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Horizon2020

Mediterranean Hot Spots Investment Programme (MeHSIP)

MENA Countries NAPs Analysis

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on behalf of the
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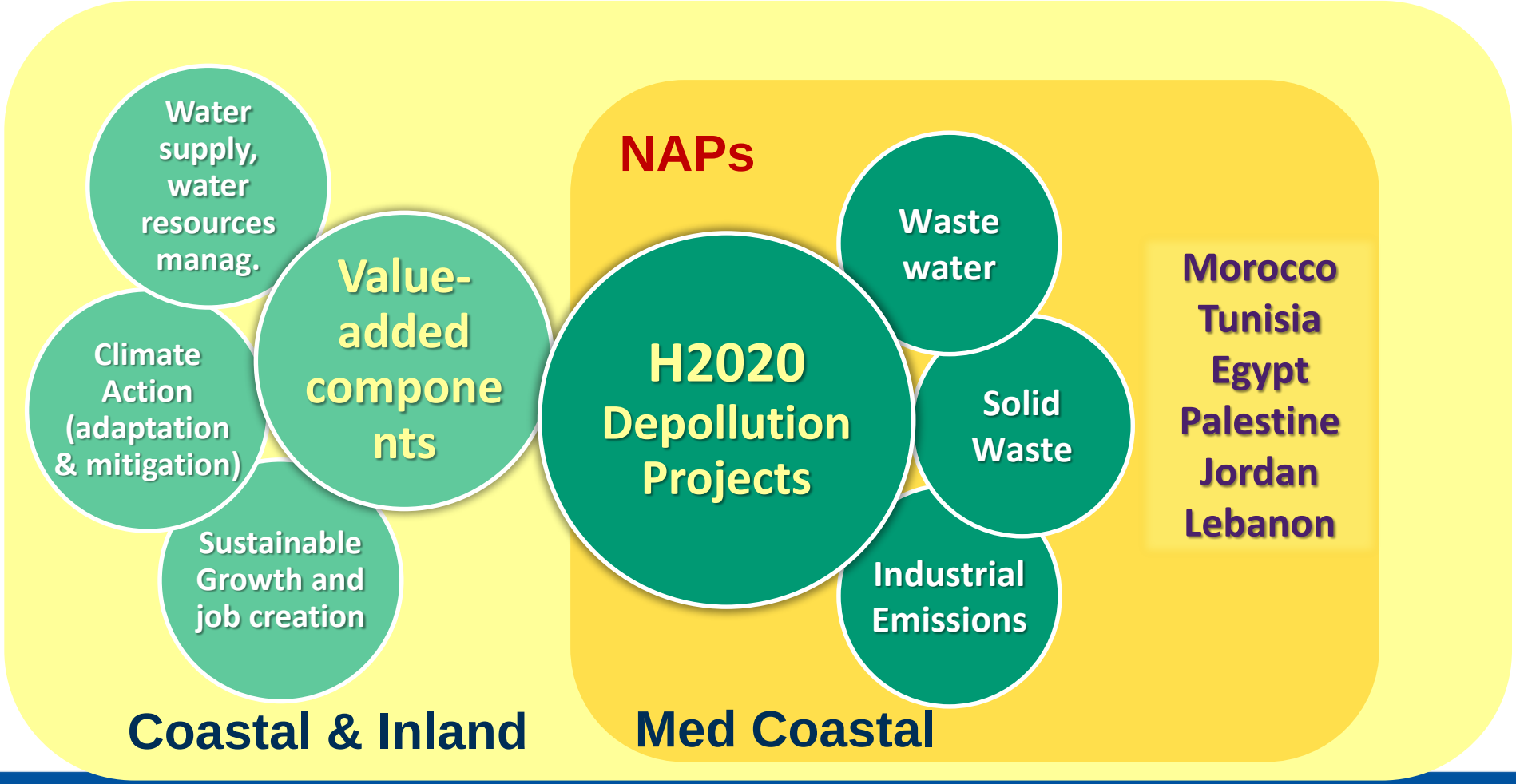
MeHSIP Extended Scope



