

Sagarmala Development Company (SDC)

- Sagarmala Programme moving from planning to implementation stage
- Projects under Sagarmala will be implemented by Central Ministries, State Governments, Ports / Agencies primarily through private or PPP mode
- Sagarmala Development Company (SDC) set up for providing funding support to project SPVs and residual projects under Sagarmala
- SDC incorporated under Companies Act 2013
 - Subscribed Share Capital: Rs. 90 Crore
 - Initial Authorized Capital: Rs. 1,000 Crore
- First Board meeting of SDC held on 21.09.2016
- Process already started for appointment of full-time Managing Director, Director (Projects) and Director (Finance & Administration)

Objectives of SDC

- Develop & formulate projects emanating from National Perspective Plan
- Assist SPVs set up by Central Line Ministries / State Governments/State Maritime Boards/Ports etc. for project implementation
- Provide funding window for residual projects that cannot be funded by any other means/mode
- Prepare the Detailed Master Plans for the Coastal Economic Zones (CEZs) identified as part of the National Perspective Plan
- Provide a framework for ensuring integrated development of Indian maritime sector
- Raise funds from multi-lateral and bilateral agencies as debt/equity (as long term capital), as per the project requirements.

Sagarmala Programme

- Program for **industrial growth, jobs and prosperity.**
- Manufacturing **hubs in coastal regions** supported by good connectivity to ports and efficient ports. **Ports as catalysts.**
- 7,500 km long coastline, 13 States and Union Territories
- 12 Major, 200+ Non-Major ports, 90% of country's EXIM trade by volume
- Cargo Traffic Growth: **1072.23 MT in 2015-16 to 2500 MT in 2024-25**
- Coastal shipping to increase from 86 Million Tons to 215 Million Tons by 2025

Table 1: Logistics cost as % of GDP for countries comparable to India

S.No.	Country	Logistics Cost as % of GDP
1	India	19%
2	China	12.5%
3	Indonesia	15.72%
4	UK	13.43%

Table 2: Current Modal Split in India

S.No.	Mode	% Share	Cost (Rs/Ton KM) ¹
1	Road	54.36	2-3
2	Rail	32.65	1.2-1.5
3	Waterways (inland waterways & coastal shipping)	6.00	0.2 – 0.3
4	Pipelines	6.99	0.1 – 0.15

- China has 30 times more port capacity than India
- In India, share of coastal and inland water transport is 2-3% compared to China's 25%. **China's logistics cost is 1/3rd of India's logistics cost- major reason being manufacturing hubs on the coast of China**

¹ For coal (excluding pipelines) assuming a distance of 2000 KM

Sagarmala Programme – Key Achievements till Date

2.1. National Perspective Plan and Projects under Sagarmala

- National Perspective Plan (NPP) prepared
- 400+ projects (cost: Rs. 8 Lac Crore), have been identified;
 - Projects worth Rs. 1 Lac Crore under various stages of implementation and development

Table 3: Summary of projects under Sagarmala

S. No.	Project Theme	FY 15-16		FY 16-17		FY 17-18		FY 18-19		FY 19-20 to FY 24-25		FY 25-26 to FY 34-35		Total	
		#	Project Cost (Rs. Cr)	#	Project Cost (Rs. Cr)	#	Project Cost (Rs. Cr)	#	Project Cost (Rs. Cr)	#	Project Cost (Rs. Cr)	#	Project Cost (Rs. Cr)	#	Project Cost (Rs. Cr)
1	Port Modernisation	62	27,700	46	22,670	13	2,193	20	35,512	27	26,588	21	28,165	189	142,828
2	Connectivity Enhancement	30	15,881	58	28,924	28	16,641	26	139,715	17	21,182	11	8,233	170	230,576
3	Port-Linked Industrialisation	2	325	1	3,000	2	5,000	17	94,426	11	318,130	-	-	33	420,881
4	Coastal Community Development	4	79	4	529	3	119	4	688	8	2,800	-	-	23	4,216
Total		98	43,985	109	55,123	46	23,953	67	270,341	63	368,700	32	36,398	415	798,500

