

National Action Plan for the Sustainable Management of Marine Litter in the Red Sea coast of the Hashemite Kingdom of Jordan

January 2023



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for the Sustainable Management of Marine Litter
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the Hashemite Kingdom of Jordan**

December 2022

PERSGA – “The Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden” is an intergovernmental organization dedicated to the conservation of the coastal and marine environments in the region. The Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment (Jeddah Convention) 1982 provides the legal foundation for PERSGA. The Secretariat of PERSGA was formally established in Jeddah following the Cairo Declaration of September 1995. The PERSGA member countries are Djibouti, Egypt, Jordan, Saudi Arabia, Somalia, Sudan, and Yemen.

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Introduction

Among the 17 United Nations (UN) Sustainable Development Goals (SDGs) that encompass the 2030 Agenda for Sustainable Development is a stand-alone goal that seeks to address the need for the sustainable use and conservation of life below water. This is SDG 14 “Conserve and sustainably use the oceans, seas and marine resources for sustainable development”. SDG 14.1 requires a significant reduction of marine debris by 2025, and SDG 12.5 states that by 2030 overall waste generation must be significantly reduced through prevention, reduction, recycling, and reuse. These are specific targets that highlight the urgency to act.

The Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA) developed a Regional Action Plan (RAP) for Sustainable Management of Marine Litter in the Red and Gulf of Aden in 2018. It pertains to marine litter in the Red Sea and Gulf of Aden (the PERSGA region), including Gulf of Aqaba. The purpose of the RAP is to provide a roadmap to sustainably manage marine litter in the PERSGA region. More specifically, the RAP lists practical actions that if enacted will greatly reduce the amount of litter entering the marine environment and help remove litter already there.

Jordan generates 2.2 million tons of solid municipal waste per year, growing annually by 5% of which only 7% is recycled or salvaged mainly by the informal sector (UNDP Jordan). The presence of this huge amount of waste, in addition to the fact that there are more than 2.5 billion plastic bags (Heinrich Boll Stiftung, 2020), has made waste management a national priority in Jordan. Several initiatives have been adopted at the national level to raise awareness about the impact of waste, how to reduce generating waste and how to sustainably manage waste.

Most litter reported in the Gulf of Aqaba coastal waters is from recreational and shipping activities. Many litter items come from Aqaba’s passenger port north of the Marine Science Station (MSS) and it is estimated that 19 million items enter the marine environment from ferryboats each year (ASEZA, 2021). Shipping and port activities contribute 30% of marine litter whilst the fishing industry represents only 3%. The most significant accumulated litter in Aqaba’s marine environment is composed of plastic, and microplastics are considered a serious threat to scleractinian (reef-building) corals and other marine life. Aqaba is a major tourist destination, and this coupled with large quantities of waste being generated is creating a serious problem to marine life.

This document is a National Action Plan (NAP) for the Sustainable Management of Marine Litter in the Red Sea coast of the Hashemite Kingdom of Jordan. It is designed to complement the RAP and to ensure Jordan’s response to marine litter is comprehensive and practical. The NAP was prepared by the PERSGA in cooperation with the National Focal Point in Jordan (Aqaba Special Economic Zone Authority (ASEZA). ASEZA is the authority responsible for implementing this NAP.

This NAP provides details on how national actions will be achieved in Jordan and in what time frame. The national actions were selected from 60 actions listed in the RAP and each is ranked in terms of its priority. Each action is linked to one of seven complementary components (or strategies) designed to comprehensively address the threat of marine litter. This NAP will also support Jordan in fulfilling its commitments to the UN Convention on Biological Diversity, and the SDGs, especially SDG14 “Life Below Water”.

The actions, listed under each component, were selected according to their suitability for Jordan. For each action, there is a priority ranking; task or steps to complete the action; national capacity to implement the action; training needs for those executing the action; approximate budget cost to complete the action.

The NAP is a high-level document and thus will need to be supported by more detailed work plans. Typically, there should be a work plan per action. Work plans should include:

- Measurable objectives,
- A list of team members and their responsibilities,
- Detailed explanation about tasks,
- Setting action timelines, milestones and outputs,
- Establishing detailed budgets..

Training is proposed for most of actions. The training will provide those responsible for executing the work plans with information and skills to facilitate implementation. This could include training on how to write an effective work plan and work scopes when there is a need for consultants to do specialized activities. Some

of the training activities will be more specialized such as providing government employees with updates on regulations pertaining to international conventions. This training will not make the employees experts on the subject; however, it will help them to direct and manage the consultants assigned to complete some actions. Indicative budgets are proposed in this NAP to complete each action. The costs of the employees and the general office costs will be covered from the internal budget of the government agency. However, funds may be needed to cover external costs such as training, payments for consultants, implementation of workshops and purchasing awareness raising material. Therefore, budgets provided in this NAP are for guidance purposes only because final costs must be refined once the full scoop of each action is fully understood and presented in the work plans.

This NAP is a working document that should be updated after 10 years. It is important that changes to the NAP are recorded along with the dates of change and the reasons for change. The time frames for actions in this NAP are presented in quarters and per year (for example: third quarter 2022).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1 st Quarter			2 nd Quarter			3 rd Quarter			4 th Quarter		

The following priority ranks are used to indicate the level of urgency for each action stipulated in this NAP:

- Very high priority (urgent and where the immediate action is required (it is preferred to start within one year from the approval of the NAP).
- Medium priority (it is preferred to start within three years).
- Low priority (it is preferred to start within four years).