MeHSIP role in the NAP 2015 process

- **Project fiche**
  - MeHSIP prepared a NAP Project fiche in coordination with UNEP/MAP.
  - The Fiche was distributed to all experts and used to describe the investment measures identified in the NAPs.
- **Follow-up at country level**
  - MeHSIP local experts have closely coordinated with NAP Focal Points and Country Experts in MENA region to discuss the identified measures and frame the identified investments
  - Quality of cooperation variable from country to country

General Analysis MENA NAPs

- **Multiple pollution sources investigated, e.g. industries, agriculture, municipalities**
- **Scoring of priority measures not always reflecting real government priorities**
- **Often a mix of measures is presented ranging from:**
  - Preliminary studies
  - Policy / regulatory changes
  - Capacity Building / TA
  - Investment projects
- **Limited amount of project fiches elaborated**
- **Many investments require substantial upstream preparatory work (not in the hands of donors or other institutions)**

Analysis NAP Jordan

- **3 hotspots in Amman-Zarqa river basin, (other hotspots excluded):**
  - A: Seel Al-Zarqa River near Russayfeh and near Hashimeyeh and
  - B: Halabat area
- **Main pollution sources**
  - Industries (untreated wastewater and waste) and
  - Agricultural (pesticides and fertilisers)
- **GAP analysis was done for different areas (institutional, legal etc.)**
- **Domestic wastewater is already largely treated**
- **Proposed measures (4 project fiches)**
  - Industrial wastewater treatment plants
  - Collection and treatment of (hazardous) waste
  - Awareness and monitoring programs
- **Mainly ownership within MoE**

Analysis NAP Palestine

- **5 hotspots:**
  - A: Gaza
  - B: Jenin, Tulkarm and Qalqilya
  - C: Ramallah
- **Main pollution sources**
  - Domestic wastewater and waste
  - Industries (untreated wastewater and waste) and
  - Agricultural (illegal pesticides and fertilisers)
- **Proposed measures (1 project fiche)**
  - (Industrial) wastewater treatment plants
  - Collection and treatment of (hazardous) waste
  - Awareness and monitoring programs
- **No capacity for loans, less possibilities for grants**

Analysis NAP Egypt

- **8 hotspots:**
  - A: Lake Maryut, Abu Qir Bay, Lake Manzala
  - B: El Mex Bay, Kitchener Drain
  - C: Marsa Matruh, Marina City and Lake Bardawil in Sinaï
- **Main pollution sources**
  - Domestic wastewater and waste
  - Industries (untreated wastewater and waste) and
  - Agricultural (illegal pesticides and fertilisers)
- **Proposed measures**
  - Depollution of agricultural drains
  - (Separate) Collection, treatment and reuse of wastewater and stormwater
  - Domestic and hazardous waste collection and treatment
- **Large areas involved, large investments required, phasing of measures**

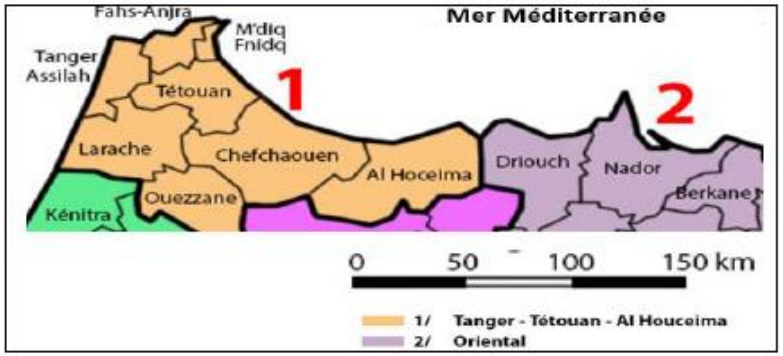
NAP Egypt: Multi-dimensional depollution projects

How to stabilise project pipelines?