- Rs. 242.92 Crore released for 14 projects under Sagarmala; Some of the key projects are:
 - Rs. 58.5 Crore released for capital dredging for Gogha-Dahej RO-Pax Ferry Services project
 - Rs. 50 Crore released for construction of RoB cum Flyover at Ranichak level crossing at Kolkata Port
 - Rs. 43.76 Crore released for RO-RO Services Project at Mandwa
 - Rs. 20 Crore released for setting up second rail line from Take-off Point A cabin at Durgachak (Haldia Dock Complex)
 - Rs. 20 Crore released for Vizag Port road connectivity to NH5
 - Rs. 10 Crore released for development of a full-fledged Truck Parking Terminal adjacent to NH7A (VOCPT)

2.2. Port Modernization & New Port Development (189 projects, Rs. 1.42 Lac Crore)

- Master Plans finalized for 12 major ports
 - 142 projects (cost: Rs. 91,434 Crore) identified for implementation till 2035 (**Table 4**)
 - 42 projects (cost: Rs. 23,263 Crore) already under implementation
 - 30 projects (cost: Rs. 11,612 Crore) to be taken up in FY 16-17

Table 4: Phasing of Projects from Major Port Master Planning

Timeline for Implementation	No. of Projects	Project Cost (Rs. Cr)	Capacity Addition (MMTPA)
Under Implementation*	42	23,263	310
2016-17**	30	11,612	138
2017-18	12	2,103	30
2018-19	11	4,703	15
2020-25	26	21,588	151
2026-35	21	28,165	240
Total	142	91,434	884

*Additional 22 MMTPA is from projects which are not from the port master plan

**Additional 9 MMTPA is from projects which are not from the port master plan

- New Port Development
 - TEFR prepared for new port locations: Vadhavan, Sagar Island, Paradip Outer Harbor, Enayam, Sirkazhi and Belekeri
 - DPR prepared for new port at Sagar Island; EFC approval obtained
 - DPR under preparation for Vadhavan, Paradip Outer Harbor & Enayam
 - Cabinet approval obtained for setting up major port at Enayam

- Major Port Operational Efficiency Improvement
 - Benchmarking exercise conducted for major ports
 - 116 initiatives identified for implementation over 3 years
 - 62 initiatives already implemented, 80 MMTPA of port capacity unlocked so far

Promotion of Cruise Tourism

- Task Force to promote cruise tourism constituted
- Foreign flag vessels carrying passengers allowed to call at Indian ports without obtaining license from DG (Shipping); Facility extended upto 5.02.2024
- Standard Operating Procedures for cruise vessels finalized in consultation with Bureau of Immigration, MHA, CBEC, CISF and Port Authorities;
- Port-level Committees constituted to address manpower, coordination and logistics issues
- Consultant appointed for preparation of action plan for development of cruise tourism in India
- Cruise terminals under development at Chennai and Mormugao Port Trust

2.3. Port Connectivity Enhancement (170 projects, Rs. 2.3 Lac Crore)

- **Rail Connectivity Projects**

- Indian Port Rail Corporation Limited has taken up 25 works (cost: Rs. 5,284.38 Crore)
 - 8 works (cost: Rs. 159.24 Crore) already awarded in FY 16-17
 - 4 more works (Rs. 571.13 Crore) likely to be awarded in FY 16-17
 - 6 works (Rs. 228.01 Crore) DPR prepared
 - 7 works (Rs. 4326 Crore) DPR under preparation
 - New projects
 - Heavy Haul Rail Corridor Project between Talcher & Paradip
 - JNPT-Manmad-Indore rail link feasibility study
 - Jaisalmer-Kandla Rail feasibility study

- Out of the 27 rail projects identified under Sagarmala
 - 21 projects (3300 Km, cost: Rs.28,000 Crore) are being taken up by Ministry of Railways
 - 6 projects (151 Km, cost: Rs.3,590 Crore) to be taken up by IPRCL
- **Road Connectivity Projects**
 - Out of 79 road projects (including 10 freight friendly expressways)
 - 45 projects (cost: Rs. 154,258 Crore) to be done by MoRTH / NHAI
 - 34 projects (cost: Rs. 10,923 Crore) to be done by State PWD, Port Authorities, NHAI and SDC in coordination with MoRTH / NHAI
 - 14 projects already under implementation