For each component in this NAP, the relevant priority ranking of each action was assessed at a national workshop in which major stakeholders were invited. Participants were divided into groups, and each group presented their view about the priority ranking as shown in the table below. The final priority ranking was based on the average rating for the groups.

Ranking classification for action priority

Ratio	Classification
1.0-1.25	Low
1.5-2.0	Medium
2.0-2.5	High
2.5-3.0	Very High

Component 1:

Integrated Management Framework

The objective of this component is to promote integration and coordination of initiatives to sustainably manage marine litter in Jordan.

ASEZA, through the Commission of Environment, is responsible for preservation of the marine environment and the conservation of marine and beach natural resources based on the law of the Authority and Aqaba Marine Reserve's bylaw and instructions. These instructions relate to maintaining public safety in the Aqaba Marine Reserve through monitoring public activities, monitoring users and providing extension and assistance services to visitors, applying the necessary procedures to control all developmental, scientific, tourism, recreational, navigational and commercial activities.

Action I : Appoint ASEZA as the national agency to manage and control marine litter activities in Aqaba⁽¹⁾.

Priority ranking	Very High
Tasks	1.ASEZA will manage and control marine litter activities in Aqaba. The guidelines prepared through the RAP of PERSGA are the main reference for the preparation of the NAP. 2.ASEZA will take responsibility for implementing the NAP in cooperation with various stakeholders.
National capacity to implement action	Yes
Training needs	N/A
Budget to complete action	Cost of national workshop to discuss implementation of the NPA: 2500 USD (1750 JOD)
Timeframe	2 nd Quarter to 3 rd Quarter 2023
Performance Indicators	Appointed a national agency to manage and control marine litter activities at the national level. Establishment of a national Interagency Task Force on marine litter management..
Target	ASEZA as the national agency for management of marine litter in Jordan. One NAP for managing marine litter in the Red Sea coast of Jordan.
Partners	PERSGA.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	The Regional Action Plan, Technical and Financial Support.

1) Action II (ASEZA take responsibility for developing and implementing the NAP) has been completed. This action was supported by a national consultant and a stakeholder workshop.

Component 2:

Awareness and Education

The objective of this component is to raise government and public awareness of the impact of litter to the marine environment, economy, and human health through the implementation of education and awareness programs and literature.

A first step to address marine litter is to enhance the awareness of people and raise their knowledge about threats to the environment from litter. It's important to identify and promote awareness, understanding, and respect for the marine environment and secure commitment for responsible behavior at personal, local, national, and global level.

Action 1: produce, publish and/ or disseminate education and awareness materials specific to each stakeholder or beneficiary, using electronic media, information sheets, brochure, booklets, videos, CDs, and other media.

Priority ranking	Very High
Tasks	<ol style="list-style-type: none">1. Form a working committee (from the following sectors: the Directorate of Education, the Tourism Directorate, ASEZA, the Royal Department for Environment Protection (Environmental Police), neighborhood committees, the Chamber of Industry and Commerce, Governorate and the Decentralization Council) to identify priority entities that will benefit from this action.2. Determine or choose the nature and quality of publications that are compatible with the beneficiaries.3. Determining how this material will be distributed or published and enhance the digital and electronic material rather than printed materials.4. Identifying the appropriate times and places to distribute these publications.5. Identifying the appropriate content that matches the level, capabilities, and nature of the beneficiaries.6. Determining focal point for each party, whose responsibilities will be to follow up on all the above until these materials reach their beneficiaries.7. Continuing to raise awareness on the impact of plastic waste on the environment and public health and the importance of regulations limiting the use of plastic in Aqaba.8. Identification of entities working in the field of awareness and the possibility of integrating initiatives to implement awareness campaigns about the law issued by the Ministry of Environment.9. Encourage different sectors in Aqaba to participate in environmental events and campaigns to raise awareness.
National capacity to implement action	Yes
Training needs	Training on preparing a questionnaire to measure change in awareness following dissemination of material to raise knowledge about marine litter. Training on choosing the most appropriate awareness approaches and materials
Budget to complete action	The materials, which could include brochures, mobiles messages, movies or radio interviews, or high-quality posters, in addition to some simple gifts such as natural fiber bags. The estimated cost = 20000 USD (14000 JOD) Each training program can be held in three phases and over two days, the cost of each training is 1000 USD (750 JOD). Total: 1000 USD X 2 Days X 3 times X 2 training programs = 12000 USD (8500 JOD) The total cost for implementation of Action 1 = 20000 + 12000 = 32000 USD (22500 JOD)

Timeframe	3 rd and 4 th Quarter of 2023, 1 st and 2 nd Quarter of 2024
Performance Indicators	Number of miscellaneous educational materials published. Number of people and entities given the educational materials. Number of people participating in training programs.
Target	Five types of miscellaneous educational materials. 50000 persons receiving the educational materials annually. 70 participants attending the training programs.
Partners	The Directorate of Education, the Tourism Directorate, ASEZA, JREDS, the Royal Department for Environment Protection (Environmental Police), the neighborhood committees, the Chambers of Industry and Commerce, Governorate and the Decentralization Council.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Component 2 II: Develop and publish marine litter educational and awareness material, for a range of stakeholders, which can be shared among member countries.

