

Partners for Resilience : Strategic Partnership

ESSVA TOOL and Relevance to PfR:SP

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What is ESSVA?

**ESSVA = Ecosystem-Service Shared
Value Assessment**

**ESSVA is an acronym of
“Ecosystem-Service Shared Value Assessment”**

(ESSVA is an acronym of
“Ecosystem Service Shared Risk Assessment”)

**ESSVA (and ESSRA) are Important Concepts
for
The Management of Lentic-Lotic Basins**

Ecosystem Service Profiles: Factual vs. Perceptual

a. Ecosystem Service Fact Profiles (ESFPs)

- The typical ESFPs include the governmental data on land use, water use, population dynamics (census data), legal and regulatory aspects such as water quality and quantity data.
- They may also include the information and data developed and compiled in the form of research database, e.g., the GIS and remote sensing analysis results and their application to modeling of various kinds.

b. Ecosystem Service Perceptual Profiles (ESPPs)

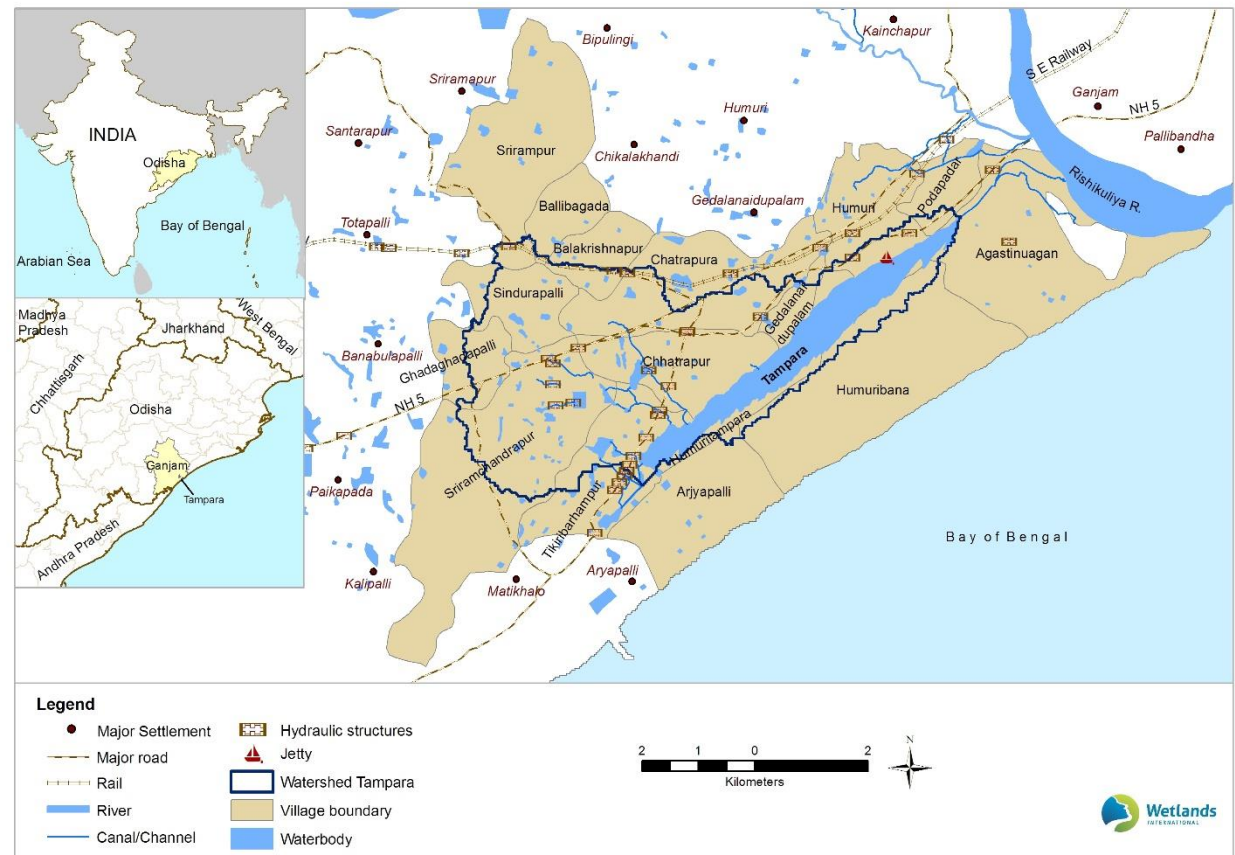
- They need to be assessed using a survey form.
- The form needs to be developed based on the Ecosystem Service framework.