- **Multi-Modal Logistics Parks (MMLPs)**

- Out of 7 MMLPs proposed under Sagarmala

- 4 MMLPs being developed by CONCOR – Pantnagar, Nagulapally, Naya Raipur, Jharsuguda
 - 1 MMLP near Siliguri being developed by Siliguri Jalpaiguri Development Authority (SJDA)
 - CONCOR to initiate action, with a detailed area-wise analysis on the balance 2 locations in Madhya Pradesh and Rajasthan

Table: Port Connectivity Projects under Sagarmala

Mode	Project Type	No. of Projects	Investment (Rs. Crore)
Pipeline	POL pipeline projects	3	4,500
Road	Road connectivity to Major Ports (including New Ports)	42	21,164
	Expressways with dedicated freight lanes	10	1,25,500
	Road connectivity to Non-Major Ports	35	19,116
Rail	Internal port rail projects	20	1,207
	Rail connectivity projects	49	50,400
Waterways	NW-2,4 and 5	3	7,515
Multi-modal	Development of ICD / Multi-Modal Logistics Hubs	8	1,174

Hubs			
Total		170	230,576

- **Coastal Shipping**

- Additional coastal shipping potential of 130 MMTPA by 2025 identified
- Cabotage relaxed for 5 years for specialized vessels (RO-RO, RO-PAX)
- Scope of Coastal Berth Scheme expanded and integrated into Sagarmala Programme
- Projects under Coastal Berth Scheme
 - 5 projects sanctioned in FY 15-16; Fund of Rs. 70 Crore released
 - 30 projects (cost: Rs.584.46 Crore) considered in FY 16-17
 - Rs. 19.72 Crore sanctioned for 6 projects so far
 - Dedicated coastal berth at Porbandar Port (cost: Rs. 37 Crore)
 - Construction of jetties at Bhayander (cost: Rs. 14.15 Crore)

Table 5: Proposals received under Coastal Berth Scheme

S.No.	State	# of proposals received	Total Projects Cost (Rs. Crore)
1	Andhra Pradesh	9	330.45
2	Gujarat	1	37
3	Tamil Nadu	1	20
4	Goa	9	99
5	Maharashtra	9	82.01
6	Kerala	1	16
Total		30	584.46
Total funding sought under Coastal Berth Scheme			292.23

2.4. Port-led Industrialization (33 projects, Rs. 4.2 Lac Crore)

- Perspective plans prepared for 14 Coastal Economic Zones (CEZs)
- 29 potential port-linked industrial clusters identified across Energy, Materials, Discrete Manufacturing and Maritime sectors (**Table 6**)
- Master plans prepared for Maritime Clusters proposed in Gujarat and TN

- Ministry is also developing SEZ at JNPT, Free Trade Warehousing Zone at Ennore, Smart Port Industrial Cities at Kandla and Paradip

Table 6: Details of Port-linked Industrial Clusters

Type of Coastal Industrial Cluster	Potential Locations	# of Projects
Refining & Petrochemical Cluster	Refining cum Petrochemical: Maharashtra, Tamil Nadu	2
	Petrochemical: Gujarat, Tamil Nadu, Karnataka, Andhra Pradesh	4
Power Cluster	Northern Maharashtra, Central Andhra Pradesh, Central Tamil Nadu	3
Steel Cluster	Southern Maharashtra/Goa, Tamil Nadu	2
Maritime Cluster	Gujarat, Tamil Nadu	2
Cement Cluster	Gujarat, Andhra Pradesh	2
Discrete Manufacturing Cluster	AP, Maharashtra, Tamil Nadu, West Bengal, Kerala, Gujarat, Rajasthan, Bihar, Assam	14

2.5. Coastal Community Development (23 projects, Rs. 4,216 Crore)

- **Skill Development**

- Skilling projects funded under Sagarmala

- **Safety training for workers in Alang-Sosiya Shipyard:** Rs. 30 Crore sanctioned & Rs. 10 Crore already released

- Coastal Districts Skill Training Project under Deen Dayal Upadhyay Grameen Kaushal Yojana (DDU-GKY): Rs. 13.77 Crore sanctioned & Rs. 6.9 Crore already released
- Ministry is undertaking skill gap analysis in 21 coastal districts
 - Action plan for 6 districts in Gujarat, Maharashtra & AP prepared; Projects from the same to be implemented under DDU-GKY
- Ministry is conducting cutting-edge skill training in maritime sector
- Proposals under evaluation:
 - Multi-Skill Development Centre linked to JNPT
 - Centre of Excellence for Shipbuilding

