

Ocean Governance Capacity building needs Pakistan Perspective

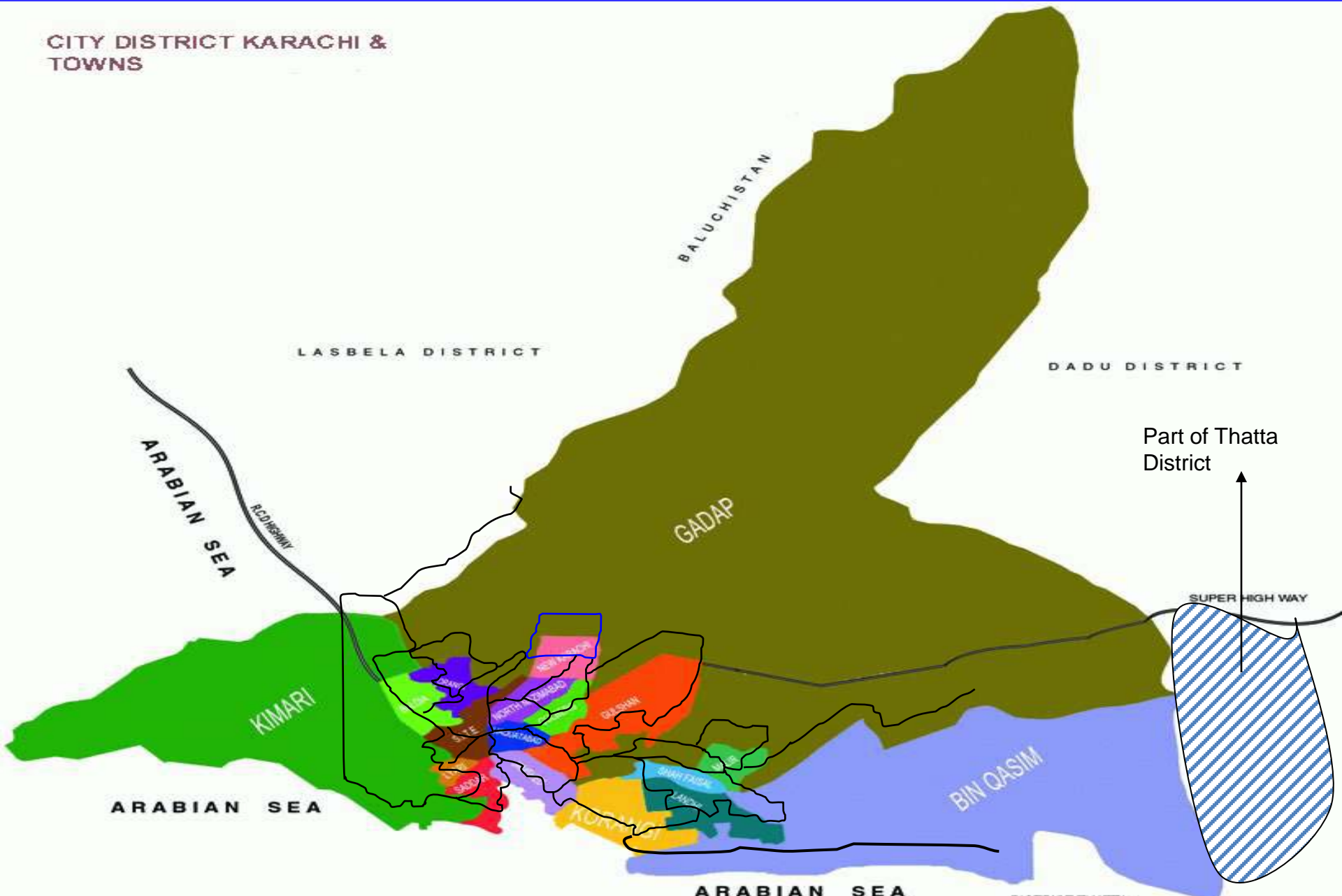
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MAP OF KARACHI DISTRICT

CITY DISTRICT KARACHI &
TOWNS



The Core Issues

- ❖ **Karachi** the largest city of Pakistan with an estimated population of around 22 million.
- ❖ The city is expanding unplanned both vertically and horizontally.
- ❖ Karachi have undefined boundaries and within the metropolitan area of command many agencies are working.
- ❖ Lack of interdepartmental communication and inability to sense the gravity of the situation and understanding of the repercussion..

Contd.

