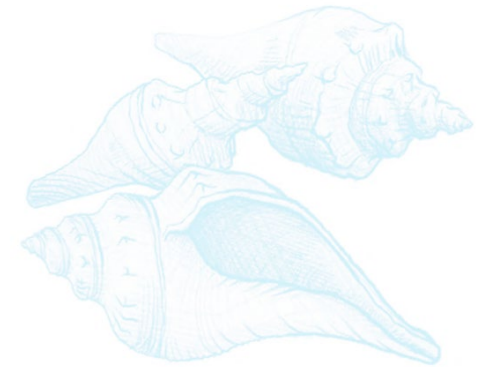
- **Co-Management**
- **Participatory**
- **Rights-based**
- **Gender-Sensitive**
- **Ecosystems-Based**
- **Adaptive Management**
- **Integrated**



# Initiating a Shellfishery Co-Management Planning Process

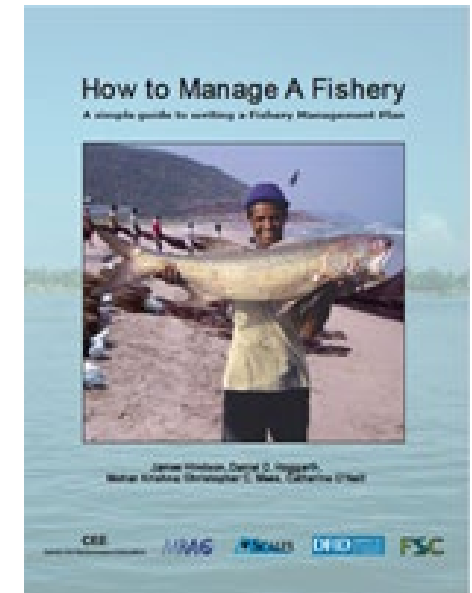
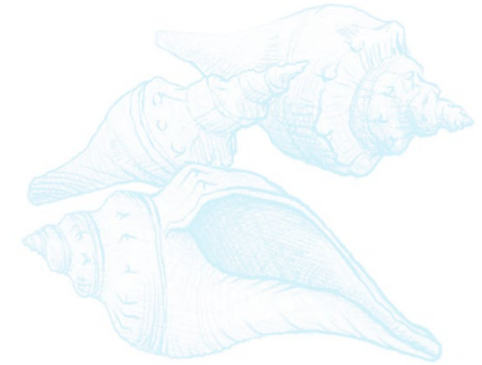
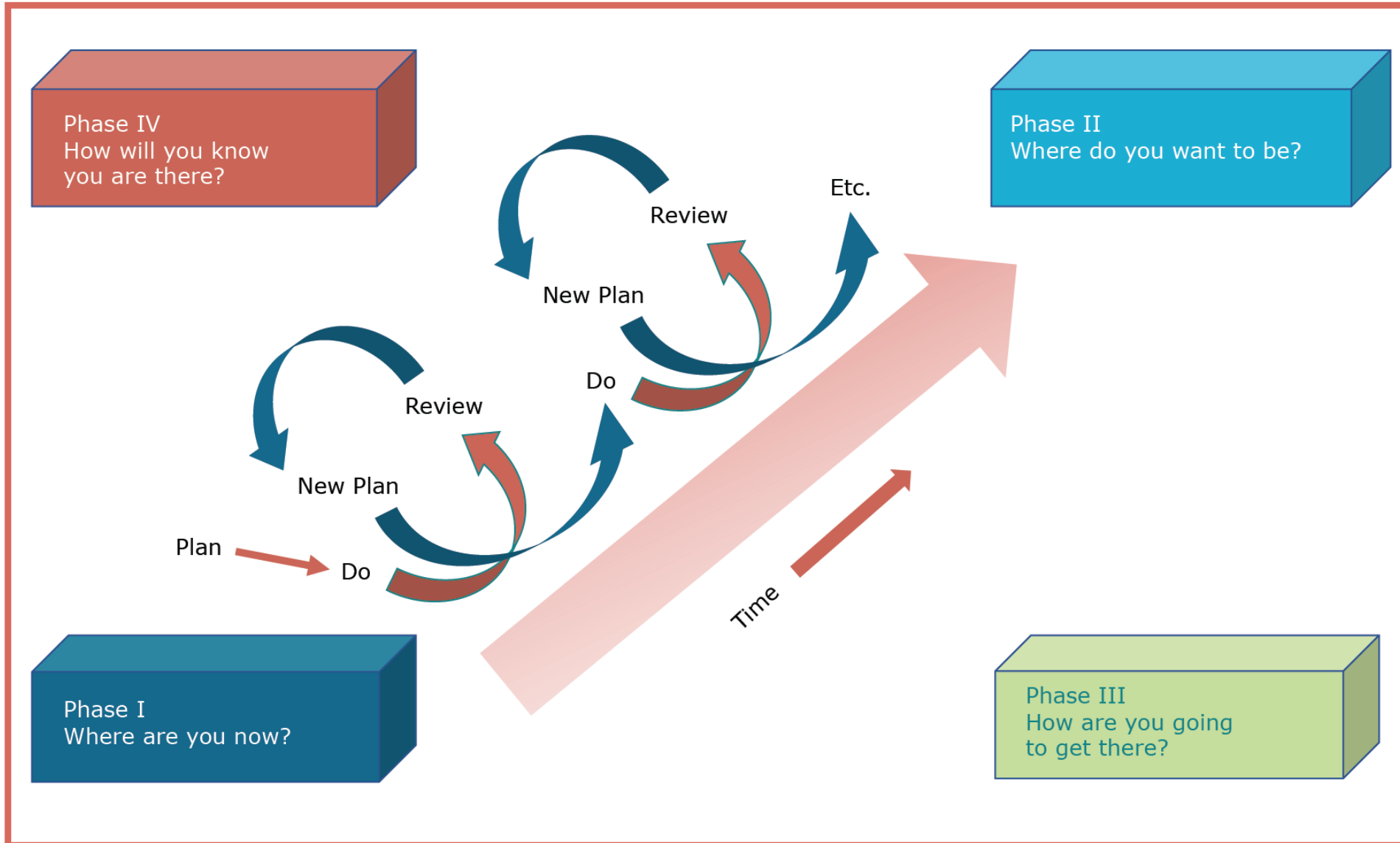
A plan should:

- Analyze the current situation in a fishery
- Set out some principles that should be followed in management
- Detail goals and objectives for the fishery
- Say how they are to be achieved
- Say how they are to be monitored





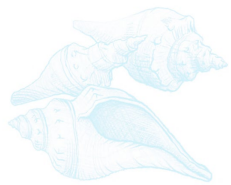
# Phases in the planning and implementation process



# Steps in the Planning Process







# Phase I

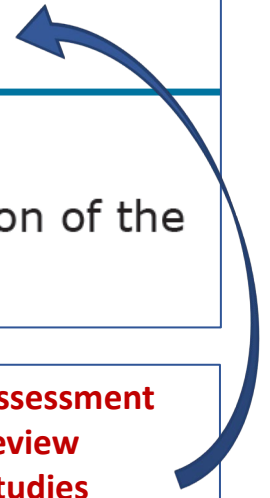
<p>Preparation for developing the management plan</p> <p><i>Where are you now?</i></p>	1	<p><b>Define</b></p> <p>Define the fishery your management plan is for and the management area boundaries</p>
	2	<p><b>Stakeholder Analysis</b></p> <p>Carry out a stakeholder analysis and decide how you are going to involve the stakeholders</p>
	3	<p><b>Situation Analysis</b></p> <p>Carry out a situation analysis and list the problems faced by your fishery</p>
	4	<p><b>Institutional Arrangements</b></p> <p>Establish the governing arrangements for implementation of the management plan</p>

For community-based management, the resource users need to be the prime members of a management committee



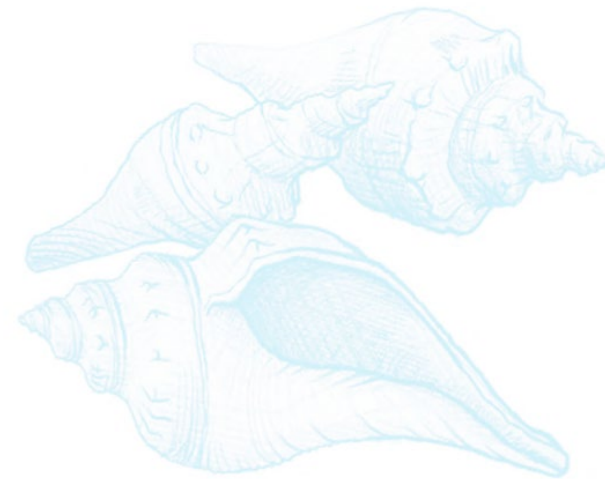
Stakeholders should be encouraged to identify and take initiatives within their control and drive development of improved enabling conditions through their demonstrated experience