Action II: Organize awareness workshops on the impact of marine litter for various stakeholders, such as teachers and government officials.

Priority ranking	Very High
Tasks	<ol style="list-style-type: none"> 1. Determine the entities or beneficiaries and the role of each of them. 2. Identify entities working in the field of awareness raising, such as eco-schools, eco-clubs, eco-certifications for hotels, organizations working with fishermen, divers, and other local community members. 3. Identify ways integrating similar initiatives to foster greater public awareness and to reduce repetition or to improve outcome through training and information sharing. 4. Determine the persons or entities that will assist in the training process, qualifying them and raising their capabilities at the level of trainers. 5. Determine the training material or programs and the duration of each.
National capacity to implement action	Yes
Training needs	<p>Training on preparing a questionnaire to measure change in awareness following dissemination of material to raise knowledge about marine litter.</p> <p>Training on the skills to help choose the most appropriate methods to raise awareness among the target group.</p>
Budget to complete action	<p>The proposed target groups are divers, fishermen, other sea users, security sectors, glass bottom drivers, women sector, educational sector (environmental supervisors) and private sectors.</p> <p>The number of awareness raising workshops; around one workshop for each group or sector annually.</p> <p>1060 USD X 7 groups= 7420 USD (5260 JOD)</p> <p>Trainer's cost: 7 groups X 565 = 3955 USD (2800 JOD)</p> <p>The total estimated cost: 11375 USD (8060 JOD)</p>
Timeframe	3 rd and 4 th Quarter of 2023, and 1 st Quarter of 2024.
Performance Indicators	<p>Number of sectors attended the training.</p> <p>Number of training materials that were prepared.</p>

Target	Seven sectors from Aqaba. Four training programs.
Partners	The Directorate of Education, the Tourism Directorate, JREDS, local communities, the Royal Department for Environment Protection (Environmental Police), the neighborhood committees, the Chambers of Industry and Commerce, governorate and the Decentralization Council.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Component 2 IV: Organize workshops to improve media/awareness raising skills to allow information on marine litter to be disseminated effectively to the public and to develop advocacy skills to influence government policy. Component 2 VIII: Encourage member countries to continue to undertake activities associated with PERSGA's 'Clean-up Our Seas' campaign. Component 2 IX: Encourage member countries to participate in international campaigns such as the # Clean Seas campaign.

Action III : Develop strong linkages with key government departments to inform officials and judicial sector/ decision-makers about information relating to the environmental effects of marine litter.

Priority ranking	High
Tasks	6. Identify the national agencies with key decision-making roles relating to the management of marine litter and who can help facilitate actions in the NAP. 7. Regularly meet with the key persons to update and advise them on actions being taken to decrease marine litter in Aqaba and to discuss how to facilitate further collaboration. 8. Organize a dialogue among decision-makers and key stakeholders. This could include facilitators who can bring all stakeholders in a goal-oriented process, and who understand the problem and potential solutions for Jordan.
National capacity to implement action	Yes
Training needs	N/A
Budget to complete action	National dialogues/national workshops to implement this action: 3525 USD (2500 JOD) The estimated budget: 3525 USD (2500 JOD)
Timeframe	3 rd Quarter 2023
Performance Indicators	Number of meetings with decision-makers. Number of national or governmental agencies involved. Number of dialogues conducted between all stakeholders
Target	At least one meeting with decision-makers. At least three meetings with national/ governmental agencies.
Partners	Ministry of Tourism Directorate, Ministry of Education, Ministry of Environment and Ministry of Interior Affairs.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Component 2 VII: Use 'Al-Sambouk' (PERSGA newsletter) to regularly share with member countries the results of actions to prevent and remove litter in the PERSGA region.

Action IV : Develop strong linkages with newspaper reporters/ editors to encourage them to communicate information about the environmental and health impacts of marine litter.

Priority ranking	High
Tasks	<p>1.The establishment of an online hub for environmental media.</p> <p>2.The NAP will focus on local and national journalists to strengthen their knowledge about the impact of marine litter on the environment.</p> <p>3.Organize comprehensive awareness workshops for journalists about the impact of marine litter.</p>
National capacity to implement action	Yes
Training needs	<p>Training program on how to write an environmental press release relating to marine litter.</p> <p>A training program to acquire/update skills in the use of social media to communicate knowledge about marine litter.</p>
Budget to complete action	<p>Comprehensive awareness workshop for journalists: US\$ 1055 USD (750 JOD)</p> <p>Trainer's cost: 560 USD (400 JOD)</p> <p>The training programs: 2 X 1055 = 2110 USD (1490 JOD)</p> <p>Trainer's cost and material: 1410 X 2 = 2820 USD (2000 JOD)</p> <p>Other costs = 1410 USD (1000 JOD)</p> <p>The total estimated cost: 7955 USD (5650 JOD).</p>
Timeframe	1 st Quarter 2023
Performance Indicators	<p>Number of journalists who attended training.</p> <p>Number of press releases or articles published relating to marine litter.</p>
Target	<p>Fifteen journalists.</p> <p>Ten press releases or articles relating to marine litter.</p>
Partners	The Tourism Directorate, related organizations, the Jordanian press association and governorate.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Technical support.

