

Scientific Theme III

Human influences on the River Basin Coastal Zone Interactions



Human influences on river basin-coastal zone interactions consider river basin drivers/pressures that influence and change the coastal domain. The whole water continuum is considered as a single system. Processes of material transport to the ocean and human influences due to activities in the Exclusive Economic Zone (EEZ) are considered through links to Themes II and IV. Key issues include:

- Disentangling the cause-effect relationships of those impacts and human activities which are strictly coast or river basin-oriented (regional), from those which result from wider external pressures on the river-coast system;
- Modeling coupled human-ecosystems in river basins using the Driver-Pressure-State-Impact-Response (DPSIR) approach and assessment framework in order to identify links between major anthropogenic and natural pressures in catchments that affect coastal ecosystems
- Developing scenarios that predict future coastal change due to land use, climate change and management options
- Evaluating societal and institutional dimensions and changes in order to establish basin-coastline linkages.

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