



India-Norway Marine Pollution Initiative

India-Norway cooperation project on capacity building for reducing plastic and chemical pollution in India (INOPOL)

Marianne Olsen

National Policy Workshop Webinar Series on
“Countermeasures for Riverine and Marine Plastic Litter in India”, 18 May 2020



MU GAMMA
Consultants Pvt. Ltd



Toxics Link



SRM
Institute of Science and Technology



Background

2019: MoU signed on India-Norway Ocean Dialogue and the establishment of the Norway/India Task force on blue economy and sustainable development



Indo-Norway Marine Pollution Initiative

- the first Joint initiative
- takes forward the commitments made under the MoU



The project is financed by The Norwegian Development Program to Combat Marine Litter and Microplastics



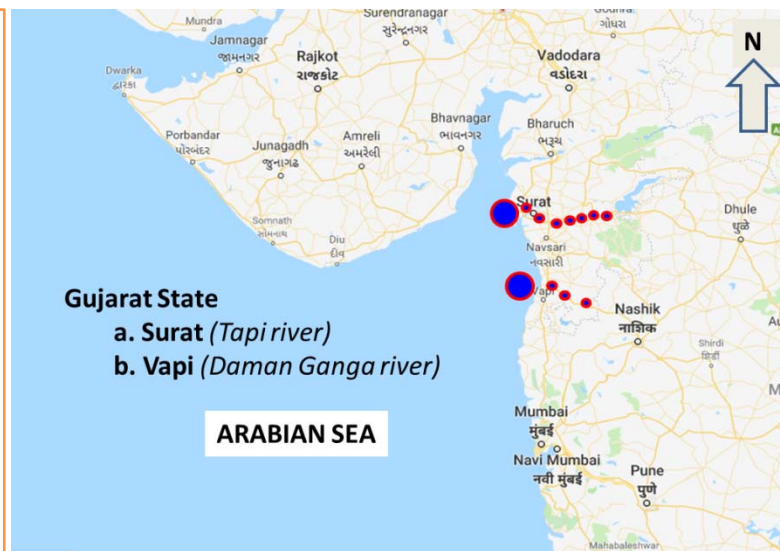
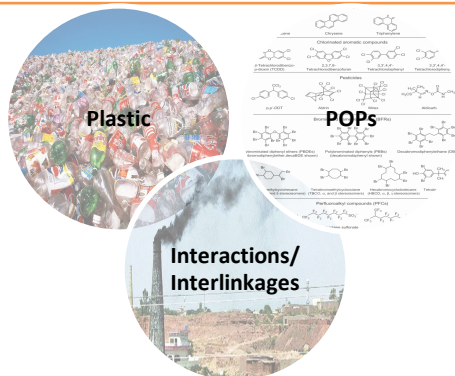
Introduction

Project implementation team

- Norwegian Institute for Water Research (NIVA)
- The Energy and Resources Institute (TERI)
- Mu Gamma Consultants (MGC)
- Central Institute of Plastics Engineering & Technology (CIPET)
- SRM Institute of Science and Technology
- Toxics Link

Main objective

Applying a science-based approach to build knowledge and capacity to tackle plastic and chemical pollution from key sources