- **Stock Assessment**
- **Legal Review**
- **Other studies**



# Phase II

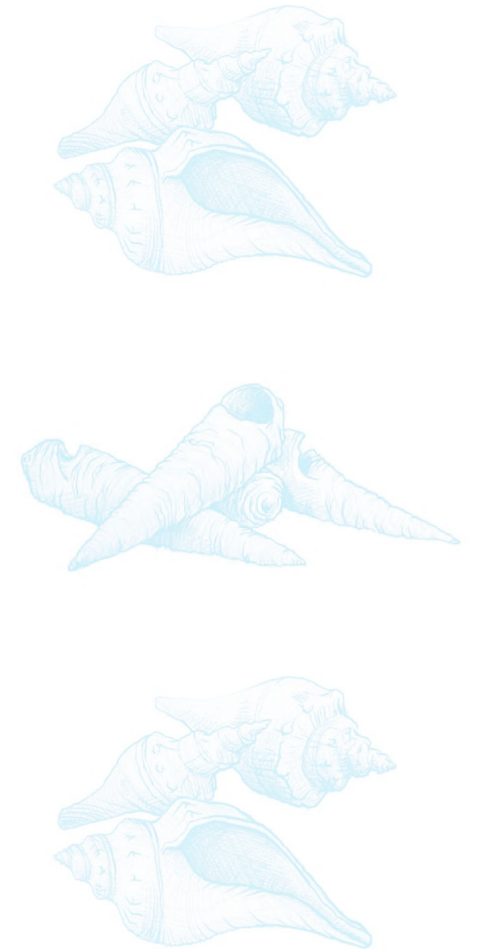
Developing the management plan	5	<b>Vision or Purpose</b> Agree on the overall purpose of your plan
<b><i>Where do you want to be?</i></b>	6	<b>Goals and Objectives</b> Decide on the biological, ecological, social, and economic goals needed to achieve your purpose and define objectives for each goal





# Phase II Example

Purpose	Goals	Objectives
<p>Establish an ecologically and economically sustainable oyster fishery</p>	<p>Biological: maintain oyster stocks well above exploitation levels to ensure sustained harvesting</p>	<p>Establish sustainable harvesting of oyster resources that avoids juveniles from being picked and allows larger more valuable oysters to be harvested</p>
	<p>Ecological: rehabilitate mangrove habitat to levels that can ensure sustained harvesting</p>	<p>Maintain the health and functioning of the mangrove ecology, thereby protecting important habitats of oysters and other fish species</p>
	<p>Socio-Economic: improve the standards of living for local oyster harvesters through improvement in oyster value chain activities and employment opportunities leading to improved income levels of resource users</p>	<p>Improve post-harvest value chain activities for oysters, thereby reducing poverty and improving food security among both women and men oyster harvesters</p>
	<p>Capacity Development: association strengthening</p>	<p>Strengthen local community involvement in planning implementation and decision-making in the sustainable use of oyster resources</p> <p>Strengthen capacity of membership and leadership of the Densu Oyster Pickers Association to participate in key community decision-making</p>





# Phase III

Developing the management plan  <i>How are you going to get there?</i>	7	<b>Management Measures</b> Decide the management actions you are going to take to achieve the objectives
	8	<b>Penalties and Sanctions</b> Determine the penalties for those who violate the plan's rules
	9	<b>Resources</b> Identify the resources needed to implement the plan





# Phase IV

Planning to implement, evaluate and review the management plan

***How will you know you are there?***

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## **Formal Approval**

Rule-making rights are recognized by outside authorities

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## **Implementation**

Make an action plan to implement your management plan

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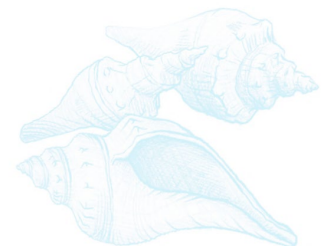
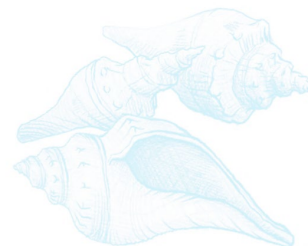
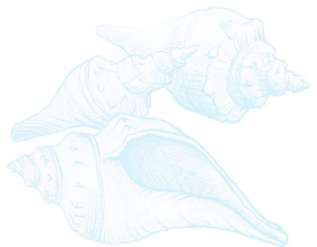
## **Monitoring**

Monitor regularly how well your plan is achieving objectives

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## **Reviewing**

Review and update your plan every few years



# Public Education and Awareness Creation of Regulations