ESSVA & PfR SP

- PfR-SP focuses on water mediated risks and promotes use of wetland restoration as a pathway for risk reduction
- ESSVA as a tool to:
 - Provides an opportunity to populations around ecosystems to evaluate their ecosystem on current and future status & values, helping them to shape a shared vision and common understanding of the issues and challenges facing the watershed
 - Augment conventional hazard-capacity-vulnerability assessment to integrate ecosystem services values
 - Provide ways to fill perception gaps between different stakeholders, and gaps between people living in different locations in the watershed

Tampara

- Freshwater lake with spanning 409 ha
- Primary freshwater inflows from catchment runoff and rainfall
- Outlet to Rushikulaya constricted to enable freshwater retention
- Basin inhabited by 30,000 households, directly and indirectly dependant on wetland resources and functions



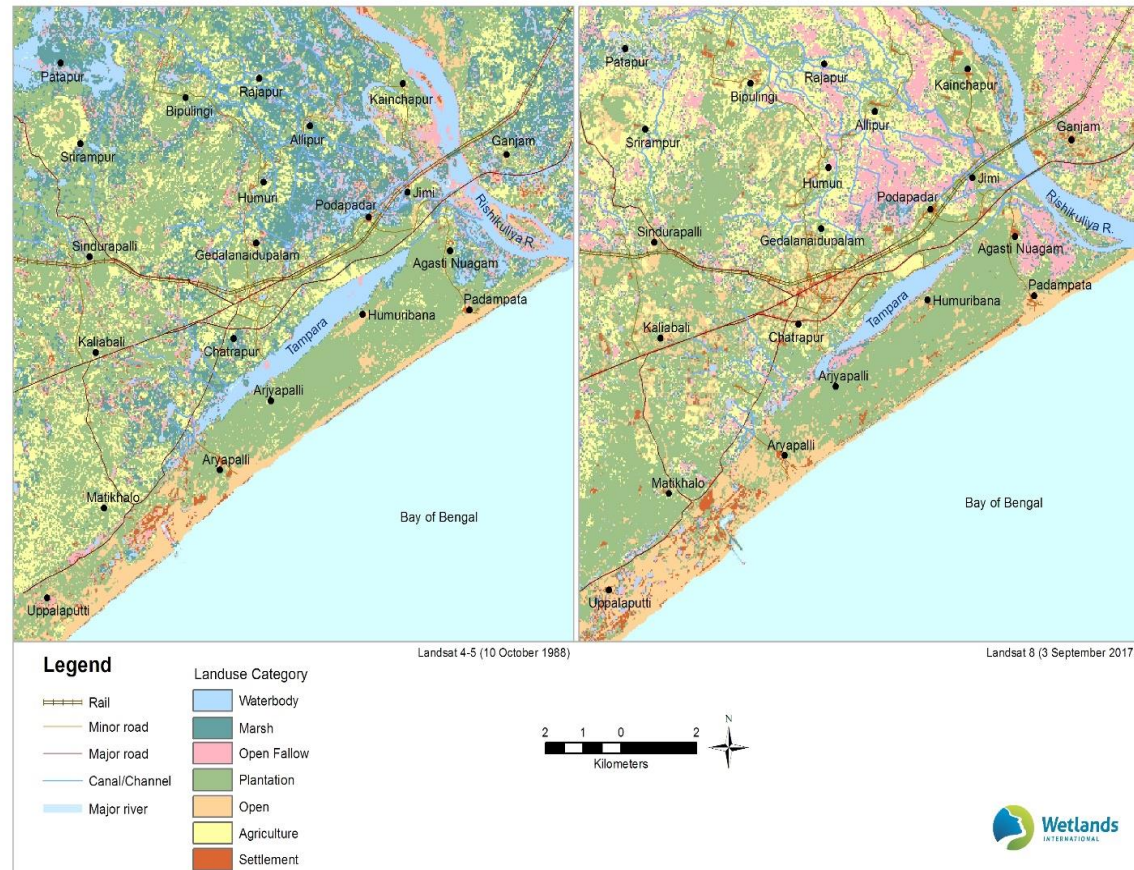
Significance for local livelihoods



Developmental activities

Less tampered with relative to other waterbodies of the state

- Rare-earth mining (thorium, monazite) leading to fragmentation of larger wetland regimes
- Lack of maintenance of outlet leads to reduced water levels
- Lake margins converted for agriculture
- Drying of the lake bed in years of insufficient rainfall
- Nutrient enrichment due to poor sanitation and fertilizer based agriculture
 - <30% have access to toilets

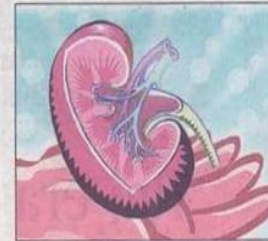


Kidney disorder strikes Ganjam, kills 70 in 3 yrs

Groundwater Contamination Suspected

Hrusikesh Mohanty | TNN

RIISING TREND



► The villages are located near the Odisha Sands Complex in Ganjam

► Affected villages are Badaputi, Baganapeta, Laxmipur and Arjipalli located near Oscom

► Water contamination due to effluent and radiation of monazite plant of Oscom blamed

► Oscom chief S P Behera refutes allegations, says there is no contamination

► Activists urge govt to inquire into the issue with the help of a high-level expert committee

► Residents of the area worry over spread of disease

Berhampur: The villages located near the Odisha Sands Complex (Oscom) at Matikhala near Chhatrapur in Ganjam district are in the grip of renal disease. Around 70 people in the villages have died while over 200 out of 5,000 population are suffering from kidney disorder in last three years, said an official source. Oscom is a unit of the Indian Rare Earths Limited, a public sector undertaking.

