MAVA
FONDATION POUR LA NATURE

FINAL EVALUATION
WA6 - CONSERVING SEAGRASS BEDS 2018-2022

03.10.2022

1. INTRODUCTION

Seagrasses are one of the most important coastal habitats in the world – providing a multitude of ecological services like carbon sequestration and essential nursery areas. Despite this, they are also among the least known ecosystems in West Africa. As such, they are exposed to many threats, like climate change, pollution, and unsustainable fishing practices. To protect these important areas, it is urgent to improve knowledge about their locations and health status and implement appropriate management and conservation and measures in key sites.

For these reasons, the ResilienSEA project was designed and implemented in seven countries on the West African coast (Mauritania, Senegal, The Gambia, Guinea Bissau, Guinea, Cabo Verde, and Sierra Leone). The project focused on increasing knowledge, communication, and advocacy in order to create and implement appropriate management measures for sustainable seagrass conservation.

OBJECTIVES:

- Generate knowledge on the distribution, ecology, value of ecosystem services.
- Raise awareness by developing and sharing training tools and communication materials for stakeholders.
- Build the capacity of pilot site managers on methods for monitoring and protecting seagrass beds.
- Integrate seagrass conservation into national policies and pilot site management plans.
- Strengthen the sub-regional network for sharing experiences on seagrass conservation and management.
- Develop a strategy for mobilising financial and technical resources for the continuity of the project's actions.