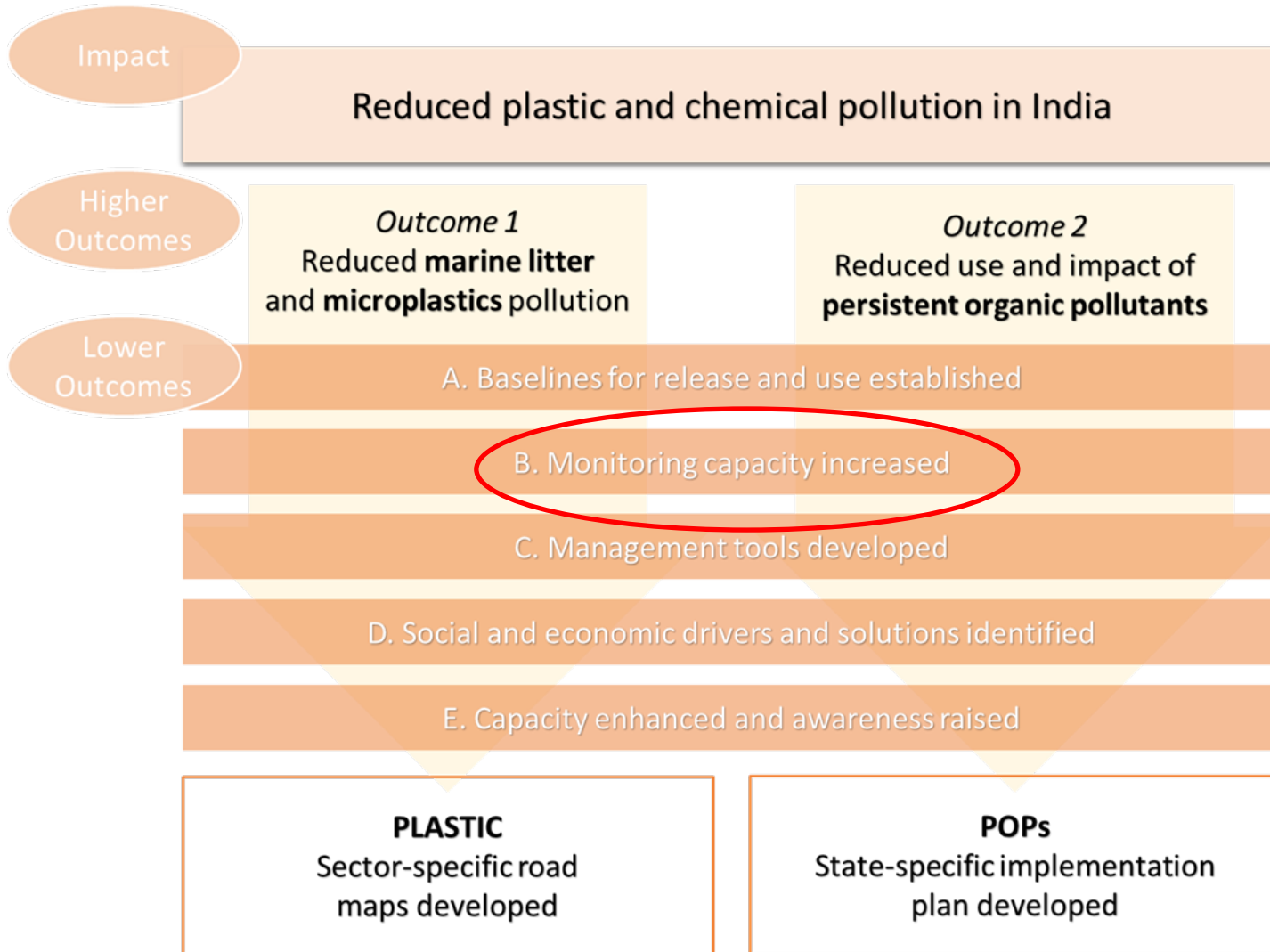


Focus

- Developing coherent systems for data collection and analysis
- Land sources, river fluxes and ocean input of plastic and POPs
- Support ongoing efforts by key stakeholders (e.g. ministries, scientific institutions, NGO's)
- Gujarat is focus area, while keeping in mind the potential for up-scaling



Overview Outcomes and Outputs





Capacity and awareness

- Different stakeholders involved
- **Training programs and workshops**
- **Inter-lab calibration and harmonization of methods**
- Dissemination
- Capacity building among government stakeholders
 - State level
 - National level
- Assess potential for extrapolation and up-scaling

Deliverables:

Plastic – Sector specific strategy report

POPs – State level action plan

Plastics in the environment - State of the art:



- No historic data
- Little baseline data for plastics in the environment
- Plastics not included in regular monitoring programs
- Lack of standardized methods and systems for QA
- Lack of quantitative validated data on riverine litter
- Lack of knowledge on effects and impact
- Lack of data for human health risk assessment
- Lack of knowledge on fate in the environment
- Lack of methods and data for ERA
- Lack of understanding for the best measures