Component 3:

Legal and Institutional Framework

The objective of this component is to review and, if necessary, improve the legal basis for preventing litter entering the marine environment.

Action I : Evaluate the success or otherwise of the enforcement of legislation and regulations, and revise or update, where necessary, to manage litter associated with vessels and litter generated in cities, towns, and ports and to reduce litter entering the marine environment and or to remove marine litter.

Priority ranking	Very High
Tasks	<ol style="list-style-type: none"> 1. Review all legislation relating to waste management in Aqaba, and review violations of regulations (by all stakeholders) relating to waste management and littering. 2. Choosing a consultant to carry out the assessment of all legislation related to marine litter. 3. Ensure that all stakeholders are involved in the evaluation and that no party is excluded. 4. Hold a national workshop to present the results and invite decision-makers, stakeholders, legal professionals, and others. 5. Evaluate the means of enforcement, and the effectiveness of their application. 6. Identify weaknesses in the application of existing legislation and develop a list of solutions. 7. Prepare a report that includes all the information gained through the above tasks and submit to ASEZA.
National capacity to implement action	Yes
Training needs	N/A
Budget to complete action	Hiring a consultant: 24000 USD (17000 JOD) High level workshop: 2820 USD (2000 JOD) The total estimated cost: 26820 USD (19000 JOD).
Timeframe	3 rd Quarter 2023.
Performance Indicators	Number of legislation and regulations reviewed. Number of participants attending the workshop. Number of monitoring and evaluation reports.
Target	More than ten legislations or regulations. At least one workshop. One Report.
Partners	Legal professionals and stakeholders.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Component 3 X: Facilitate a workshop to assist member countries to review existing legislation and, if necessary, develop new legislation to prevent litter entering the marine environment.

Action II: Understand the implementation status of the MARPOL Convention at the national level.

Jordan has ratified all annexes of the MARPOL Convention and is working to implement them. In relation to Annex V, the private sector has been contracted to provide reception facilities for waste, oil, and wastewater..

Priority ranking	Very High
Tasks	1.Review the implementation and enforcement of the MARPOL Convention and all related annexes. 2.Audit all facilities related to MARPOL Convention to ensure compliance. .
National capacity to implement action	Yes
Training needs	Training in MARPOL requirements.
Budget to complete action	Hiring a consultant: 14100 USD (10000 JOD)
Timeframe	1 st Quarter of 2023.
Performance Indicators	Number of training programs.
Target	At least one training program.
Partners	Jordan Maritime Commission, and related entities.
National Strategies	Currently, there are no national strategies relating specifically to this action. However, there is the National Ballast Water Management Strategy for Jordan.
PERSGA Input	Component 3 XI: Facilitate a workshop to assist member countries understand their obligations to MARPOL and the London Protocol.

Action III: Ensure reception facilities at ports are aligned with MARPOL requirements in order for the Red Sea Special Area requirements to take effect.

Jordan ratified Annex V of MARPOL and have a contract with two companies from the private sector to provide reception facilities for oils only.

Priority ranking	Very High
Tasks	1.Undertake evaluation of the implementation and enforcement of Annex V and other obligations relating to the Red Sea Special Area. 2.Audit the reception facilities related to MARPOL Convention "Annex V" to ensure compliance. 3.Annual review of contracted companies' requirements to verify their fulfillment in relation to reception facilities. 4.Report to IMO about compliance in relation to Red Sea port reception facilities relating to Annex V and the Red Sea Special Area.
National capacity to implement action	Yes
Training needs	Training in MARPOL Convention Annex V. Training on the methodology used to audit establishments.
Budget to complete action	7000 USD (5000 JOD)
Timeframe	2 nd Quarter 2023.
Performance Indicators	Number of training programs.

Target	At least one training program.
Partners	Jordan Maritime Commission, and related entities.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Component 3 XI: Facilitate a workshop to assist member countries understand their obligations to MARPOL and the London Protocol.

Action IV: Enforcement of Annex V of the MARPOL Convention.

Priority ranking	Very High
Tasks	1. Annual audit in cooperation with Jordan Maritime Authority, ASEZA, IMO, and related entities to regularly audit compliance of reception facilities in nominated ports to meet MARPOL's Annex V commitments. 2. Audit enforcement at Aqaba's ports to ensure compliance of Annex V.
National capacity to implement action	To be determined; may need consultant from IMO.
Training needs	Training in auditing; especially in relation to Annex V .
Budget to complete action	7000 USD (5000 JOD)
Timeframe	2 nd Quarter of 2024.
Performance Indicators	Audits of reception facilities and enforcement protocols to ensure continued compliance.
Target	One audit of every port with reception facilities (frequency as determined by MARPOL requirements).
Partners	ASEZA, Jordan Maritime Commission, IMO and PERSGA and related entities.
National Strategies	Currently, there are no additional national strategies relating to this action
PERSGA Input	Component 3 XI: Facilitate a workshop to assist member countries understand their obligations to MARPOL and the London Protocol.