BUDGET ENGAGED

€ 1,780,000

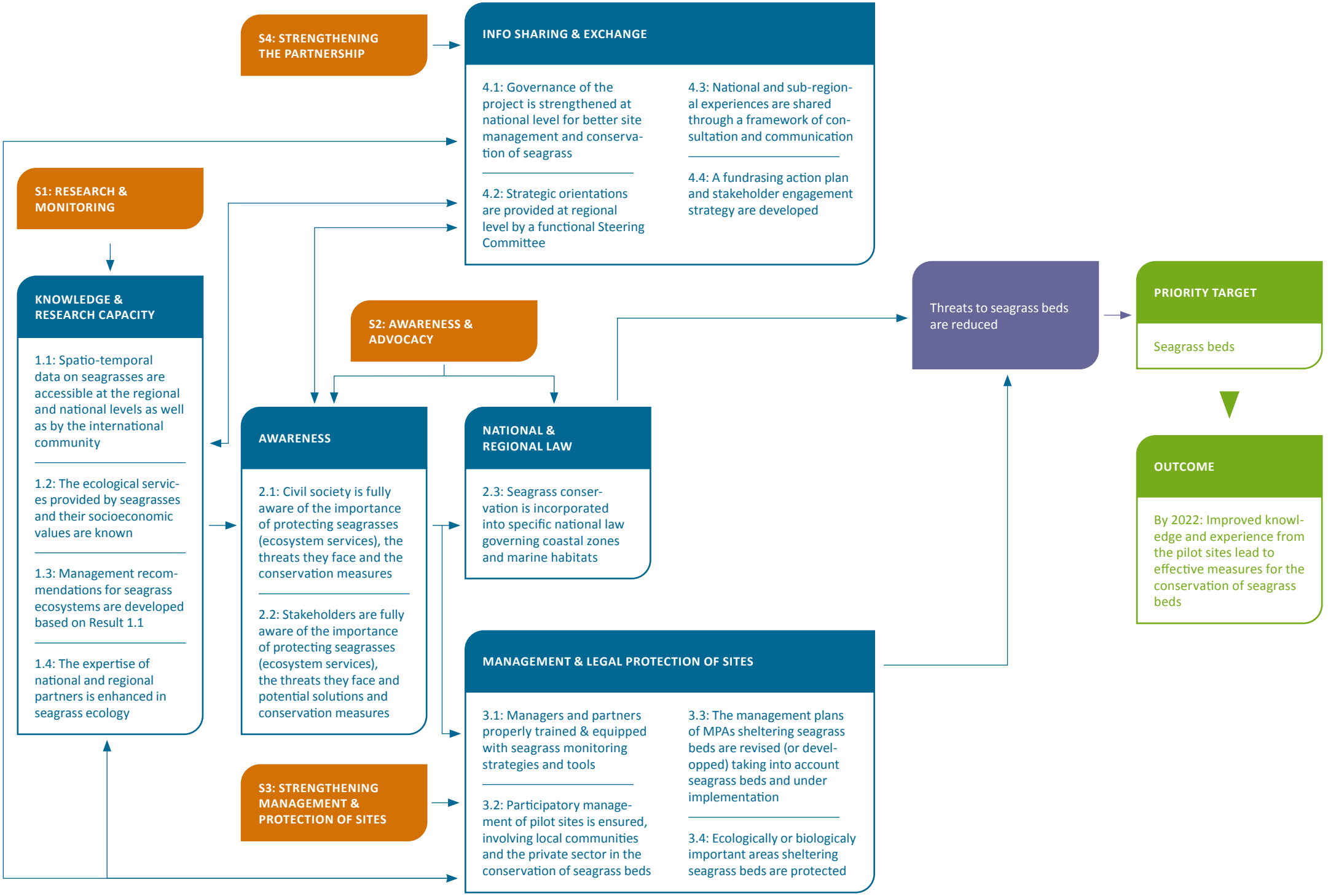
BUDGET PER STRATEGY

- Foster research and monitoring 34%
- Raise advocacy and awareness 18%
- Improve key site protection and management 15%
- Strengthen the partnership 8%
- Capacity building* 25%

THE PARTNERSHIP

ADAD · Ministério da Agricultura e Ambiente · Governo de Cabo Verde · CSE Centre de Suivi Ecologique · Direction des Aires Marines Communautaires Protégées – Sénégal · ECOCV · NAAFO · rampao · NCD · ODZH · Parc National du Banc d'Arguin · AMISO · CIPA Centre de Investigação Pesqueira Aplicada · C.N.P.M.Z.C · The Conservation Society Sierra Leone · Environment Protection Agency Sierra Leone EPA-SL · FEGUIPA · GRID Arendal A UNEP Partner · Nature Culture Development · Wetlands International

* This strategy was applied only during phase 1 to identify needs and set up a training program. For phase 2, capacity building activities were part of the other strategies to better target them


S4: STRENGTHENING THE PARTNERSHIP
INFO SHARING & EXCHANGE
4.1: Governance of the project is strengthened at national level for better site management and conservation of seagrass
4.2: Strategic orientations are provided at regional level by a functional Steering Committee
4.3: National and sub-regional experiences are shared through a framework of consultation and communication
4.4: A fundrasing action plan and stakeholder engagement strategy are developed
S1: RESEARCH & MONITORING
KNOWLEDGE & RESEARCH CAPACITY
1.1: Spatio-temporal data on seagrasses are accessible at the regional and national levels as well as by the international community
1.2: The ecological services provided by seagrasses and their socioeconomic values are known
1.3: Management recommendations for seagrass ecosystems are developed based on Result 1.1
1.4: The expertise of national and regional partners is enhanced in seagrass ecology
S2: AWARENESS & ADVOCACY
AWARENESS
2.1: Civil society is fully aware of the importance of protecting seagrasses (ecosystem services), the threats they face and the conservation measures
2.2: Stakeholders are fully aware of the importance of protecting seagrasses (ecosystem services), the threats they face and potential solutions and conservation measures
NATIONAL & REGIONAL LAW
2.3: Seagrass conservation is incorporated into specific national law governing coastal zones and marine habitats
S3: STRENGTHENING MANAGEMENT & PROTECTION OF SITES
MANAGEMENT & LEGAL PROTECTION OF SITES
3.1: Managers and partners properly trained & equipped with seagrass monitoring strategies and tools
3.2: Participatory management of pilot sites is ensured, involving local communities and the private sector in the conservation of seagrass beds
3.3: The management plans of MPAs sheltering seagrass beds are revised (or developped) taking into account seagrass beds and under implementation
3.4: Ecologically or biologicaly important areas sheltering seagrass beds are protected
Threats to seagrass beds are reduced
PRIORITY TARGET
Seagrass beds
OUTCOME
By 2022: Improved knowledge and experience from the pilot sites lead to effective measures for the conservation of seagrass beds

2. PROGRESS AND ACTIVITIES

The ResilienSEA project was innovative for seagrass management in West Africa in that it made a concerted effort to unite stakeholders and provide a framework for them to work sustainably in synergy.

Thanks to collaboration among partners, and for the first time beyond Senegal, Cabo Verde, and Mauritania, field surveys confirmed the presence of seagrasses in The Gambia, Guinea Bissau, Guinea, and Sierra Leone. This collaborative work has led to the updating of the global map of seagrass.

Additionally, synergies created among national and regional stakeholders led to the production of training and awareness raising tools, and the formulation and validation of a regional strategy for seagrass conservation in West Africa.