- Lack of interdepartmental communication and inability to sense the gravity of the situation and understanding of the repercussions of ineffective administration and planning.
- The boundaries of Karachi are undefined and with the recent influx of population has put many departments under tremendous pressures.

Contd.

- Water being the lifeline has been given priority to meet the water demand in past. The Sewerage sector remains neglected sector for years and no development has been observed .
- The sewerage generation continue to increase with addition of the water in system.
- Domestic and industrial waste results in creating unhygienic conditions not only at the coast but within the city.

KARACHI

THE LARGEST METROPOLIS OF PAKISTAN

THE PRESENT SITUATION



Discharging Untreated Sewage into The Sea . The beach is being converted into a large blackish stinking sewage pond



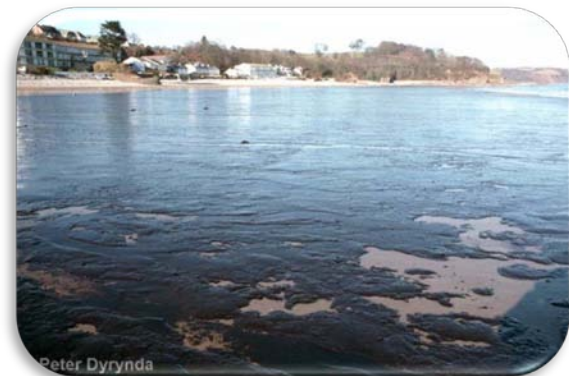
REASONS FOR POLLUTION



Serious lack of consciousness
about marine pollution in
Pakistan



Inadequate disposal of untreated
industrial effluents





REASONS FOR POLLUTION



Domestic sewage into shallow seawater off large coastal dwellings

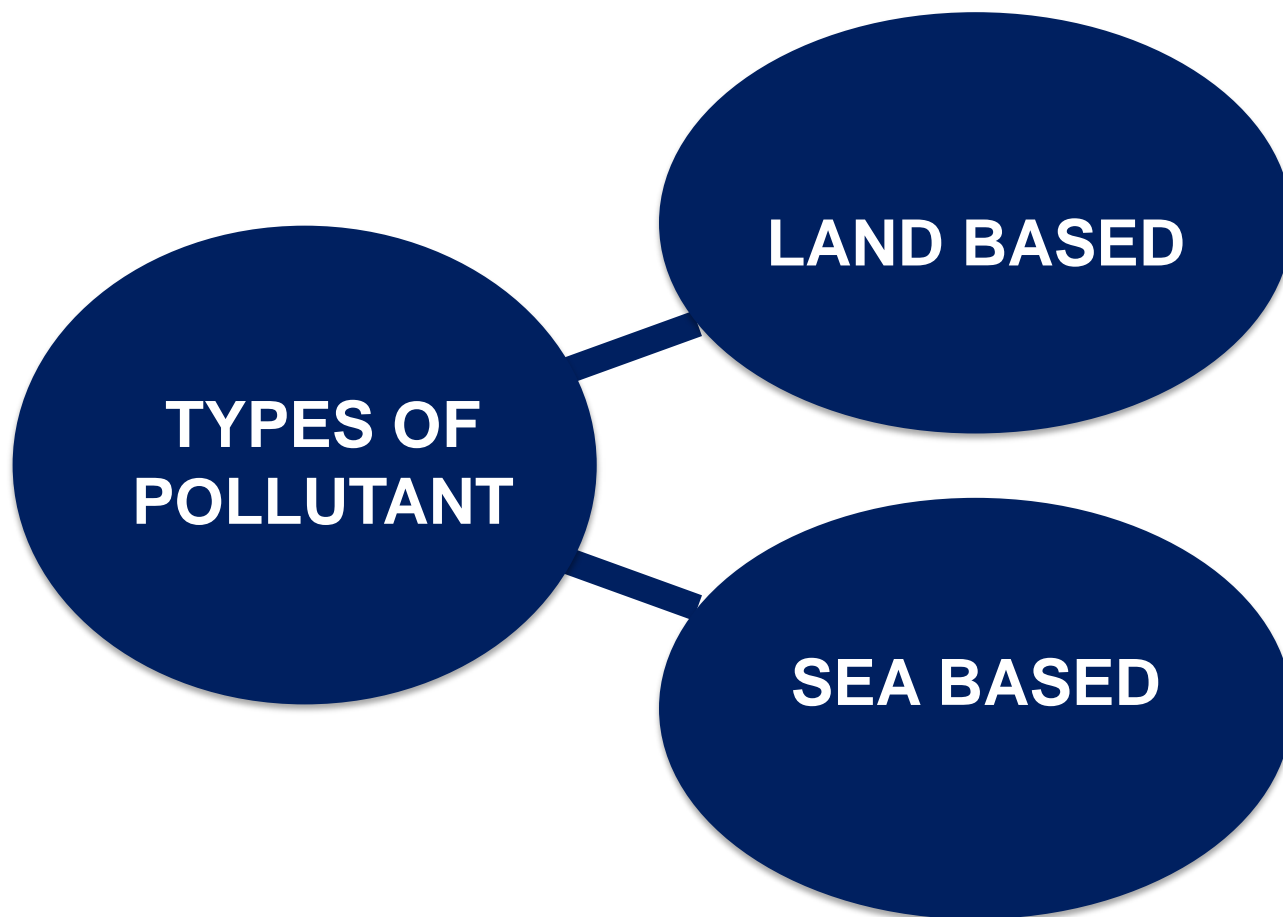


Significant degradation of quality of seawater damaging ships and crafts





REASONS FOR POLLUTION