Action V: Take steps to urge Jordan's ratification of the London Protocol

Priority ranking	Medium
Tasks	1. Consult with stakeholders on the need for Jordan to ratify the London Protocol. 2. Organize a high level meeting with policy makers to highlight the importance of this Protocol to protect the marine environment. 3. Communicate and discuss the process for ratification with IMO. 4. Prepare legal documents needed for ratification.
National capacity to implement action	Yes
Training needs	To be determined.
Budget to complete action	Approximate total costs = 10,000 USD (7,000 JD)
Timeframe	1 st Quarter of 2024.
Performance Indicators	Ratification legal documents.
Target	Ratification of the London Protocol.
Partners	Jordan Maritime Commission, IMO and PERSGA and related entities.
National Strategies	There are no additional national strategies relating to this action.

PERSGA Input	RAP Component 3 XI: Facilitate a workshop to assist member countries understand their obligations to MARPOL and the London Protocol.
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Action VI: Supporting the implementation of the instructions regulating the use of plastic in Aqaba through policy and environmentally friendly and cost-effective alternatives to plastic bags.

Priority ranking	Very High
Tasks	<p>1. Providing a platform for decision-makers and stakeholders to learn from regional and international experiences, where similar regulations limiting plastic use have been implemented.</p> <p>2. Joining national, regional, and global efforts to combat plastic.</p> <p>3. Sparking debates and supporting activism on the issue of plastic.</p>
National capacity to implement action	Yes
Training needs	N/A.
Budget to complete action	<p>Hiring expert to provide advice on sound policies and environmentally friendly and cost-effective alternatives to plastic bags as well as a final workshop with stakeholders = US\$ 7000 USD (5000 JOD)</p> <p>Organizing a stakeholder workshop = 3170 USD (2250 JOD)</p> <p>Media and social media = 1410 USD (1000 JOD)</p> <p>The total estimated budget = 11580 USD (36500 JOD)</p>
Timeframe	1 st and 2 nd Quarter 2023.
Performance Indicators	<p>Policy relating to single use plastic items.</p> <p>Number of environmentally friendly and cost-effective alternatives to plastic bags.</p> <p>Number of workshops to guide stakeholders to minimize or stop the use of plastic bags in Aqaba.</p>
Target	<p>One national study to discuss policy and alternatives to plastic bags.</p> <p>Policy on single use plastic items.</p> <p>Three workshops.</p>
Partners	JREDS, Local communities, Security sectors, Ministry of Environment and Ministry of Interior Affairs.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Technical Support.

Action VII: Supporting the implementation of the Waste Management Framework Law Number 16 of 2020 issued by Ministry of Environment.

The Ministry of Environment announced in July 2021 the start of the Framework Law for Waste Management No. 16 of 2020, regarding the indiscriminate disposal of waste in streets, public places, gardens, parks, religious and tourist sites, and public institutions.

Priority ranking	Very High
Tasks	1.Organizing a high-level seminar bringing together decision makers and the Royal Department for Environment Protection (Environmental Police) to discuss Waste Management Framework Law Number 16 and identify approaches to better enforce laws relating to waste management. 2.Involving the media in conveying awareness messages to citizens. 3.Raising the capabilities of regulatory institutions to ensure visitors comply with laws relating to solid waste.
National capacity to implement action	Yes
Training needs	Communication skills for the Royal Department for Environment Protection (Environmental Police), the Jordanian Navy, and Aqaba Marine Reserve team. English language (2 levels) courses for the Royal Department for Environment Protection (Environmental Police), the Jordanian Navy, and Aqaba Marine Reserve team.
Budget to complete action	High level seminar = 3500 USD (2500 JOD) Capacity building program = 10000 USD (7000 JOD) Total budget: 13500 USD (9500 JOD)
Timeframe	4 th Quarter of 2023 and 1 st Quarter of 2024
Performance Indicators	Number of high-level seminars. Number of capacity building programs. Number of articles published.
Target	One high-level seminar. Two capacity building programs. Four articles published annually.
Partners	Ministry of Environment, Media, Security sectors and the Royal Department for Environment Protection (Environmental Police), and Ministry of Interior Affairs.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Technical Support.

Action VII: Enforce the instructions regulating the circulation and handling of plastic bags in Aqaba .

Priority ranking	High
Tasks	<p>1.Develop a mechanism to ensure the enforcement of the instructions regulating circulation and handling of plastic bags No. (4) in the Aqaba Special Economic Zone Authority for the year 2021 issued by paragraph (B) of Article (5) from Aqaba Special Economic Zone Environmental Protection Bylaw and its amendments No. (21) for the year) approved by the Prime Minister to limit the use of the plastics in commercial markets in Aqaba.</p> <p>2.Find suitable alternatives to the use of plastic and provide them at reasonable prices for citizens.</p> <p>3.Evaluate the effectiveness of the regulation.</p>
National capacity to implement action	Yes
Training needs	Training in relation to this regulation.
Budget to complete action	Training in relation to this regulation = 2000 USD (1400 JOD)
Timeframe	4 th Quarter of 2023 and 3 rd 2024.
Performance Indicators	Training program relating to this regulation.
Target	At least one training program relating to this regulation in Aqaba.
Partners	Ministry of Environment, Security sectors and the Royal Department for Environment Protection (Environmental Police), and Ministry of Interior Affairs.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Technical Support.

Component 4:

Encouraging Public-Private-Partnerships

The objective of this component is to encourage public-private partnerships to address marine litter by removing, preventing and/or recycling marine litter in Jordan in a participatory way to achieve the goals of the NAP.

