



Regional Organization for Conservation of the Environment of the Red Sea and Gulf of Aden

Development of the Marine Litter Action Plan for the Red Sea and Gulf of Aden

Overview on the Coastal Marine Litter in PERSGA region

- ❑ The region has one of the world's busiest shipping lanes.
- ❑ A broad range of marine litter occurs in the region similar to other coasts with plastic as the common type.
- ❑ Some marine litter types like fireworks, toys, ect.. are not common in the PERSGA region.
- ❑ Weak public awareness of the impact of marine litter;
- ❑ Weak enforcement of regulations to control ML
- ❑ Inadequate solid waste management and regulations allows marine litter problem to escalate.

Regional Program of Action for the Protection of the Marine Environment from Land-Based Activities (RPA)

❑ **Legal Basic : PERSGA Protocol Concerning Protection of the Marine Environment from Land-Based Activities in the Red Sea and Gulf of Aden (2005)**

Article 7

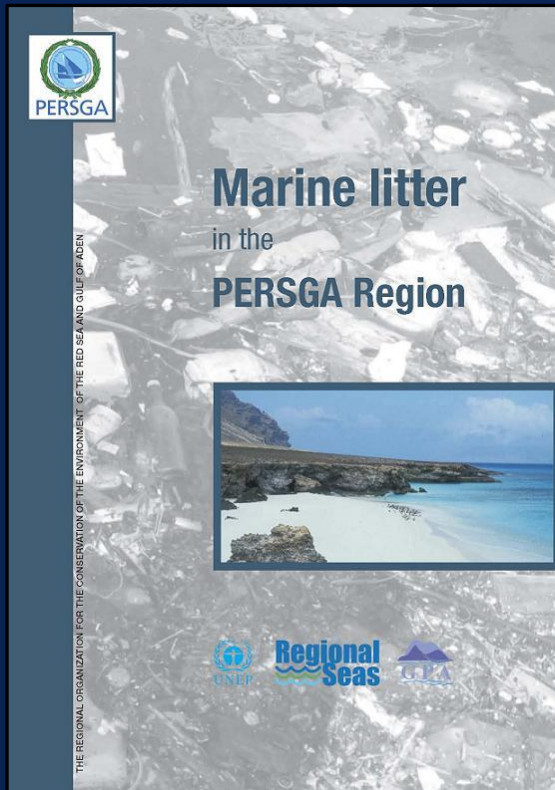
Management of Solid Wastes

Parallel to the Global Programme of Action, wastes or marine litter dumped in the coastal zone should be taken into consideration to avoid the risks imposed on marine life.

Therefore, the Contracting Parties, commit themselves as follows:-

- Taking all appropriate action to ensure elimination, to the greatest extent possible, of the solid wastes and litter reaching the marine and coastal environment by prevention or reduction of solid waste generation and by introduction of enhancements to waste treatment, including methods of collection and recycling and final disposal thereof.
- Cooperating with each other.....

Developed Marine litter Sustainable Management Framework with support of RSP/UNEP (2007-2008)



Regional Meeting to Discuss the Marine Litter Framework Document
Hurgadah, Egypt, April, 2007

PERSGA Marine Litter Initiative

Awareness and Beach Clean-Up Campaigns in Yemen with support of RSP/UNEP in 2008 and slogan “Clean up Our Seas”



الهيئة الإقليمية للمحافظة على بيئة البحر الأحمر وخليج عدن
The Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden

نظفوا بحارنا
Clean up Our Seas

نظفوا بحارنا، شعار الهيئة لعملة تنظيف البحر الأحمر وخليج عدن من النفايات في إطار تنفيذ حملة العمل الإقليمية لإدارة النفايات في المناطق الساحلية.

Clean up Our Seas It is the slogan of the campaign of PERSGA to clean up the Red Sea and Gulf of Aden from litter within the framework of the Regional Action Plan for Sustainable Management of Marine Litter in the PERSGA Region.