IRAN

745 KM

PAKISTAN

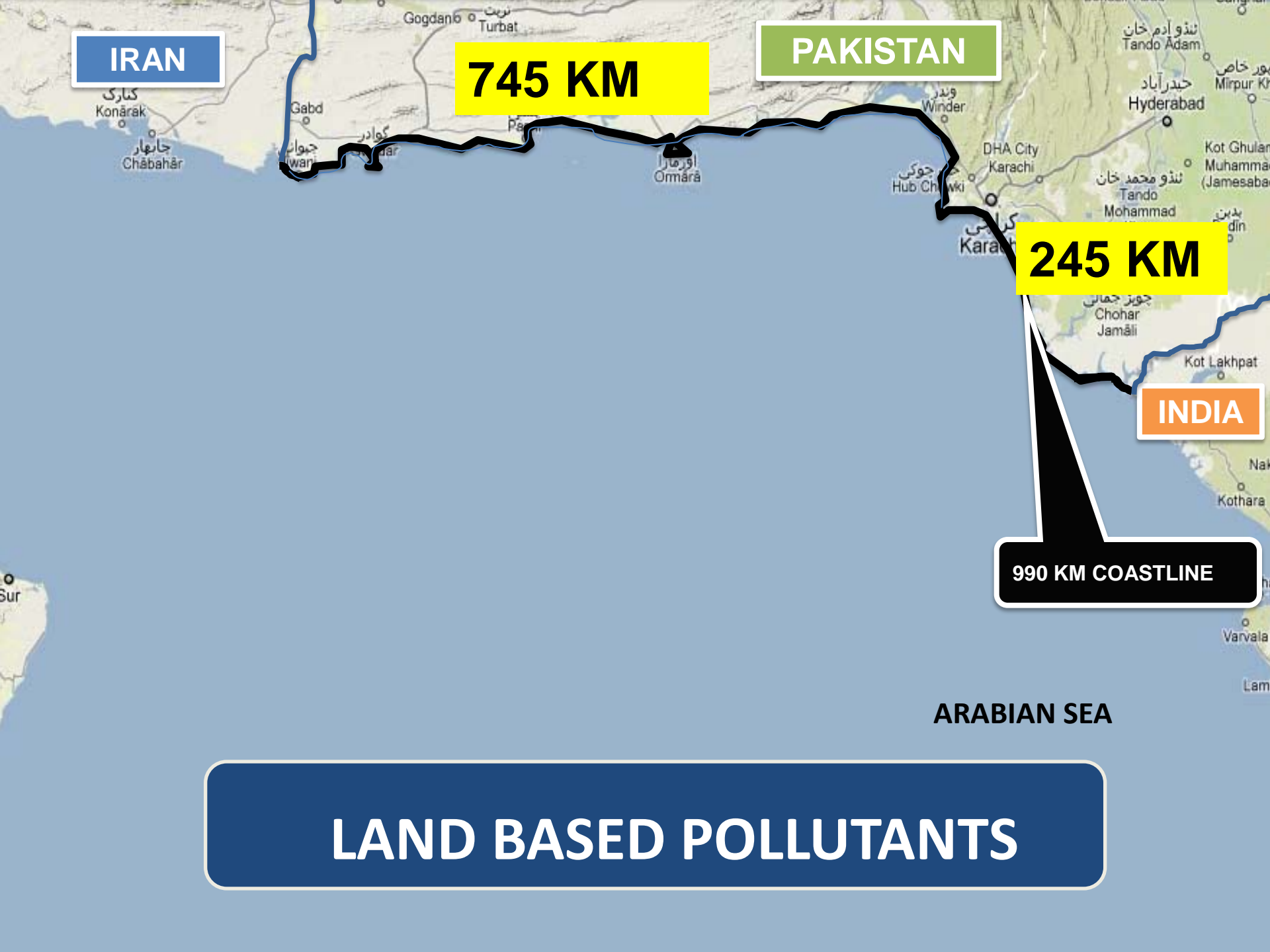
245 KM

INDIA

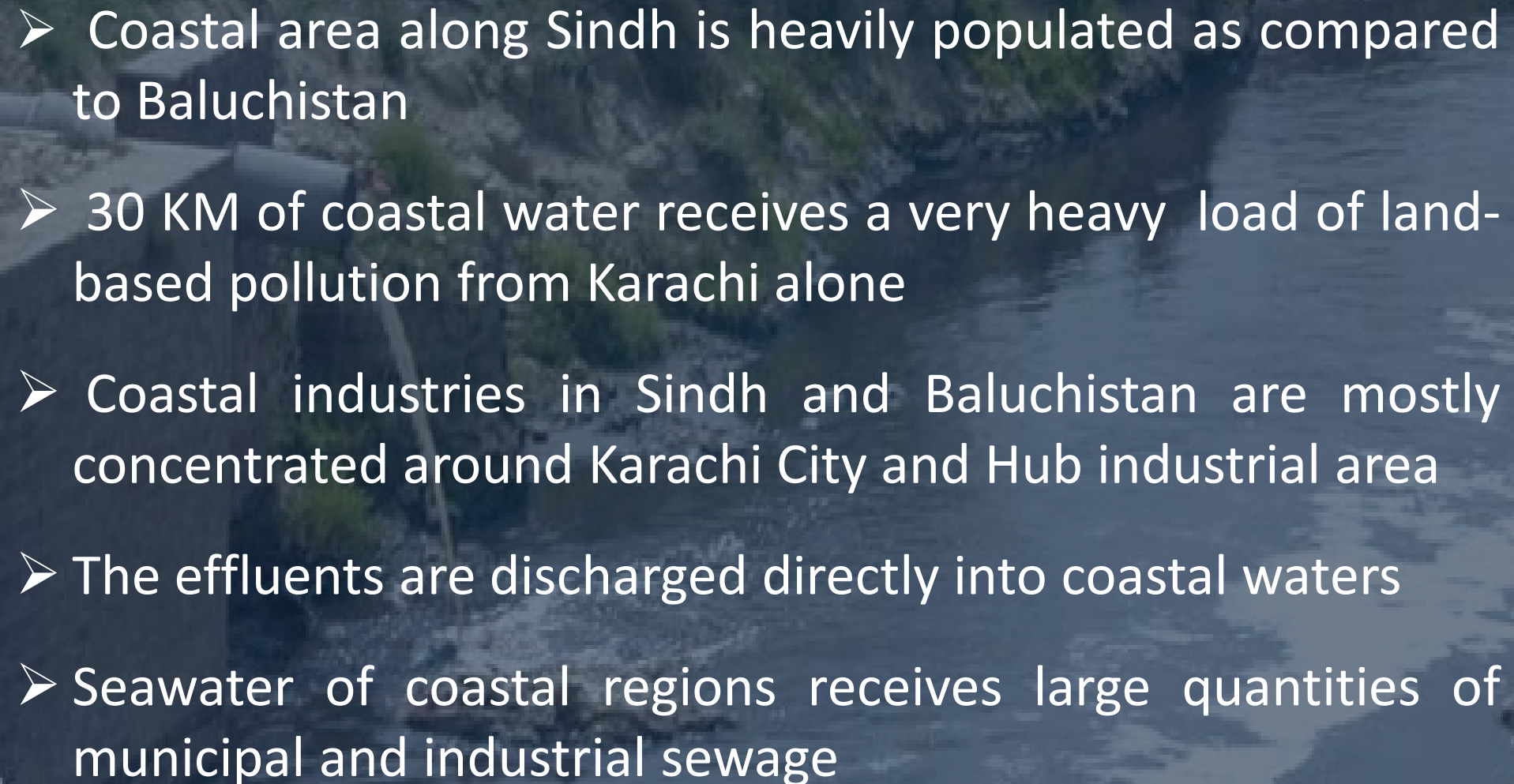
990 KM COASTLINE

ARABIAN SEA


LAND BASED POLLUTANTS



LAND BASED POLLUTANTS

- 
- Coastal area along Sindh is heavily populated as compared to Baluchistan
 - 30 KM of coastal water receives a very heavy load of land-based pollution from Karachi alone
 - Coastal industries in Sindh and Baluchistan are mostly concentrated around Karachi City and Hub industrial area
 - The effluents are discharged directly into coastal waters
 - Seawater of coastal regions receives large quantities of municipal and industrial sewage

