



# JSW Dharamtar Port Pvt. Ltd.



## About the Company

JSW Dharamtar Port Private Limited, a subsidiary of JSW Infrastructure Limited, operates a

331.5 m captive facility in River Amba, about 22 km (12.2 nautical miles) from the Arabian Sea on the west coast of India. The existing facility is being revamped and expanded to 1,750 m, with new top-end equipment in line with the phased expansion plans of JSW Steel Ltd., Dolvi Works from 3 MTPA to 10 MTPA.

JSW Dharamtar Port is poised to be the only riverine terminal to handle 8,000 DWT barges in the country, which would ply in a 130 m wide, 26 km long channel inside Dharamtar Creek. This combines the virtues and advantages of coastal as well as IWT modes and serves the JSW Steel plant at Dolvi. The present jetty capacity of 15 MTPA is expected to increase to 35 MTPA with the expansion in the next 2 years. The facility offers efficient and environment-friendly cargo handling for iron-bearing raw materials, coal-bearing raw materials, fluxes, clinker, containers, hot rolled coils, cement and slag.

## Risk

The Dharamtar Creek is formed by the flow of River Amba, with uniform depth in the range of 10 m, and has moderate cover of mangroves with mud flats and low-lying, marshy areas on its sides. *Avicennia marina* is the dominant mangrove species, followed by *Avicennia officinalis*, *Acanthus ilicifolius* and *Cerops tagal*. The Creek also supports major fisheries of True-Fin fishes and Shell fishes, mainly molluscs and crustaceans.

Heightened anthropogenic activities such as coastal development, deforestation, urbanisation, conversion into paddy fields and aquaculture ponds, over-harvesting of timber and fuel-wood, and dumping of domestic sewage have resulted in depletion of the mangrove's habitat and impeded its ability to provide ecological services. The depletion of mangrove habitats also negatively impacts agricultural land due to intrusion of saline water, resulting in loss of crops for the local farmers. Considering these factors as well as the current port operation and future expansion, the role mangroves play in sustaining the creek is even more crucial.

## Mitigation Initiatives

Taking cognisance of future operational modalities of the port and various impacts of anthropogenic activities, a mangrove restoration plan was developed in consultation with local stakeholders to mitigate impacts of the port, factor in adaptation measures for future climate change impacts, and control intrusion of salt water into the agricultural lands.

The project was started in 2016 covering 5 contiguous villages and impacting around 7,817 fishermen, farmers and group gram panchayats. The project was planned for three years in phases as summarised below.

### Phase-I (2016 -2017)

- ▶ Construction of embankment around the 5,000-ha land to control intrusion of salt water into agricultural land with an investment of INR 134 lakhs
- ▶ Plant 1,05,000 saplings on 20 ha area with an investment of INR 21.08 lakhs
- ▶ Conduct 7 awareness-cum- training sessions for local stakeholders

### Phase-II (2017-2018)

- ▶ Plant 3,00,000 saplings on 60 ha area with an investment of INR 283.35 lakhs
- ▶ Conduct 3 awareness-cum- training sessions for local stakeholders

### Phase-III (Future)

- ▶ 2018-19: Target to plant 4,30,000 saplings out of which 1,43,000 saplings are already planted
- ▶ 2019-20: Target to plant 1 million saplings cumulatively by 2020 (3,00,000 to be done in 2019-2020)



2016: Planting the mangrove saplings by SHGs


2018: The resulting mangrove plantation

## Business Case

Investing in mangrove conservation for the port project is extremely important to continue successful and unhindered operations in this critical habitat. The conservation initiatives have resulted in multiple benefits to the port as well as for the local community, thereby helping to ensure continued license to operate the port.

## Linkages with NBTs

Ports are crucial for the Indian economy due to the cost-effective mode of transport and a lower environmental footprint. Considering the economic development plan of India, the port sector needs to enhance its capacity to cater to growing future requirements. As most ports are located along the coast, their impacts on the habitat is unavoidable and proactive steps in minimising these impacts will play a critical role in the ability to maximise win-win solutions. The initiative of JSW Dharamtar Port Private Limited is supporting NBT 3 of India's National Biodiversity Action Plan 2014.

NBT	NBT	COMPOSITE INDICATOR	INITIATIVE BY JSW DHARAMTAR PORT PRIVATE LIMITED
<b>3</b> Safeguarding Natural Habitats 	Strategies for reducing rate of degradation, fragmentation and loss of all natural habitats are finalized and actions put in place by 2020 for environmental amelioration and human well-being.	Trends in mangrove cover and coastal area management	Mangrove habitat restoration project of JSW Dharamtar Port Private Limited is helping in increasing the mangrove cover by 80 ha till date, and an additional 120 ha by 2020.
		Trends in maintenance of fertility in agricultural lands using natural methods and means	The project supports livelihoods of about 16,500 fishermen and farmers from 6 group gram panchayats for the control of salt water intrusion and keeping agriculture land intact and productive.