PERSGA Marine Litter Initiative

Awareness and Beach Clean-Up Campaigns in Djibouti with support of RSP/UNEP in 2008 and slogan “ *Clean up Our Seas*”



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نظفوا بحارنا
Clean up Our Seas



نظفوا بحارنا : شعار الهيئة لحملة تنظيف البحر الأحمر وخليج عدن من النفايات في إطار تنفيذ خطة العمل الإقليمية لإدارة النفايات في المناطق الساحلية.

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Underwater Clean-Up Campaign in Jeddah, Saudi Arabia in 2008 in cooperation with a Dive center



Awareness and Clean-Up Campaign in Salif, Yemen in 2010 in cooperation with the local municipality and coast guards



16/02/2010

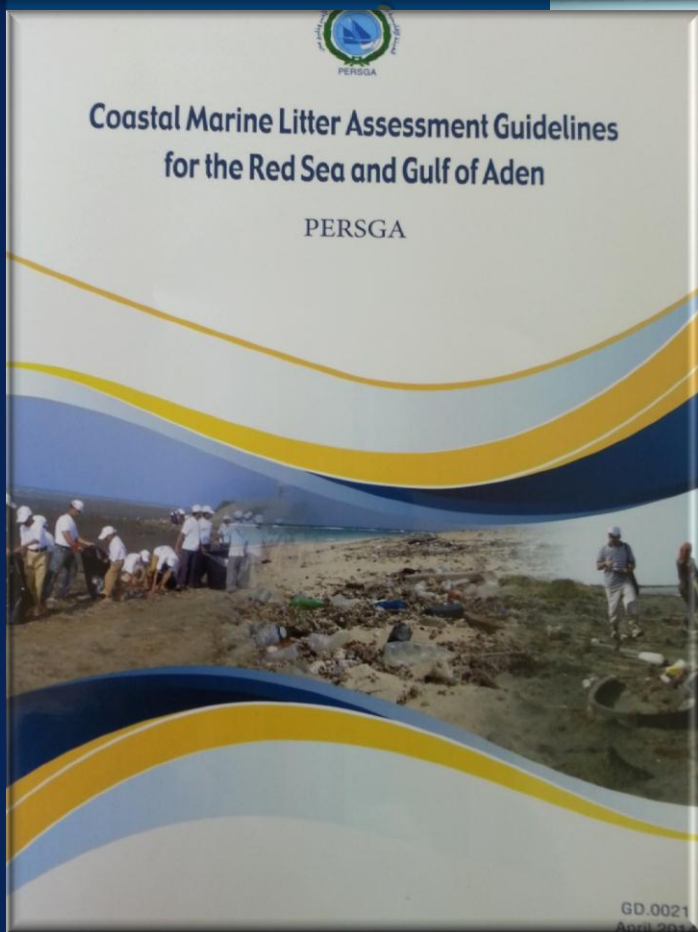


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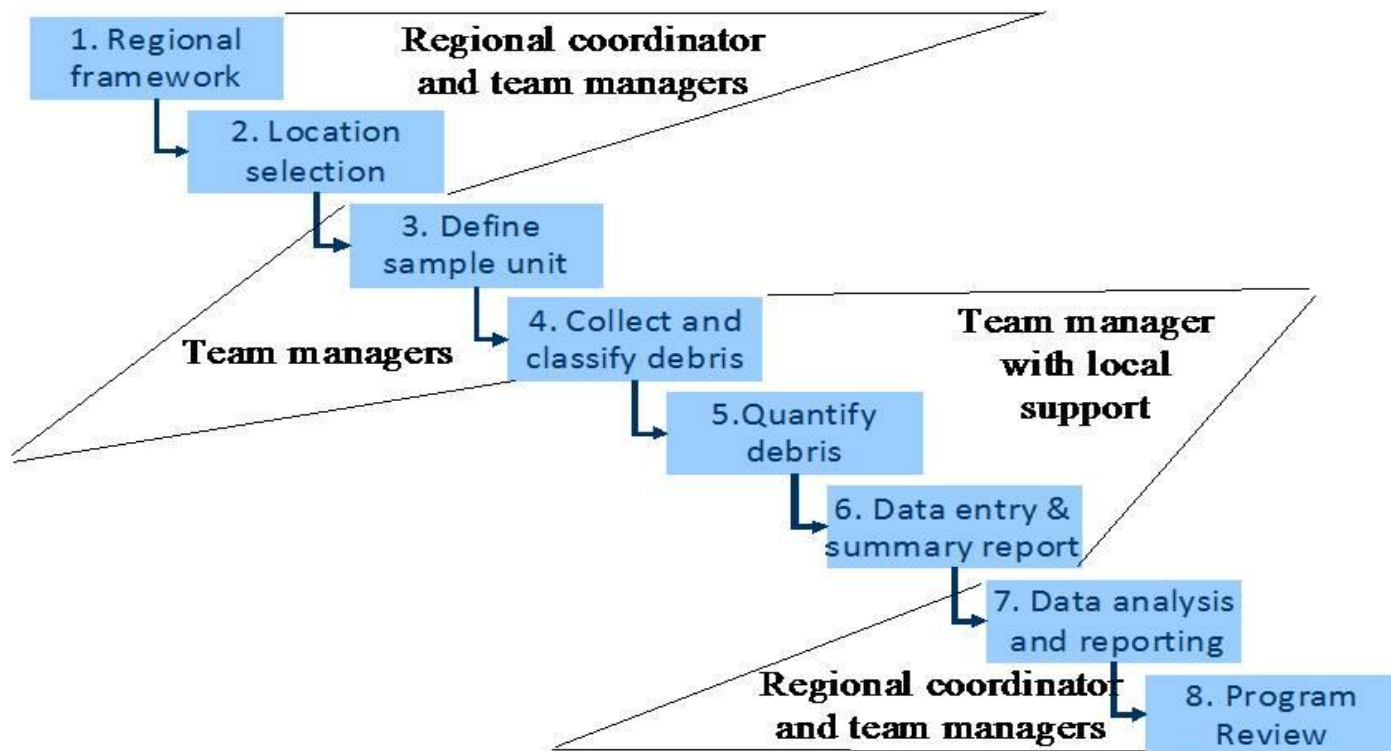
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Training Workshop on Assessment and Management of Marine Litter 6-8 February 2012. PERSGA Headquarters, Jeddah, Saudi Arabia



Developed a Coastal Marine Litter Assessment Guidelines for the Red Sea and Gulf of Aden, produced in 2014

Framework for developing beach litter assessment capability (PERSGA, 2014)



Assessment Methods:

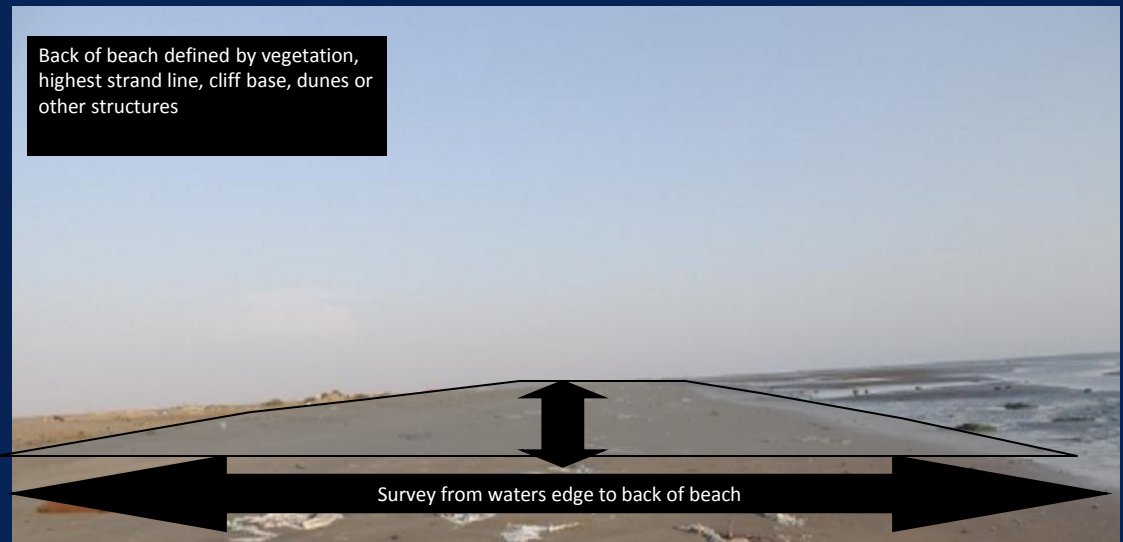
- **Baseline Visual Beach Litter Assessment**
- **Rapid Beach Litter Assessment**
- **Comprehensive Beach Litter Assessment**