- Water sector reform
- High-jacked pipeline
- No feedback on priorities in the pipeline
- Project scope and boundaries
- Not enough projects for all donors

Analysis NAP Morocco

- **2 hotspots (zones sensibles):**
  - Tanger
  - Tétouan
- **Main pollution sources**
  - Wastewater (sludge)
  - Industrial contaminants (Hg)
  - Solid Waste (uncontrolled dumps, marine litter)
- **Proposed measures**
  - Sludge management
  - Wastewater treatment plants for villages < 2000 inhabitants
  - Rehabilitation of dump sites
  - Change of industrial process to eliminate Hg emissions
- **Limited appetite for the Gov. of Morocco to borrow**
- **Many concessions for pubic services in place (SW and WW)**



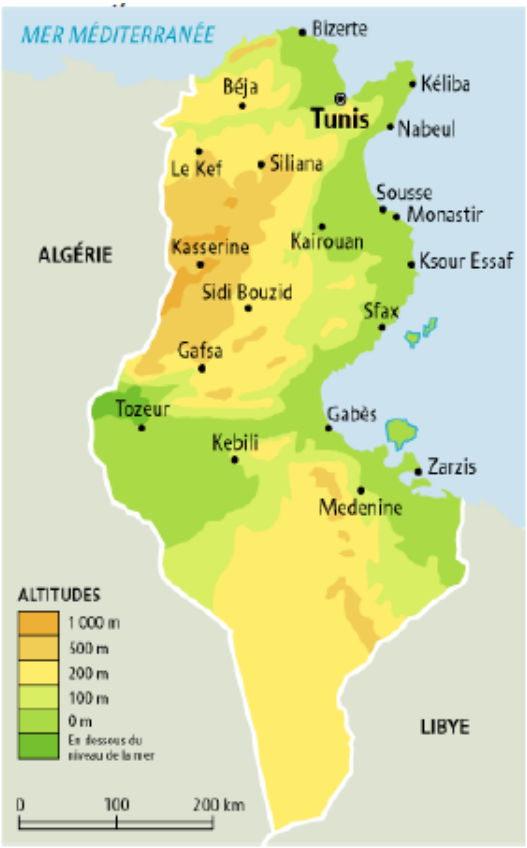
NAP Marocco: Hg related measures

How to best combine different measures ?

MEASURES	TYPE	SCOPE
• Prendre une **décision administrative** pour la fermeture de l'unité de Chlore-alcali	**Policy**	**Local**
• Elaborer une **étude de faisabilité** sur le changement de technologie pour l'unité de chlore alcali	**Studies**	**Local**
• Elaborer une **étude de décontamination** du site de l'unité de chlore alcali en cas de changement de la technologie ou de fermeture	**Studies**	**Local**
• **Mettre en oeuvre** les actions préconisées par le plan de décontamination du site de l'unité de chlore alcali	**Investment**	**Local**
• Mettre en place une **filière de collecte** et d'élimination des déchets contenant du Hg et des filières pour le recyclage des déchets valorisables (Batteries usées, déchets plastiques, pneus usés, etc.)	**Policy/CB**	**National**
• **Mettre en oeuvre** les actions préconisées par l'étude de contamination des sites par le Hg	**Investment ?**	**National**
• Mettre en place un **comité de suivi** de la décontamination des sites par le Hg.	**Policy**	**National**