- **Fisheries Development**

- Ministry is part-funding select fishing harbour projects under Sagarmala in convergence with Department of Animal Husbandry Dairying & Fisheries (Ministry of Agriculture)

- Rs. 52.17 Cr sanctioned for project for modernization & upgrading of Sassoon Dock
- 10 more proposals under consideration: Karnataka (3), Kerala (2), Tamil Nadu (2), Maharashtra (1), Gujarat (2)
- Upgradation of Kulai fishing harbor
- Upgradation of Veraval and Mangrol fishing harbors
- Ministry will also support development of deep sea fishing vessels and fish processing centres in convergence with Department of Animal Husbandry Dairying & Fisheries.

3. Sagarmala Programme – Next Steps

3.1. Port Modernization & New Port Development

- Work in coordination with State Governments to increase Indian Port Capacity to more than 3,000 MMTPA by 2025 (**Table 7**).

Table 7: Port Capacity Expansion Roadmap

Port Capacity Roadmap		Capacity (MMTPA)	Capacity (MMTPA)
Port Capacity in 2015-16			1,673
Capacity addition from	Ongoing expansion at major ports*	332	
	Projects to be awarded in major ports in FY 16-17*	147	
	Projects to be awarded in major ports in FY 17-19	45	
	Projects to be awarded in major ports in FY 20-25	151	
	Major port operational efficiency improvement	100	
	New port development	320	
	Expansions planned in non-major ports by 2025	315	
Port Capacity in 2024-25			3083

*Includes projects considered under master planning and already taken up by major ports

- New Port Development:
 - Award implementation of Vadhavan, Paradip Outer Harbor & Enayam
 - Obtain Cabinet approval for setting up major port at Vadhavan

3.2. Port Connectivity Enhancement

- Implement road projects under Sagarmala including 10 freight friendly expressways (E.g. Expressway from Ahmedabad to JNPT)

- Award implementation of Heavy Haul Rail Corridor project between Talcher & Paradip in coordination with Ministry of Railways
- Proposal for Cabotage relaxation for 2 years subject to level playing field for Indian flag ships
- Modal shift incentive scheme for IWT sector; Develop 37 prioritized National Waterways

3.3. Port-led Industrialization

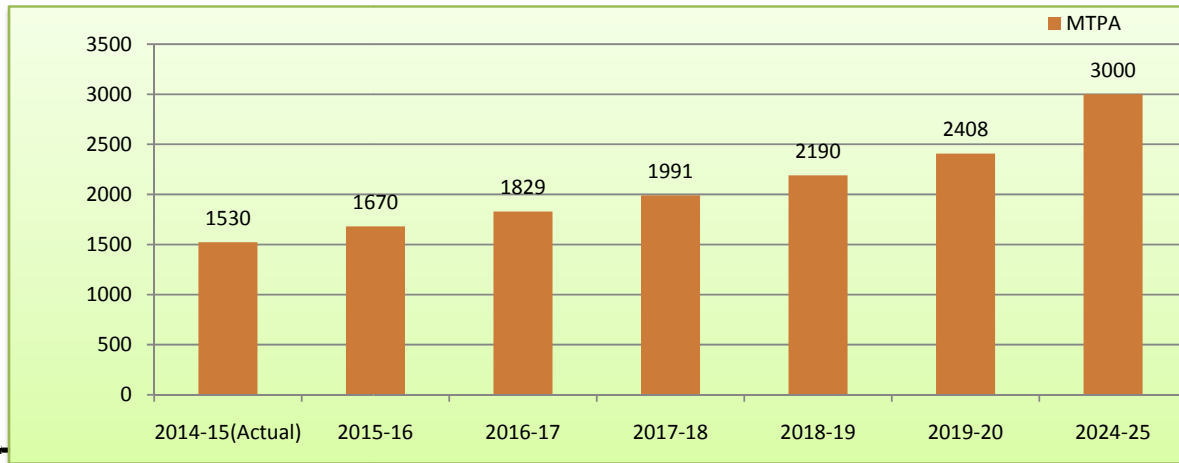
- Develop Master Plans for the 14 Coastal Economic Zones (CEZs) in a phased manner; Phase I: Master planning of CEZ in Gujarat, Maharashtra, Andhra Pradesh & Tamil Nadu
- Develop DPRs for Maritime Clusters proposed in Gujarat and Tamil Nadu
- Award for implementation of Kandla & Paradip Smart Port Industrial Cities