LAND BASED POLLUTANTS

- 
- Textile Industries
 - Metallurgical Industries
 - Auto Engineering Works
 - Machine Tool Factory
 - Power Plants
 - Oil Refineries
 - Chemical & Pharmaceutical Industry
 - Cottage Industries



LAND BASED POLLUTANTS



Sewerage generated in Karachi is about 472 Million Gallons per Day (MGD)



Three Sewage treatment plants of capacity 151 MGD are held which treat only 55 MGD

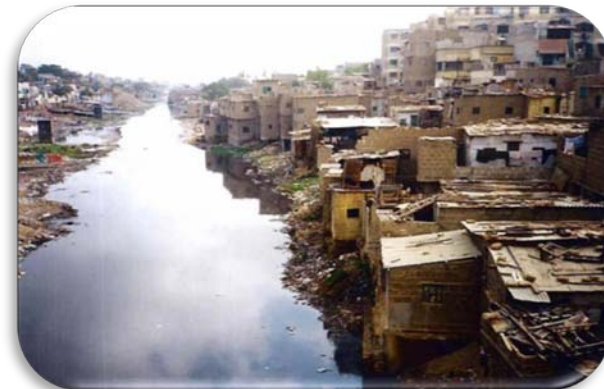




LAND BASED POLLUTANTS



321 MGD of sewage is drained without any prior treatment



Karachi Harbour is considered most heavily polluted marine site in Pakistan

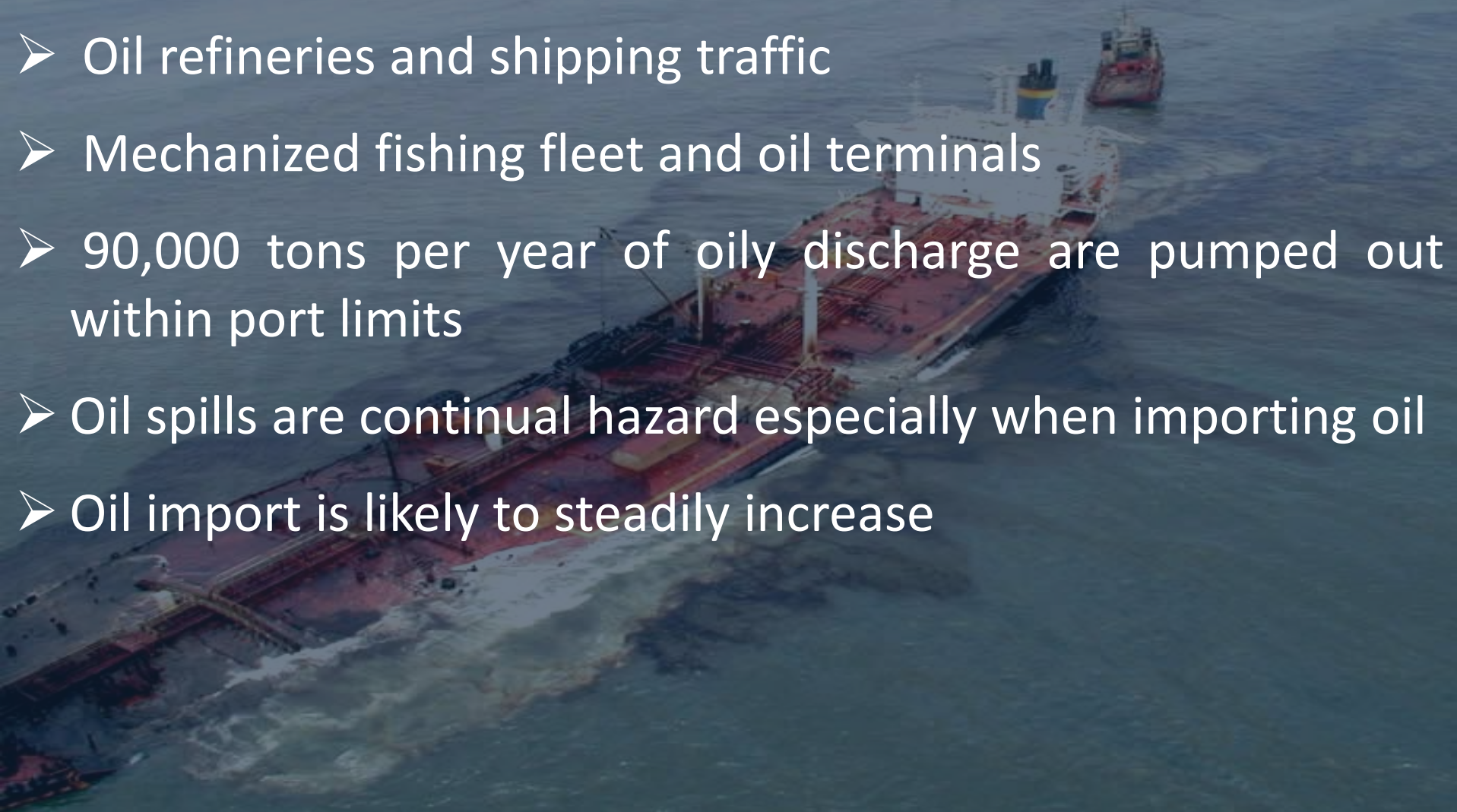


SEA BASED POLLUTANTS

- Grounding/Stranding of ships
- Collisions at sea
- Oil spills from ships
- Oil wastes from bilge's / engine rooms
- Dumping of garbage and other refuse material



SEA BASED POLLUTANTS

- Oil refineries and shipping traffic
 - Mechanized fishing fleet and oil terminals
 - 90,000 tons per year of oily discharge are pumped out within port limits
 - Oil spills are continual hazard especially when importing oil
 - Oil import is likely to steadily increase
- 
- An aerial photograph of a large oil tanker ship at sea. The ship is red and white, with a blue and yellow funnel. It is surrounded by a dark, oily slick on the water's surface. A smaller red and white vessel is visible in the background. The image is used as a background for the text.

REGULATIONS AND EXISTING LAWS

- Environmental Protection Act 1997
- National Environment Quality Standards 2001
- KPT Act 1886
- MARPOL 73/78
- MSA Act 1994
- Pakistan Merchant Shipping Ordinance
- UNCLOS 1982
- Fisheries Act 1897



REGULATIONS AND EXISTING LAWS

- The Ports Act 1908
- Pakistan Penal Code 1860
- Pakistan Territorial Water and Maritime Zone Act 1976
- Convention on Civil Liability for Oil Pollution Damage
- Intentional Convention on Oil Pollution Preparedness, Response and Cooperation 1990