Stronger public-private partnerships can serve as an important vehicle to clean up or reduce marine litter, especially where businesses cooperate to address the pollution challenge.

Action I: Encourage private companies to take initiatives, such as a voluntary phase-out of single-use bags, water bottles and straws and other plastic items.

Priority ranking	High
Tasks	1.ASEZA must adopt the green growth and blue economy policy in all coastal investments and projects and urged those project proponents to adopt the blue flag and green key programs. 2.Promoting structural economic changes that would reduce the production and consumption of plastics, increase production of environmentally friendlier materials, and support the development of alternatives to plastics. 3.Promoting best practices along the whole plastics manufacturing and value chain from production to transport, such as aiming for zero loss of plastic. 4.Organizing training for establishments, hotels, and factories on ways to reduce the use of some types of plastics and ways to deal with them.
National capacity to implement action	Yes
Training needs	Training program “Best practices to reduce the use of some types of plastics”.
Budget to complete action	1000 USD (700 JOD)
Timeframe	2 nd and 3 rd Quarter 2023.
Performance Indicators	Number of training or capacity building programs. Number of environmental or sustainable initiatives adopted by different sectors.
Target	Two training programs and workshops annually. Two environmental or sustainable initiatives annually.
Partners	Ministry of Environment, Media, Ministry of Tourism, Private sectors, and Touristic Sectors.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Component 4 VII: Develop an award that PERSGA gives out on an annual basis to a company or NGO for outstanding contribution to the prevention or the removal of marine litter in the PERSGA region.

Action II: Involve a range of stakeholders (e.g., private individuals, NGOs, private companies) to implement actions associated with this NAP.

Priority ranking	Very High
Tasks	1.Create an approach that will facilitate stakeholder involvement in actions listed in this NAP. Stakeholders can be from the community or government. 2.Get approval from appropriate decision-makers to create the approach.
National capacity to implement action	Yes

Training needs	Training in creating an effective approach that will help facilitate stakeholder engagement in actions listed in the NAP.
Budget to complete action	10000 USD (7000 JOD)
Timeframe	3 rd Quarter of 2023.
Performance Indicators	An effective approach to facilitate stakeholder engagement in the actions listed in this NAP.
Target	Five types of different entities. Enroll 50 people from different entities in the training activities.
Partners	The Directorate of Education, the Tourism Directorate, JREDS, local communities, the Royal Department for Environment Protection (Environmental Police), the neighborhood committees, the Chambers of Industry and Commerce, governorate and the Decentralization Council.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Component 4 VII: Develop an award that PERSGA gives out on an annual basis to a company or NGO for outstanding contribution to the prevention or the removal of marine litter in the PERSGA region.

Action III: : Trial novel actions to prevent and or remove marine litter.

Priority ranking	High
Tasks	<ol style="list-style-type: none"> Promoting best practices along the whole plastic manufacturing and value chain from production to transport, such as aiming for zero loss of plastic into the environment. Enhance opportunities to recover plastic products for recycling and energy recovery, including: <ul style="list-style-type: none"> > Promoting structural economic changes that would increase recycling and reuse. > Improving the waste management systems of communities through the sharing of best practices as well as identifying and addressing loopholes that contribute to the generation of marine litter. Work with the scientific community to better understand and evaluate the scope, origins, and impact of and solutions to marine litter. Support research aimed at better understanding the impacts of plastics on the marine environment, to design new or improved green chemistry alternatives and to assess cost-effective production on a commercial scale.
National capacity to implement action	Yes
Training needs	N/A
Budget to complete action	7000 USD (5000 JOD)
Timeframe	3 rd and 4 th Quarter of 2023 and annually.
Performance Indicators	Number of meetings and workshops with different target groups. Number of initiatives related to previous tasks.
Target	Three training programs and workshops annually. One environmental or sustainable initiative annually.
Partners	Ministry of Environment, Media, Private sectors, and Touristic Sectors.

National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Component 4 III: Propose 'Flag-Ship Demonstration Actions' in the PERSGA region that have been successful at reducing the risk of marine litter entering the marine environment (e.g., phasing-out plastic bags) or resulting in the removal of litter from the environment (e.g., recycling strategy)

Component 5:

Removing Marine Litter

The objective of this component is to collect litter from the marine environment and dispose of the litter in the most environmentally appropriate way.

There is increasing concern about the extent and impact of plastic pollution in the oceans. Approximately 6,300 million metric tons of plastic waste have now been generated worldwide, and because collection and recycling facilities are unavailable or inadequate in most countries, up to 12.7 million tons are estimated to enter the ocean annually (Burt, et al. 2020).

Action I: Develop national strategies to encourage coastal landowners or managers (resorts, village councils, municipalities) to incorporate into their work plans the need to regularly collect and remove litter from their areas of operation.