Finally, advocacy for the integration of seagrasses into national legislations resulted in their inclusion in national strategic planning and regulatory documents in Cabo Verde, Sierra Leone, Mauritania, and Senegal.

STRATEGY 1: RESEARCH AND MONITORING

The strategy focused on in-depth research and regular monitoring of pilot sites for studies on both the ecology and socio-economic value of seagrasses. Activities included:

- training national implementation teams on seagrass identification, monitoring, ecology, and mapping;
- developing training modules for university curricula;
- collecting spatio-temporal data on seagrasses for national, regional and international stakeholders;
- effecting studies on the socio-economic value of seagrasses and the ecosystem services they provide.

STRATEGY 2: RAISE ADVOCACY AND AWARENESS

Raised advocacy and awareness using a communication strategy designed to engage local communities, civil society, universities, managers, and decision-makers in seagrass conservation. Activities included:

- developing and sharing communication tools like banners, posters, videos, flyers, brochures, etc.;
- raising decision-makers' awareness on seagrass ecosystem services;
- advocating for the integration of seagrass into national legislations.

STRATEGY 3: IMPROVE KEY SITE PROTECTION AND MANAGEMENT

Improve key site management by strengthening capacities and stakeholder involvement and integrating seagrass protection into new or existing management plans. Our activities included:

- developing a seagrass monitoring training manual;
- formulating and validating a regional strategy for seagrass conservation;
- supporting the establishment of two new MPAs in Sierra Leone and Senegal;
- integrating seagrass conservation into pilot sites and other protected areas' management plans.

STRATEGY 4: STRENGTHEN THE PARTNERSHIP

Strengthen and improve partnership sustainability beyond 2022, promoting the development of regional networks through a communication framework, shared experiences, and fundraising. Our activities included:

- organising annual national and subregional meetings;
- participating in regional and international events like the PRCM forum, IUCN Congress, APAC Congress, and the World Seagrass Conference;
- organising exchange visits and shared experiences between members of the pilot site managers' sub-regional network;
- developing and implementing a fundraising strategy.

KEY LESSONS

Implementing the ResilienSEA action plan has provided multiple lessons learned on successful activities and what needs to be improved:

1. Capacity building provided a solid basis for motivating and generating increased interest on the value and conservation of seagrasses in West Africa.
2. Integrating seagrasses in management policies and strategic planning documents required an inclusive and participatory approach from all stakeholders.
3. Creating a widely available online platform for regional seagrasses contributed to better information-sharing and more sustainable use of data.
4. Highlighting the links between seagrasses and other ecosystems and species, such as mangroves and sea turtles, fostered synergies with other conservation projects.
5. Seagrass prospection and mapping along the West African coast demonstrated connectivity and complementarity between sites.
6. The difference in administrative and financial procedures between the different types of partners (regional and international organisations, CSOs, government institutions, etc.) is likely to have an impact on the smooth functioning of the coordination and the efficient implementation of the project.
7. Seagrass conservation requires real involvement of civil society organisations.
8. Regional planning of activity implementation should align with national priorities.

3. RESULTS AND IMPACTS

The ResilienSEA project has achieved key results for seagrass conservation. Improving scientific knowledge and building stakeholders capacities in the seven target countries contributed significantly to developing a regional expertise, which is key to sustainable management of seagrass meadows. More expertise also led to the collection of reliable, robust data uploaded to a functional regional platform on seagrass in West Africa (Seagrass spatial lab[1]).

The development of a Regional Atlas[2] significantly contributed to the integration of the West African coast into the global seagrass distribution map, improving information accessibility on this ecosystem. We also developed other specific tools such as maps, videos, and posters, which were effective in informing, raising awareness, and communicating the importance of seagrass meadows ecosystem services and their protection.

At the political and regulatory level, the inclusion of seagrass beds in national strategic documents like management plans and Nationally Determined Contributions (NDC's) was an important step towards strengthening conservation. At the sub-regional level, a common strategy on the conservation of seagrass meadows formed the basis of a consultation and exchange framework.

[1] https://geograsslab.resiliensea.org/
[2] https://www.grida.no/publications/866

CASE STUDY 1: WEST AFRICA'S UNIQUE POSITION AS A SEAGRASSES TRANSITION ZONE

Four species of seagrass are found in West Africa - namely *Halodule wrightii*, *Cymodocea nodosa*, *Ruppia maritima*, and *Zostera noltei*. The latter's presence was confirmed for the first time by ResilienSEA in the Saloum Delta, Senegal, which is now its new global southernmost distribution limit. The Banc d'Arguin National Park (PNBA) in Mauritania represents the northernmost limit of *Halodule wrightii*, while The Gambia is the southernmost limit of the species *Cymodocea nodosa*. Cabo Verde is the only country in the region where *Ruppia maritima* has been recently recorded[3].