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An aerial photograph of Greater Karachi, Pakistan, showing the city's layout and its proximity to the Arabian Sea. The city is characterized by a dense grid of streets and buildings. Green highlights are overlaid on the map, indicating the locations of various sewerage treatment plants and collection networks. The Arabian Sea is visible in the bottom left corner, and the surrounding land is a mix of urban development and natural terrain.

S-III

GREATER KARACHI SEWERAGE PLAN

The Project Aims To

- ❖ Improve environmental condition at costal area and beaches
- ❖ Improve health and hygienic conditions
- ❖ Maintain marine ecological balance.
- ❖ Reduce problems of Karachi port operations.
- ❖ Production of healthy sea food.
- ❖ Increase fishery export.
- ❖ Improved storm water drainage system

By

Providing Sewage transmission and treatment facilities for 500 MGD.



Way Ahead....

- Environment: Making it a national priority agenda
- Consistency of policies and programmes
- Effective collaborative management at all levels (communities, governments, civil society)
- Better Policy Enforcement
- Mainstreaming of Poverty and Environment issues
- Existing regulations/ laws on pollution. If implemented in letter and spirit, there would be no cause of concern about pollution
- Awareness raising and inculcating positive attitudes

What Can be Expected ?

- **Clean Beaches**
- **Improved Health & Hygienic Conditions within City**
- **Production of healthier and safer sea food.**
- **Increased Fishery Export**
- **Better Environmental Conservation**
- **Improved Storm water Drainage**
- **Direct & Indirect Employment**
- **Increased Tourism**
- **Facilitate Port Operation**

POINTS TO PONDER



*Our lives begin to end the day we become silent
about things that matter*

- Martin Luther King, Jr

*Nobody made a greater mistake than he who
did nothing because he could do only a little*

- Edmund Burke

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THANK YOU