Priority ranking	Very High
Tasks	1.The Aqaba Authority adopted the green growth and blue economy policy in all coastal investments and projects, and urged those project proponents to adopt the blue flag program. 2.Encourage coastal landowners and managers of municipalities to incorporate litter removal strategies into their own work plans. 3.Inform Aqaba Marine Reserve and ASEZA to get approval for clean-up campaigns
National capacity to implement action	Yes
Training needs	Training environmental supervisors in hotels on the application of environmental labeling standards.
Budget to complete action	Training = 4230 USD (3000 JOD)
Timeframe	Start from 3 rd Quarter of 2023 and end at 3 rd Quarter 2024.
Performance Indicators	Number of 'Blue Flag Beaches'.
Target	Two 'Blue Flag Beaches'.
Partners	Aqaba Marine Reserve, and Ministry of Tourism.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Component 5 IV: Develop guidelines for removing litter safely (by the collector) and cost-effectively (to a suitable disposal site or recycling plant). Component 5 V: Workshop to share ideas on how marine litter can be safely and cost-effectively removed from beaches in the PERSGA region.

Action II. Expand/continue undertaking annual beach and underwater clean-up campaigns.

Priority ranking	Very High
Tasks	1.Undertake beach and underwater clean-up campaigns on a regular basis. 2.Coordinate activities of national clean-up campaigns in parallel with annual international and regional initiatives.
National capacity to implement action	Yes
Training needs	N/A
Budget to complete action	Two days clean-up campaign for beaches and underwater annually: 7000 USD (5000 JOD)
Timeframe	4 th Quarter of 2023, 2024, 2025 and 2026.
Performance Indicators	Number of participants. Number of beaches and dive sites involved in clean up campaigns.
Target	One thousand participants. Litter removed from at least two beaches and two dive sites during campaigns.
Partners	JREDS, Aqaba Marine Reserve, dive centers, NGOs, UNEP, PERSGA, Students, and Local communities.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Component 5 IV: Develop guidelines for removing litter safely (by the collector) and cost-effectively (to a suitable disposal site or recycling plant). Component 5 V: Workshop to share ideas on how marine litter can be safely and cost-effectively removed from beaches in the PERSGA region.

Component 6:

Research and monitoring

The objective for this component is to undertake research to determine the source, density, and composition of marine litter in each PERSGA member country.

Action I: Expand the number of the Jordanian beaches where marine litter survey baseline has been established.

Priority ranking	Very High
Tasks	1.Preparing a list of Jordanian coastal locations where marine litter data should be collected and a list of sectors than can assist with this action. 2.Determining the mechanisms and procedures used to reach a comprehensive assessment of marine litter. 3.Organizing a series of workshops to identify potential research contributions from various sectors. 4.Determining roles and responsibilities for this action.
National capacity to implement action	Yes
Training needs	Training to monitor marine litter, classifying marine litter and determining its sources.
Budget to complete action	7000 USD (5000 JOD)
Timeframe	1 st Quarter of 2023 and ongoing.
Performance Indicators	Number of locations where baseline has been collected. Number of people and entities involved in data collection activities. Number of participants from the main sectors participating in training programs. Amount and quality of collected data from different sectors.
Target	Five types of research sectors. Enroll 100 people and entities in the training activities.
Partners	JREDS, the Royal Department for Environment Protection (Environmental Police), the neighborhood committees, the University of Jordan, the Chambers of Industry and Commerce, the governate and the Decentralization Council.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Component 6 I: Promote PERSGA's regional survey program to investigate the extent of marine litter accumulation on beaches in all member countries. Component 6 II Expand the regional survey program to investigate the types, sources, and extent of marine litter accumulation on the seafloor and, if practical, in the water column for all member countries. This will complement the program already in place to address litter on beaches. Component 6 III Develop a comprehensive manual on standardized protocols to evaluate marine litter in the following environments: seafloor (shallow and deep water); sea surface; in the water column; on beaches and areas immediately beyond beaches.

Action II: Regularly (1-2 years) re-survey beaches that have baseline data.

Priority ranking	
Tasks	<p>1. Determine the participating parties who will resurvey beaches where baseline is already been collected (see previous action). Participating parties could include diving centers, divers, eco-clubs, in addition to fishermen and other local communities.</p> <p>2. Determine the persons or entities that will assist in the training process for those participants who require training.</p> <p>3. Determine the training material or programs and the duration of each program (this could be done in collaboration with an established working committee).</p>
National capacity to implement action	Yes
Training needs	N/A
Budget to complete action	5000 USD (3500 JOD)
Timeframe	1 st Quarter of 2023 and ongoing.
Performance Indicators	<p>Number of participating parties and stakeholders.</p> <p>Number of training programs.</p>
Target	<p>Ten stakeholders.</p> <p>Five training programs.</p>
Partners	The Directorate of Education, the Tourism Directorate, JREDS, local communities, the Royal Department for Environment Protection (Environmental Police), the neighborhood committees, the Chambers of Industry and Commerce, the governorate and the Decentralization Council
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	<p>Component 6 I: Promote PERSGA's regional survey program to investigate the extent of marine litter accumulation on beaches in all member countries.</p> <p>Component 6 II Expand the regional survey program to investigate the types, sources, and extent of marine litter accumulation on the seafloor and, if practical, in the water column for all member countries. This will complement the program already in place to address litter on beaches.</p> <p>Component 6 III Develop a comprehensive manual on standardized protocols to evaluate marine litter in the following environments: seafloor (shallow and deep water); sea surface; in the water column; on beaches and areas immediately beyond beaches.</p>

Action III: Encourage and support local marine institutes and universities to undertake research to determine the direct and indirect ecological impacts of marine litter on marine organisms and habitats and the social and economic impacts of marine litter in the PERSGA region.