Non-Major Ports (mostly privately operated)

- Around 200 notified Non-Major Ports governed by the respective Maritime State Governments;

- Around 64 ports are operational and handle EXIM cargo;
- 62 notified and 17 operational ports on the East Coast and 138 notified and 47 operational ports on the West Coast.
- Handle about 43% of total seaborne traffic.
- Capacity as on 31-03-2016: 705.00 Million Tonnes (approx.)
- Throughput during 2015-16: 475.00 Million Tonnes (approx.)

Capacity Projection in Indian Ports



PPP in Major Ports (as on 31.03.2016)

Stage	No. of Projects	Investment (Rs. Crores)	Investment (US\$ million)	Capacity (MTPA)
Under Operation	52	19509.47	3000	319.09
Under Construction	37	35377.49	5500	336.67
Total	89	54886.96	8500	655.76

New Major Port at Sagar, West Bengal

- Estimated Project Cost –US\$ 225 million
- Port to handle 7.41 MMTPA of cargo by 2023-24
- Total land required 198 Hectares
- SPV between KoPT and Government of West Bengal to select PPP operator
- Milestones
 - Feasibility report prepared
 - Award of Project – 31.12.2016

New Port at Vadhavan

- Satellite Port of JNPT
- Port to have capacity to handle 15 Million TEUs
- To be spread over 1028 Ha
- Project Cost –US\$ 1400 million
- Total project cost –US\$ 4600 million
- DPR completion - July, 2017
- Financial Closure – August, 2017
- Award – January, 2018

New Major Port at Colachel (Enayam)

- Estimated Project Cost –US\$ 1000 million
- Port to have 16 m draft to handle vessels of 18000 TEU Capacity.
- Terminal to be developed as hub for trans-shipment and EXIM containers
- Total land required 320 Ha

- To be developed through Public Investment and PPP Mode
- Milestones
 - DPR – December, 2016
 - Award of Project – June, 2017

Outer Harbour Project – Paradip

- Mineral rich hinterland contributing to the rapid rise in traffic over the years
- Consistent cargo growth

Shipbuilding & Ship Repair

- Shipbuilding has a high multiplier effect: On investment it is 11.6, on employment it is 6.4 and on turnover it is 4.2.
- It helps in heavy engineering industry, ancillaries and service sectors.

- “Shipbuilding and Ship Repair” is one of four key sectors of strategic sectors identified by Govt. of India.
- We are aiming to get 5% of global share in shipbuilding by 2020(Currently it is 0.1%)
- We are aiming to get 10% of global share in ship repair by 2020(Currently total global ship repair value is US \$206)
- Major importers of Indian built ships - Singapore, UAE, Sri Lanka, Qatar, Oman, Italy, Indonesia, Belgium, Liberia.

