

1. Research & Development Ports Sector (CS)

FINANCIAL OUTLAY (Rs In Cr)	OUTPUTS 2023-24			OUTCOMES 2023-24			
	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
1.2	1.	Ameliorate Dredged Sediments	1.1. % Completion of the study on ameliorate dredged sediments for their bulk utilization to make it techno-commercially feasible option by various treatments and to minimize the dredging cost	80%	1. To make the dredged material suitable for infrastructural development available during dredging at Major Ports.	1.1. Recommendations provided to stakeholders on cost reduction of dredging cost of Major Ports (Yes/No/In progress)	Yes
	2.	Submerged vanes for river training and sediment management in streams and their field application	2.1. % Completion of the study on the flow pattern due to submerged vanes in rivers and to fix optimal size and shape of submerged vanes	66%	2. Optimize the shape and size of the vane and to recommend the design to be used in field for river training measure	2.1. Recommendations provided to stakeholders on minimizing erosion of banks of rivers (Yes/No/In progress)	Yes
	3.	Design, Analysis and Development of Hybrid Floating Offshore Breakwater	3.1. % Completion of the study on development of numerical tool for the wave induced motions with Hybrid Floating Breakwater and validation of	80%	3. Hydrodynamic tool will be developed for hybrid floating breakwater and will be used to analyze the	3.1. Recommendations provided to stakeholders on reducing production cost of hybrid floating breakwater (Yes/No/In progress)	Yes

FINANCIAL OUTLAY (Rs In Cr)	OUTPUTS 2023-24			OUTCOMES 2023-24			
	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
			experimental study in wave flume with numerical results on various hybrid offshore floating breakwaters		effect of mooring and bottom topography on the hydrodynamic performance of the floating breakwater		
	4.	New resilient breakwater for safety of Port and Harbour against Tsunami	4.1. % Completion of the study on resilient breakwater for safety of Port and Harbour against Tsunami	33%	4. To develop new countermeasures for rubble mound breakwater in order to make it tsunami – resilient	4.1. Recommendations provided to stakeholders on reinforcing countermeasures for the existing breakwaters (Yes/No/In progress)	Yes

2. Sagarmala (CS)

FINANCIAL OUTLAY (Rs In Cr)	OUTPUTS 2023-24			OUTCOMES 2023-24			
	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
360	1.	Enhancement of road and rail connectivity to ports	1.1. No. of Rail Projects completed during the year	00	1. Improvement in evacuation infrastructure at ports	1.1. Average time in transit of goods from ports to destined locations (in hours)	1.50
			1.2. No. of Road Projects	03			

FINANCIAL OUTLAY (Rs In Cr)	OUTPUTS 2023-24			OUTCOMES 2023-24			
	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
			completed during the year				
	2. Creation of Infrastructure at ports and undertaking modernization of ports	2.1. No. of Capital Dredging Projects completed during the year	01	2. Enhancement in cargo handling capacity of ports to handle bigger vessels	2.1. Total cargo traffic volume (MMT)	1.60	
		2.2. No. of Coastal berth projects completed during the year	02		2.2. Capacity utilization at ports (%)	Target not amenable	
		2.3. No. of Ro-Ro / Passenger Jetties projects completed during the year	06	3. Enhancement of tourism	3.1. Number of tourists visiting the ports during the year	50,000	
		2.4. No of Cruise Terminal projects completed during the year	02		3.2. Increase in number of cruise ship calling	500	
	3. Skill development and research in maritime sector	3.1. No. of skill development courses conducted during the year	02	4. Skill development and research in maritime sector	4.1. Number of people certified	600	
		3.2. No. of labs established during the year	00				

3. Assistance to Ship Building, Research & Development (CS)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2023-24			OUTCOMES 2023-24			
	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
131.03	a. Financial Assistance/subsidy to All India Shipyards						
	1.	Finance for construction and delivery of vessels by Indian shipyards	1.1. No. of vessels financed during the year	7	1. Promotion of ship building in domestic shipyards to generate employment and business opportunities	1.1. Amount of business generated during the year (Rs. Crores)	772
						1.2. Employment generated during the year (Man Days)	11,00,000
	b. Research & Development (Shipping Sector)						
	1.	Designing of containers to boost manufacture of seaborne 20 ft containers in India	1.1. Development and optimization of designs - % completed	100%	1. Developing the prototype based on the released design	1.1. Preparation of prototype - % completed	100%
	2.	Construction of Hydrogen Fuel Cell Electric Vessel (Pilot Project)	2.1. Construction of electric vessel - % completed	100%	2. Successful launch of the pilot project for commercial uses	2.1. Successful launch of the vessel (Yes/No/In progress)	Yes