Priority ranking	Very High
Tasks	<ol style="list-style-type: none"> 1. Determine the participating institutes and universities. 2. Identification of research priorities. 3. Create synergies between different marine research institutes/universities through conducting workshops on marine litter research. 4. Develop a research monitoring program that will track marine litter spread and changes in the ecosystem as a result of marine litter.
National capacity to implement action	Yes
Training needs	Training on exchanging research experiences and promoting partnership between research institutions.
Budget to complete action	14100 USD (10000 JOD)
Timeframe	1 st Quarter 2023 and ongoing.
Performance Indicators	<p>Number of institutes and universities involved.</p> <p>Number of synergies between research institutions.</p>
Target	<p>Five sectors from the field of research.</p> <p>Two synergies between various research institutions.</p>
Partners	The Directorate of Education, the Tourism Directorate, JREDS, the Royal Department for Environment Protection (Environmental Police), the neighborhood committees, the Chambers of Industry and Commerce, the Governorate and the Decentralization Council.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	<p>Component 6 XII: Record and disseminate (to member countries) evidence of human health being compromised by marine litter.</p> <p>Component 6 XIII: Record and disseminate (to member countries) evidence of economic impacts from marine litter in the PERSGA region.</p> <p>Component 6 XIV: Analyze cost/benefits of all forms of litter recycling in member countries.</p> <p>Component 6 XV: Work with UN Environment or other international partners to integrate SDG Indicator 14.1.1 into an existing or future monitoring program.</p>

Component 7:

Capacity Building and Training

The objective for this component is identify capacity limitations and training needs to implement actions. To ensure the sustainability of the NAP, people from different parties must be prepared to implement the requirements of the NAP on a permanent basis. These people will be prepared through multiple training programs and capacity-building programs.

Action I: Develop and implement a list of priority training and capacity building needs for various sectors to assist them to implement the NAP.

Priority ranking	Very High
Tasks	<ol style="list-style-type: none">1. Identify training and or capacity building of those sectors that will implement different actions listed in the NAP.2. Design the training and capacity building programs for the target audience.3. Implement an awareness program to enhance understanding of marine litter pathways for a broad audience.4. Implement an awareness program to clarify preventive measures toward marine litter and facilitate the application of technical sectoral guidelines.
National capacity to implement action	Yes

Training needs	<p>Training needs: List of proposed training program that can be tailored for different stakeholders and sectors.</p> <p>Training to understand marine litter generation pathways, and their implications.</p> <p>Training on preventive measures towards marine litter and facilitating the application of technical sectoral guidelines.</p> <p>Training on preparing a questionnaire to measure change in awareness following dissemination of material to raise knowledge about marine litter.</p> <p>Training on the skills of choosing successful methods for raising awareness.</p> <p>Training program to acquire skills in the use of social media.</p> <p>Training program “best practices to reduce the use of some types of waste”.</p> <p>Cross-sector “soft skills” include Microsoft Office – basic skills, electronic archiving, language skills (English language - advance level), training in preparing and creating electronic questionnaires, proposals writing and fund raising skills, and stakeholder analysis and facilitation/communication skills.</p> <p>Advanced marine ecology and biodiversity, marine waste recycling and management, EMAS training, using modern skills and techniques for litters removing, and participatory systems management skills and partner analysis.</p> <p>Integrated conservation and development planning/project approaches and techniques; participatory processes.</p> <p>Training in writing or reviewing environmental legislation and regulations.</p> <p>Advanced skills - implementing marine spatial planning (including methods for conserving and monitoring sensitive environmental areas and managing activities in sensitive environmental sites).</p> <p>Socio-economic and cultural baseline data collection.</p> <p>Introduction to basic data analysis (numerical / statistical).</p> <p>Advance skills in monitoring.</p> <p>Training in obtaining marine litter baseline using a standardized methodology.</p> <p>Intermediate GIS skills (map habitats and species).</p> <p>Diving instructor courses (PADI).</p> <p>Electronic and digital marketing with the best-established practices.</p> <p>International experience - Learning about previous experiences and visiting some existing marine reserves.</p> <p>Training on programs for designing educational materials (such as publications and posters) in a professional manner and according to the most recent programs currently known.</p> <p>Training in filming skills, preparation and production of video films, training in preparing films and educational materials according to modern info-graphic programs.</p> <p>Training in preparing and designing websites.</p> <p>Press reporting skills.</p> <p>Methods to convey awareness and to mobilize support.</p>
Budget to complete action	To be listed in work plan.
Timeframe	3 rd Quarter of 2023..

Performance Indicators	Number of participants/entities enrolled in the educational program. Number of participants from the main sectors in the training program. Qualitative output of preventative measures towards marine litter. Number of training programs implemented.
Target	Ten entities participated in the training program. Two-hundred people enrolling in training activities. Ten training programs fully implemented.
Partners	The Directorate of Education, the Tourism Directorate, JREDS, local communities, the Royal Department for Environment Protection Environmental Police), the neighborhood committees, the Chambers of Industry and Commerce, governorate and the Decentralization Council, Private sector, and all related stakeholders.
National Strategies	Currently, there are no additional national strategies relating to this action.
PERSGA Input	Component 7 II: Develop and provide regional training courses on marine litter for member countries that will help them implement their NAPs. Component 7 III: Review marine litter training courses worldwide for potential use in the PERSGA region.

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