The affected villages are Badaputi, Baganapeta, Laxmipur and Arjipalli located near the Oscom.

Activist Prafulla Samantara along with several villagers on Tuesday alleged that the kidney disease might have broken out in the area due to the contamination of the water due to effluent and radiation after commissioning of the monazite processing plant (MPP) of the Oscom.

"We had strongly opposed the establishment of the plant at the public hearing held on May 19, 2010, apprehending outbreak of disease. People of Arjipalli and Badaputi had also submitted memorandums against the plant to the district collector in 2016," said Gurudev Behera, an activist of Badaputi.

The residents of the area are panicked as the disease is spreading fast, said a local A Venkat.

The patients are now undergoing treatment in different hospitals in Visakhapatnam, Bhubaneswar and Berhampur, he added.

"We have urged the government to enquire into the issue through a high-level expert committee and find out the cause of the outbreak," said Samantara.

At the same time, the company should stop the functioning of the monazite plant till the expert team's findings come out and the government should supply pure drinking water to each house and treat the patients free of cost, he said.

When contacted, Oscom chief

S P Behera refuted the allegations. He said, "A team consisting of chief district medical officer, executive engineer, rural water supply and sanitation, and regional officer of Odisha State Pollution Control Board had visited the area last year and taken water samples from different locations for test with the direction of the district collector. The team's report was submitted to the government. We were made to understand that the water is not contaminated due to Oscom."

The only MPP of the country started production of thorium in 2015. Thorium is the raw material for production of uranium.



What does PfR intend to achieve

- Healthy wetland as a disaster buffer and basis of water secure livelihoods

By

- Putting in place an integrated management framework for securing biodiversity and ecosystem services values
- Building capacities of communities to manage the wetland as a common property
- Assessing and responding to risk of upstream and downstream development on wetland
- Integrating wetland management within the developmental plans of local Panchayat
- Linking the role of wetlands as Tampara within District Disaster Management Plan (for Ganjam)