Analysis NAP Tunisia

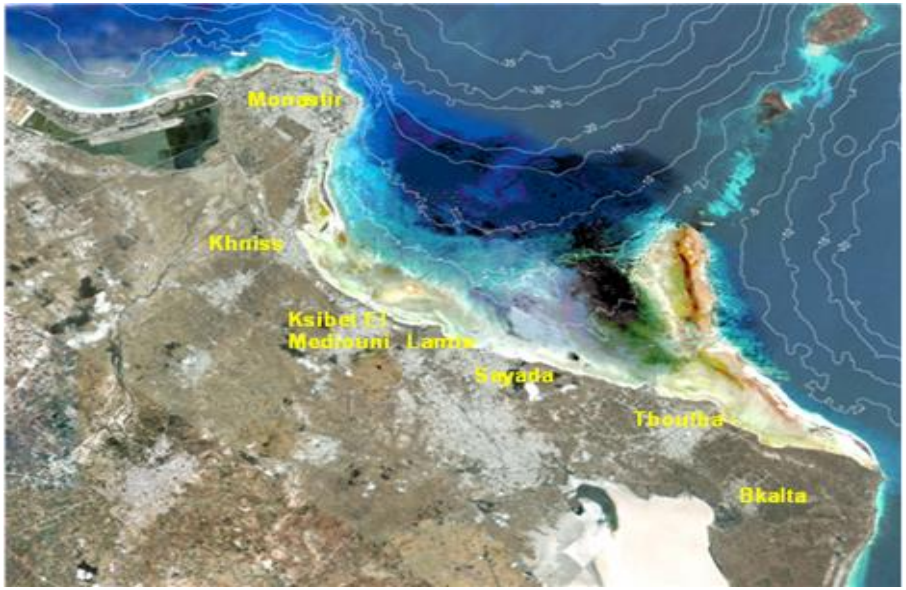
- **7 hotspots:**
  - Le Lac De Bizerte
  - Le Golfe De Tunis
  - Sousse-sidi Abdelhamid
  - La Baie De Monastir
  - La Zone Sfax Sud
  - Golfe De Gabes- Ghannouch
  - Djerba – Souk Guebli Midoun – Houmt Souk
- **Main pollution sources**
  - Wastewater
  - Industrial emissions
  - MSW and Industrial Waste
- **Proposed measures**
  - Large depollution investments (limited detail) proposed for each Hot Spot
  - At least three of the investments have been financed and are on-going



NAP Tunisia: Integrated depollution projects

Why are priority prjects on hold?

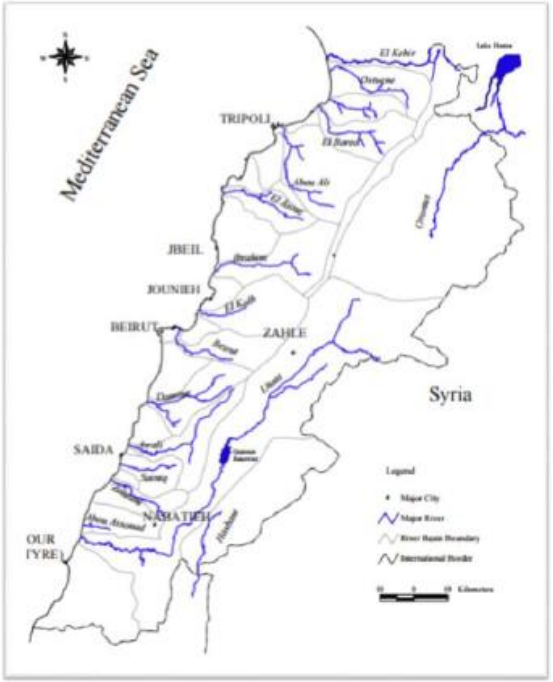
Projet de réhabilitation de la Baie de Monastir



Integrated depollution of Sfax southern coast

Analysis NAP Lebanon

- **Hotspots:**
  - 8 Priority Hot-Spots (Large cities like Beirut, Tripoli)
  - 14 Hot Spots (Smaller towns and cities)
  - 1 Potential Hot-Spot (Sour)
- **Main pollution sources**
  - Wastewater
  - Industrial emissions
  - MSW and Industrial Waste
- **Proposed measures**
  - Eutrophication (urban WW and Industrial sources)
  - Waste (municipal and marine litter)
  - Contaminants (Hazardous waste and chemical poll.proposed for each Hot Spot
- **Refugees situation analysed and accounted for**



NAP Lebanon: Industrial depollution

How to devolop project concepts into investments?