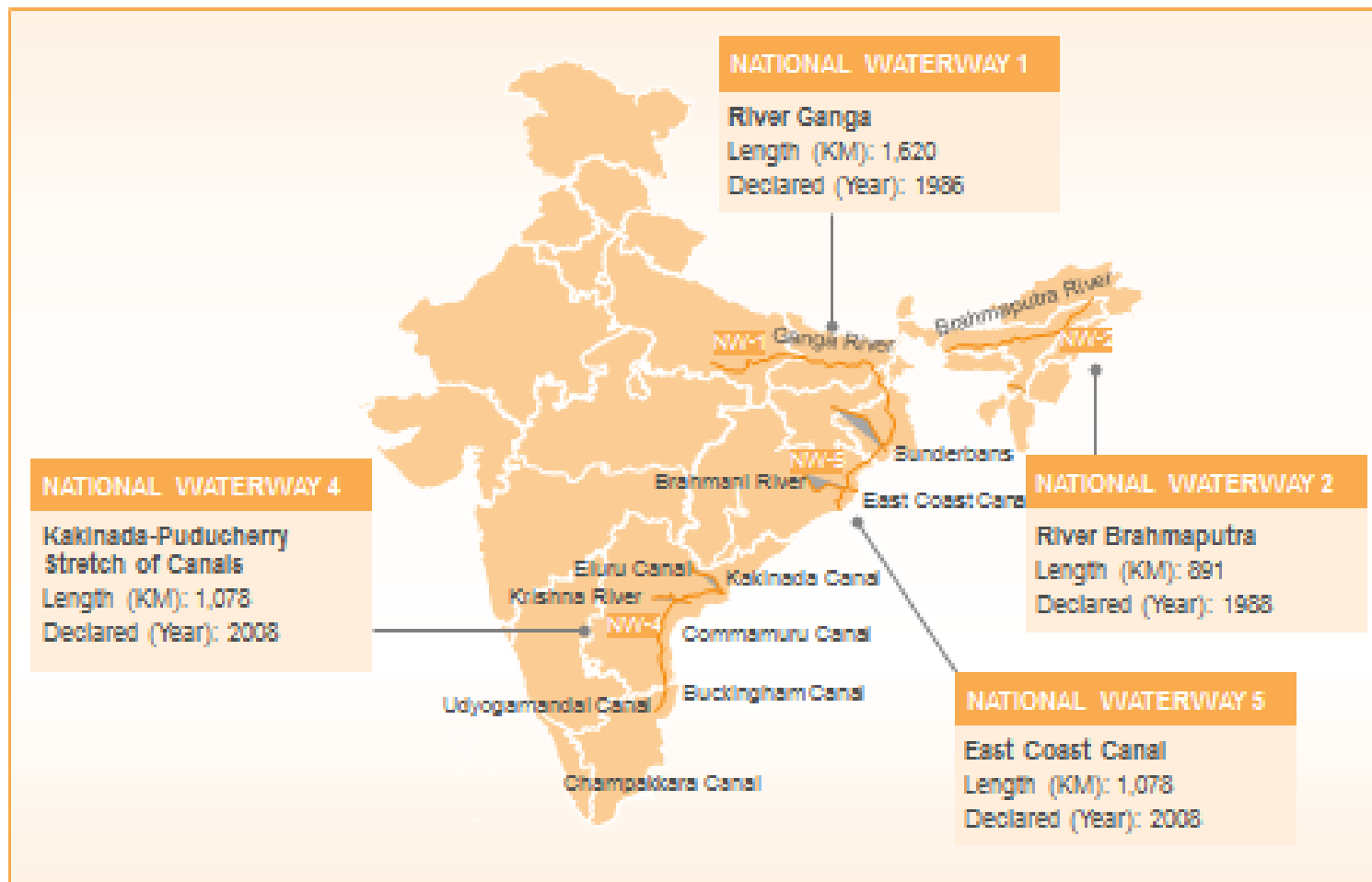
New Shipbuilding Policy

- Financial Assistance of 20% of total cost
- Shipyards granted Infrastructure status – will get cheap working capital
- Exemption on Taxes & Duties