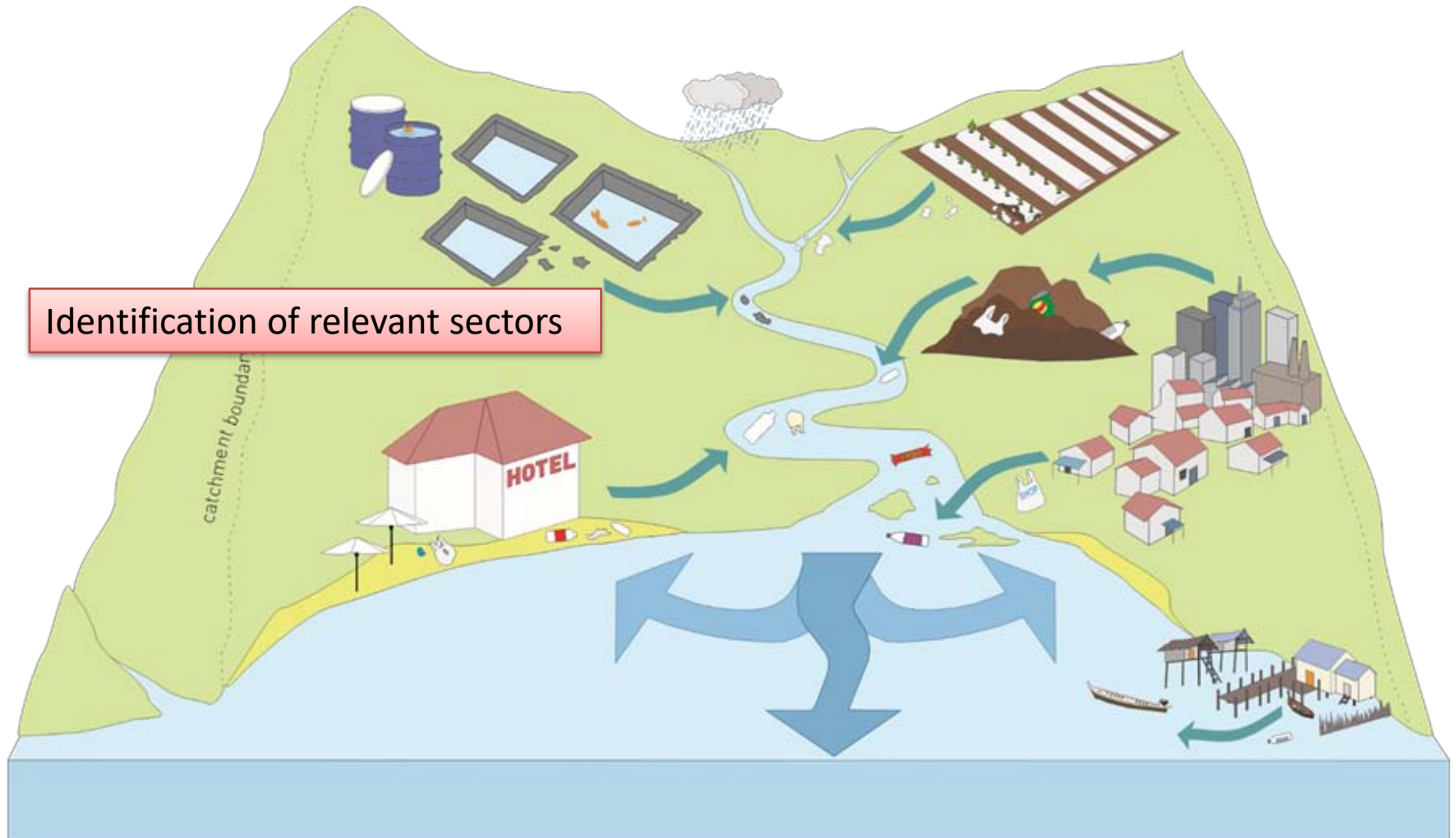


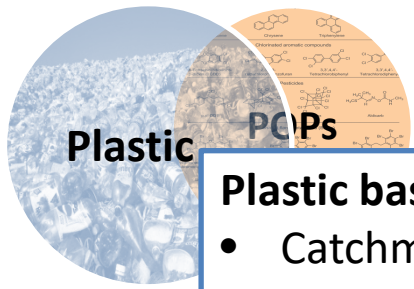
Standard protocols for identification, characterization & quantification of microplastics

Lack of harmonised methods for gathering and reporting data presents a major obstacle to the implementation of monitoring and mitigations actions. This is further hampered by a lack of clear guidelines on the purpose of monitoring.



Catchment based approach





Plastic baseline

- Catchment based
- Literature review, consultations
- Hydrological data, etc.
- Socio-economic context assessed
- Identify potential hot-spots
- Compile / analyze waste generation / collection / treatment data

Monitoring of riverine litter

- Review of national and international monitoring methods and experiences
- Sampling and analysis
- Field training and inter-calibration
- Develop a technical guideline and assess standardization options
- Recommendations for future monitoring program

Management tools

- Hydrodynamic model for plastic release, transport and fate
- Identification of key sources
- Review of best-practices
- Projections and sustainability of management options

Social and economic impacts

- Mapping of existing policies, regulations and management practices (coherence, gaps)
- Mapping of plastic waste network and market mechanisms
- Role and relevance of informal sector
- Cross-cutting: Identification of interlinkages btw plastic and POPs emissions



Catchment based approach

Develop project protocols for sampling and analysis

Interlab calibration and training

Monitore flux of macroplastics in the rivers; upstream and downstream

Investigate microplastics in riverine water and sediment



Thank you for your attention!



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