Depollution of industrial zone within Ghadir river area in Beirut (Zone B)

- Detailed baseline assessment of the Al-Ghadir drainage area:
  - Land-use and baseline environmental conditions,
  - Types and mapping of industries,
  - Point sources of pollution
  - Development of program of interventions to address pollution
- LEPAP Project

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Selected list of projects targeting NAP Hot Spots

EGYPT (160M€)

WW EXPANSION FOR KAFR EL SHEIKH GOVERNORATE (LAKE BURULLUS)

Main Objectives:

- Improving the sanitation, environment, quality of life and health of around 470,000 people.
- Reduction of pollution of the Rosetta branch (Nile) and Lake Burullus.
- Promote development in Lake Burullus area, with special reference to expansion in fisheries and agriculture as well as tourism.

NAP relevance	Project part of NAP 2005
Preparatory TA cost	0.9 M€
Investment cost unlocked	160 M€

Infrastructure Investment:

- Wastewater collection system serving 79 villages.
- Extension of 3 WWTPs
- Build 2 New WWTPs

TUNISIA (80M€)

Integrated pollution reduction of Lake Bizerte

1. Holistic vision integrating all sources of pollution at the watershed level;
2. Support to the definition of a governance structure and participatory approach;
3. Rehabilitation and extension of WW networks and 3 WWTP
4. Remediation intervention on the dump site of M. Bourguiba (urban and industrial solid waste)
5. Reduction of liquid and aerial pollutants emission loads for 3 industrial units (El Fouladh, STIR et SCB)

NAP relevance	Project part of NAP 2005
Preparatory TA cost	1.1 M€
Investment cost unlocked	80 M€

EGYPT Pipeline

NAP Investment Measures on MeSHIP Pipeline	Sector	Status
Kitchener Drain Investment Project	MS	PFS on-going
Alexandria West WWTP Extension	WW	FS to start Q4 2016
Rehabilitation of several WWTPs and WTPs	MS	Scoping
Depollution of Bahr al Baqar drain	MS	Scoping
Alexandria Hazardous Waste Management Project	SW	Scoping

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Egypt

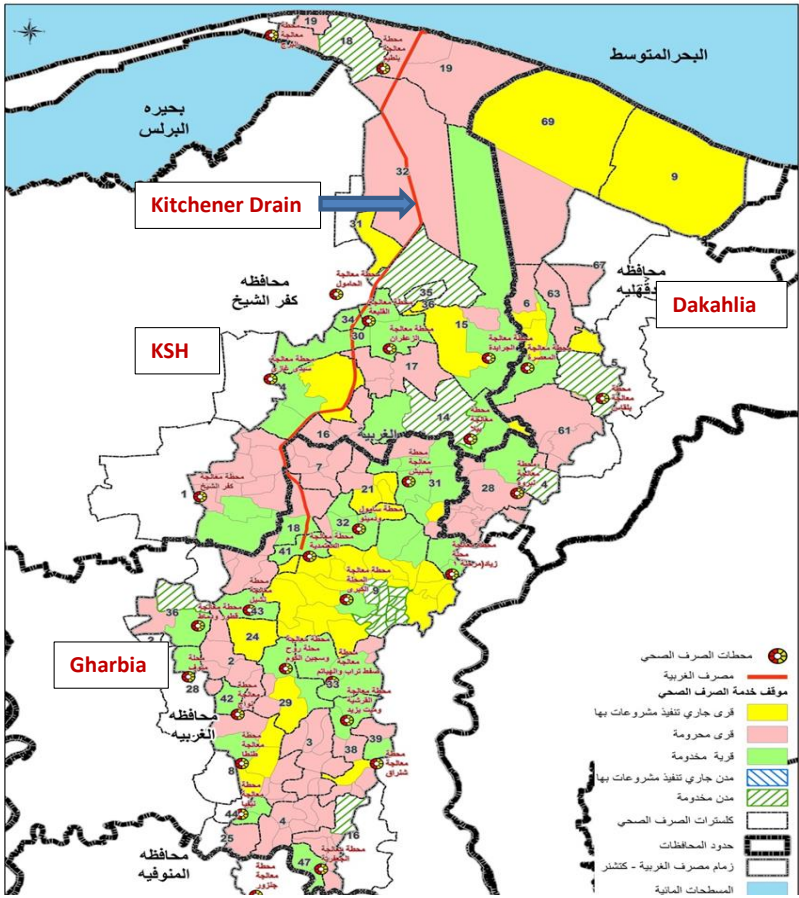
Kitchener Drain

Rationale:

- Depollution of Kitchener drain catchment area discharging to Mediterranean Sea.
- The water is used for irrigation.
- Kitchener drain is collecting domestic and industrial wastewater as well as drains agricultural areas. It is also a dumpsite for all kinds of waste.
- The hydraulic conditions need to be improved.

Scope of work:

- Wastewater and waste collection and treatment systems in 3 Governorates.
- Remodelling of Kitchener drain and its branches (including Omar Bek).



Jordan Pipeline

NAP Investment Measures on MeSHIP Pipeline	Sector	Status
Zarqa industrial WWTP	IE	Scoping

LEBANON Pipeline

NAP Investment Measures on MeSHIP Pipeline	Sector	Status
Saida WWTP and network Extension	WW	FS to start Q4 2016
Closure and rehabilitation of Tripoli MSW dump-sites (Tripoli and others)	SW	Scoping
Rehabilitation and expansion of the sewer network covered by the Tripoli STP	WW	Scoping
Preparation of an industrial pollution abatement program in the Al-Ghadir drainage area	IE	On-hold

MOROCCO Pipeline

NAP Investment Measures on MeSHIP Pipeline	Sector	Status
Changement de la technologie et décontamination de l'unité de chlore-alcali (Tétouan)	IE	Scoping
Mettre en place 5 projets de valorisation des boues (Tanger, Melloussa, Fnideq, Nador et Al Hoceima)	WW	Scoping
Mise en place de 5 nouvelles décharges contrôlées et la fermeture de 30 décharges sauvages	SW	Scoping
Assainissement villes <2000 habitants	WW	Already funded under PNA (AfD, EIB)

TUNISIA Pipeline

NAP Investment Measures on MeSHIP Pipeline	Sector	Status
Projet de valorisation des déchets ménagers (Djerba)	SW	TA on-going
Unité de déchets dangereux (Bizerte)	SW	Scoping
Dépollution Mercure et mise à niveau de la SNCPA	IE	Scoping
Réhabilitation de la baie de Monastir	MS	On-hold
Dépollution intégrée Sfax Sud	IE	On-hold
Dépollution industrielle dans le BV de Oued Hamdoun (Sousse)	IE	On-hold
MEP du projet de transfert des EUT du Grand Tunis vers les zones de l'intérieur	WW	On-hold

Solid Waste Management in Djerba

Objectives:

- Provide advice to ANGED on the definition of a suitable PPP framework for MSW Management
- Support ANGED in the preparation of tender documents for a concession for the collection, transfer, treatment and final disposal (landfilling) of MSW on the island of Djerba

Scope of work:

- Launch the first SW concession in Djerba as a pilot case study
- Define a MSW investment package for donor funding and identify opportunities for further private sector involvement

Conclusion MeHSIP follow-up

- **Egypt:** NAP shows many multi-dimensional depollution projects involving different Ministries
- **Jordan:** NAP investment projects not supported by MOPIC
- **Palestine:** NAP shows good possibilities to include CB with the investment projects
- **Morocco**: Limited scope for government borrowing for environmental projects, good opportunities to combine CB/Investment
- **Tunisia:** NAP not adding new elements to on-going efforts
- **Lebanon**: Complex institutional framework delaying decisions, good opportunities to combine CB/Investment

General Conclusion

- **Reality check** for all projects in the NAPs is essential
- Many aspects fall **outside of control** of (well meaning) donors, international organisations etc.
- Maximise **synergy** between programmes/initiatives working on the ground
  - Analyse needs project by project
  - Assess available tools and funds
  - Determine competence/responsibilities along the project cycle
  - Structure interventions (with a long term view)

Thanks for your kind attention !