Some Litter Categories



Area measurement of a beach bite with litter

Back of beach defined by vegetation, highest strand line, cliff base, dunes or other structures



Surveys for Coastal Beach Assessment in the Region 2012



Yemen



Sudan



Jordan



Djibouti

Different types of beach profile in the PERSGA region: A = Concave, B = Convex, C = tiered and D = linear.(PERSGA, 2014)



Overview on the Survey Assessment used in the region

- Coordinated and implemented with the focal points
- Conducted in April-June, 2012
- More than 100 sites studied in the four countries, documented with photos and coordinates for each site.

Main Objectives of the Survey

- Knowing the status of the coastal marine litter in the region;
- Identifying the litter categories and sources;
- Setting 2-6 priority sites from each member country for a regional monitoring program
- Assisting member countries in management of marine litter

The Method Used for the Assessment Surveys

Baseline Visual Litter Assessment : Percentage coverage, litter categories, measuring width and length of the site covered with litter, site coordinates.



Team members measuring the width and length of a beach site in the region

Scale of Marine Litter Coverage

% Coverage	Scale
<5%	1: Very Low
5%-10%	2: Low
>10%-25%	3: Medium
>25%-50%	4: High
>50%-75%	5: Very High
>75%	6: Extremely High

Datasheet used for the B

Country: _____ **Date:** _____
Data Collected by: _____ **Taken Pictures Serial No:** _____
Site No: _____ **Name/Location:** _____
Nearest Community: _____
Coordinates N: _____ E: _____

Beach Profile Type	Beach Average Width (m)	Length of beach (m)	% Cover of litter	%Cover of Plastic litter	Common litter Categories

Remarks: _____

Examples of sites with 50-75% coverage of litter and land-based sources in the region-based on the Survey Assessment



Common litter category: Plastic bottles

Examples of sites with $>75\%$ coverage of litter and land-based sources in the region-based on the survey assessment



Common litter category: Plastic sheets

Examples of sites with 25%-30% coverage of litter and sea-based sources the region



Common litter category: Plastic bottles

- Example of results
- Compressive Beach Litter Assessment

Item code (standard list)	Description	Count (# items)	Weight (kg)
PL02	Plastic bottles small	20	0.86
PL03	Large bottles, 2 stroke oil containers	5	0.67
GC04	Light globes	4	0.2
PC04	Paper trays	10	0.35
PL19.1	Vegetable bags	3	1.8
PL19.2	Mussel bags	3	1.8

Note the subcategories for litter code PL19 (shaded).



National Workshop on survey result of coastal marine litter in the Red Sea Region of Yemen. Hodeidah, April 2014.



National Workshop on survey result of coastal marine litter in Djibouti. Djibouti, August 2014.



Steps Forward

- ❑ Conduct baseline visual beach surveys for coastal marine litter in Saudi Arabia and Egypt.
- ❑ Organize a series of national training workshops on using the Guidelines
- ❑ Develop a regional coastal marine litter monitoring program, including clean up campaigns and awareness programs.
- ❑ Applying the comprehensive coastal marine litter assessment method during the monitoring program.



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Thank You...