New Projects

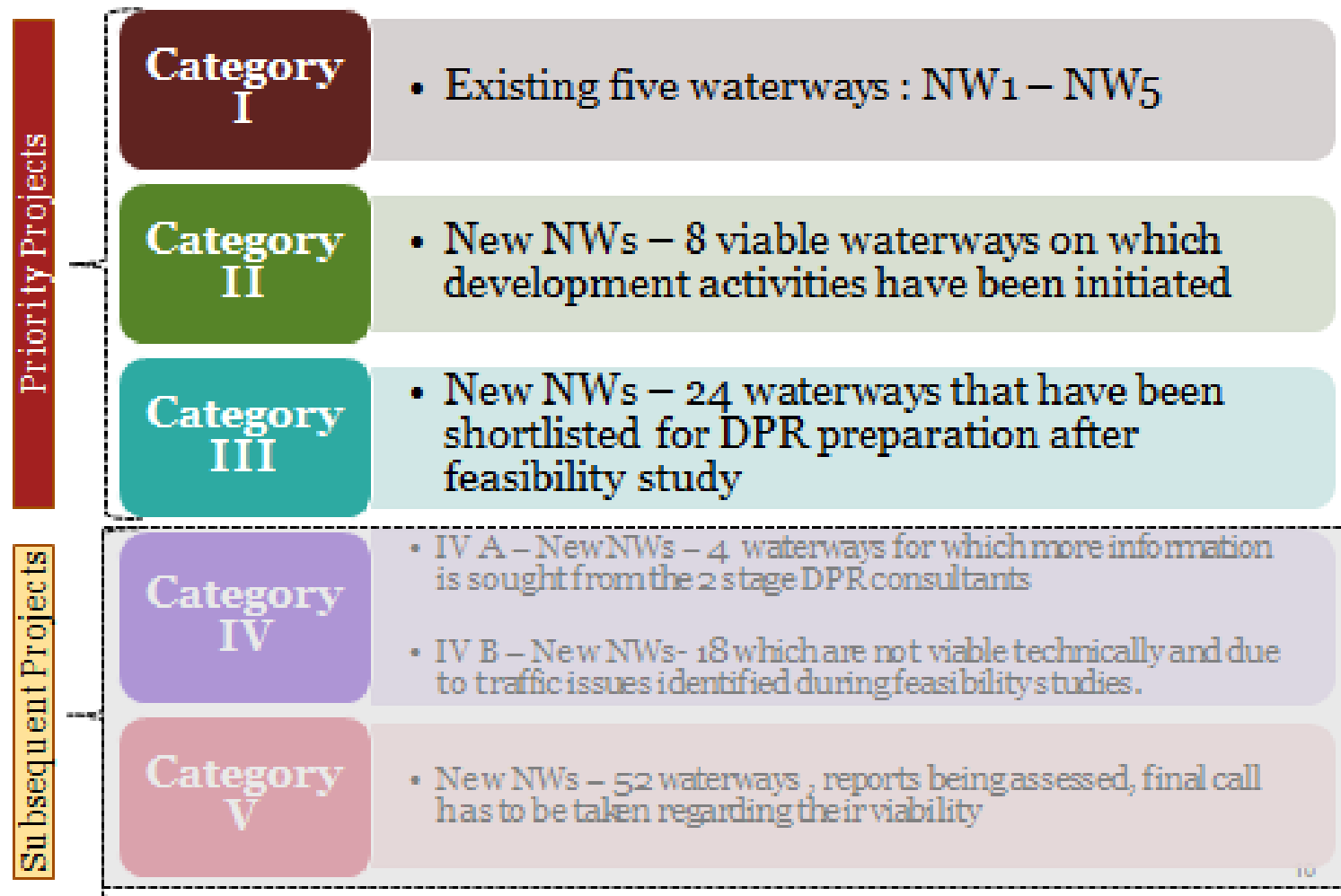
- [New Dry dock at Cochin Shipyard Limited](#) - to cater for LNG vessels, large naval vessels, jack-up rigs. Cost US\$ 230 million
- [International Ship Repair Facility](#) - US\$ 65m, completion by November 2020. Can repair 84 vessels/annum.
- [Shipbuilding and Ship Repair Facility](#) at Kandla
- India planning to build [LNG tankers with South Korean collaboration](#) in Cochin Shipyard Limited.

Development of National Waterways (1/2)



SOURCE: Ministry of Shipping

Development of National Waterways (2/2)



Investment opportunities in Indian IWT Sector (1/2)

Jal Marg Vikas Project: for capacity augmentation of NW 1 to enable movement of 1500 – 2000 DWT vessels from Haldia to Varanasi

- Multi modal Terminal Construction
- Navigational Lock
- Assured depth dredging
- LNG barges & bunkering facilities
- Ferry services

Development of NW 5 (From Talcher to Paradip & Dhamra ports)

- Construction of barrages, check dams & navigational locks
- Multi modal terminals
- Dredging
- Hinterland connectivity

Investment opportunities in Indian IWT Sector (2/2)

Development of 111 National Waterways which would require

- Fairway Development
- Terminal Construction
- Dredging
- Operation of vessels and cruises
- Aids to Navigation

Participation in PPP projects.

- Terminal operation & management
- Development of waterway infrastructure for commercial navigation
- Ship repair facilities
- Vessel leasing / chartering
- Passenger and captive cargo jetties