These findings demonstrate West Africa's role as a transitional zone for the first three species. As the vulnerability of these ecosystems in the face of climate change may affect their distribution range, it is increasingly important to continue efforts to protect and conserve these sensitive ecosystems.

Saloum Delta National Park in Senegal at Fandioung, February 2020.. The photo illustrates the joy of the Senegalese national team and the project partners after the confirmation of the presence of *Zostera noltei* beds in this site.

[3] According to the information available

CASE STUDY 2: INTEGRATING SEAGRASS BED PROTECTION INTO NATIONAL POLICIES

Improved scientific knowledge has allowed for better integration of seagrass meadows into national policies. Cabo Verde, Mauritania, Sierra Leone, and Senegal have all integrated seagrasses into their national policies and or specific conservation, planning, and management documents. Demonstrating a real commitment to seagrass conservation, Cabo Verde and Sierra Leone have incorporated seagrass meadows into their NDC's. In Mauritania, Senegal, and Sierra Leone (PNBA, PNDS, and Sherbro), seagrass meadows have been included in revised management plans. National and international recognition of the importance of seagrass meadows for associated species strengthened the argument for conservation, management, and restoration programmes. By guaranteeing their protection through local, national, regional, or global policies, countries can achieve a multitude of ecological and socio-economic objectives.

Zostera nolteil seagrass, October 2022 off iwik in the Banc d'Arguin National Park in Mauritania. Including seagrass into national policies strengthens the health of seagrass beds and allows them to play their full role.

KEY IMPACTS

The project has improved knowledge about seagrass and created ecological, political, and socio-economic impacts at national and regional levels:

1. Information on West African seagrass is more widely available.
2. Stakeholders in the target countries now have better awareness of the existence and importance of seagrasses.
3. Strengthened regional capacities capable of ensuring the capitalisation of the project's achievements through tools such as training manuals.
4. More effective management of seagrass meadows through the strengthening of their protection status (creation of new MPAs).
5. Formalising active exchange frameworks like NITs[4] or the subregional managers' network increased the partnership's sustainability.
6. Integrating West African seagrasses onto the global map increased their visibility.
7. Donor interest increased, sparking initiatives like the seagrass restoration project in The Gambia.
8. Modules on seagrass ecosystems were integrated into university curricula.

[4] National Implementation Team

4. WHAT WILL HAPPEN NEXT

Beyond the achievements attained by ResilienSEA during this initial phase, the partners face several challenges going forward. These include: (i) hosting the Seagrass Spatial Lab platform server; (ii) continuing to collect data and monitor the health of seagrass beds; (iii) integration of seagrass conservation into national laws and regulations; (iv) policy implementation; (v) strengthening the engagement of civil society organisations; and (vi) mobilizing funds.

To meet these challenges, it is important that the partnership directs its interventions towards strengthening and sustaining these actions: (i) continuation of survey activities for a complete mapping of the distribution of seagrass beds in West Africa; (ii) implementation of the regional strategy for the conservation of seagrass beds in West Africa; (iii) exchange of information and sharing of experiences for a harmonised approach at sub-regional level; (iv) the search for innovative financing, such as selling carbon credits on international markets; (v) the continuous updating of the database by the countries; (vi) the involvement and responsibility of civil society organisations (CSOs) through conventions and contracts; and (vii) continuous advocacy with decision-makers in order to integrate seagrass beds into the legal frameworks of the target countries.

> *“Seagrasses are a symbol of a new vision for the conservation of coastal and marine ecosystems and species in West Africa.”*

Francisco Wambar – Organização para a Defesa e Desenvolvimento das Zonas Húmidas na Guiné-Bissau (ODZH) – Guinea Bissau

> *“Conserving seagrass beds, which are far more efficient than tropical forests in sequestering carbon, is a vital part of the fight against accelerating climate change.”*

Abdou Aziz NDIAYE – Direction des Aires marines communautaires Protégées (DAMCP) – Senegal


Wetlands
INTERNATIONAL
ResilienSEA
MAVA
Melhoria dos Conhecimentos e das Experiências de
Conservação das Ervas Marinhas em África Ocidental (ResilienSEA, OAP6)
Avaliação Final do Projeto ResilienSEA, 08 - 11 de Novembro de 2022 no Hotel Pérola , Praia