

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION NO. 1419
TO BE ANSWERED ON 26th JULY, 2018

PROPOSALS FOR WATERWAYS

1419. SHRI K. PARASURAMAN:

Will the Minister of SHIPPING be pleased to state:

पोत परिवहन मंत्री

- (a) the details of proposals under consideration of the Government for development of waterways in the country;
- (b) whether the Government proposes to expedite these proposals in view of very low cost of transportation through waterways; and
- (c) if so, the details thereof and the future action plan of the Government in this regard?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

(a),(b)& (c) 111 inland waterways (including 5 existing) have been declared as 'National Waterways' (NWs) under the National Waterways Act, 2016 with effect from 12th April, 2016, after due consultations and recommendations of the State Governments. Reduced transportation cost is an important factor among others for development of National Waterways. As per RITES Report of 2014 on "Integrated National Waterways Transportation Grid", the cost saving in transportation of goods through Inland Water Transport (IWT) mode is as under:-

Mode	Railways	Highways	IWT
Freight (Rs/TKm)	1.36	2.50	1.06

NW-1 (River Ganga), NW-2 (River Brahmaputra), NW-3 (West Coast Canal from Kottapuram to Kollam along with Udyogmandal and Champakara Canals), NW-16 (River Barak), NW-27, 68 and 111 (in Goa), NW-9 (in Kerala) and NW-97 are operational.

Government is implementing the Jal Marg Vikas Project (JMVP) at a cost of Rs. 5369.18 crore for capacity augmentation of navigation on the Haldia – Varanasi stretch of NW-1 with the technical and financial assistance of the World Bank.

Based on the feasibility reports completed so far, the Inland Waterways Authority of India has found 36 NWs to be technically viable for development of shipping and navigation. Development activities have been initiated on 8 NWs as per details at **Annex-I**. The status of DPRs for the remaining 28 NWs is at **Annex –II**.

List of 8 National Waterways taken up for development

National Waterways	Status
1. River Barak (NW-16):	Under Phase -1, the stretch between Silchar to Bhanga (71 km) has been taken up for development. Waterway is operational with limited infrastructure facility.
2. River Gandak (NW-37): Bhaisalotan Barrage near TriveniGhat to confluence with Ganga river at Hajipur (296 km)in Bihar and UP.	Development works commenced from Ganga confluence to Bagaha Bridge (250 km approx.) stretch of NW-37 under Phase-1.
Waterways in Goa 3. NW-27-Cumberjua – confluence with Zuari to confluence with Mandovi river (17 km) 4. NW 68 – Mandovi – Usgaon Bridge to Arabian Sea (41 km) 5. NW 111 – Zuari – Sanvordem Bridge to Marmugao Port (50 km).	Development works for expansion / setting up of floating jetties and upgradation/ installation of navigational aids is underway. NWs of Goa are operational.
6. Alappuzha – Kottayam – Athirampuzha Canal (NW-9) :Boat Jetty, Alappuzha to Athirampuzha (38 km) in Kerala.	Development work in the Alappuzha – Kottayam stretch has commenced under Phase-1 for cargo movement. Waterways are already operational for ferry services.
7. River Rupnarayan (NW-86): Confluence of Dwarkeshwar and Silai rivers (Pratappur) to confluence with Hooghly river (Geonkhali) (72 km) in West Bengal.	Approximately 34 kms between Geonkhali to Kolaghat stretch has been taken up for development under Phase-I.
8. Sunderbans Waterways (NW-97): Namkhana to AtharaBanki Khal & 13 connected rivers (654 km) in West Bengal.	Phase-I development work of this waterway from Namkhana to Athara Banki Khal (172 km)has been taken up. Waterway is already operational under Indo-Bangladesh Protocol (IBP) route.

Annex-II

Status of Detailed Project Reports (DPRs) of 28 NWs			
Sl. No.	River/Canal (NW)	States	Length (km)
<u>DPRs received</u>			
1	GHAGHRA RIVER (NW-40)	U.P & Bihar	354
2	KOSI RIVER (NW-58)	Bihar	236
3	SUBANSIRI RIVER (NW-95)	Assam	106
4	BAITARNI RIVER (NW-14)	Odisha	48
5	MAHANADI -LUNA RIVER (NW-64)	Odisha	98
6	AMBA RIVER (NW-10)	Maharashtra	45
7	REVADANDA CREEK - KUNDALIKA RIVER (NW-85)	Maharashtra	31
8	MAHI RIVER (NW-66)	Gujarat	247
9	NARMADA RIVER (NW-73)	Gujarat & Maharashtra	226
10	TAPI RIVER (NW-100)	Gujarat	173
11	SUBARNAREKHA RIVER (NW-96)	Odisha	30
12	AJOY (AJAY) RIVER (NW-7)	West Bengal	19
13	ICHAMATI RIVER (NW-44)	West Bengal	63
14	KABINI RIVER (NW-51)	Karnataka	23
15	CHAPORA RIVER (NW-25)	Goa	25
16	DABHOL CREEK - VASHISHTI RIVER (NW-28)	Maharashtra	45
17	MAPUSA - MOIDE RIVER (NW-71)	Goa	27
18	SAVITRI RIVER (BANKOT CREEK) (NW-89)	Maharashtra	45
19	GURUPUR RIVER (NW-43)	Karnataka	10
20	NETRAVATHI RIVER (NW-74)	Karnataka	30
21	KALI RIVER (NW-52)	Karnataka	53
22	SHARAVATI RIVER (NW-90)	Karnataka	29
<u>DPRs under preparation</u>			
23	ALAPPUZHA- CHANGANASSERY CANAL (NW-8)	Kerala	29
24	KOTTAYAM-VAIKOM CANAL (NW-59)	Kerala	19
25	Kalyan-Thane-Mumbai Waterway, Vasai Creek and Ulhas river (NW- 53)	Maharashtra	145
26	Tizu and Zungki rivers (NW-101)	Nagaland	42
27	Yamuna (NW-110)	Delhi, Haryana and Uttar Pradesh	1089
28	Jhelum (NW-49)	Jammu & Kashmir	110

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION NO. 1422
TO BE ANSWERED ON 26th JULY, 2018

PROJECTS IN ODISHA UNDER SAGARMALA PROGRAMME

1422. DR. KULAMANI SAMAL:

Will the Minister of SHIPPING be pleased to state:

पोत परिवहन मंत्री

- (a) the details of projects being executed under the Sagarmala Programme in Paradip Port Trust in Odisha;
- (b) whether the Government proposes to develop Paradip Port Trust Hospital under the Sagarmala Programme;
- (c) if so, the details and the present status thereof; and
- (d) the details of funds allocated and utilised for these projects during the last three years and the current year?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

- (a) 2 projects (cost: Rs. 169 crore) completed and 11 projects (cost: Rs. 9854 crore) are under implementation at Paradip Port under Sagarmala.
- (b) No, Madam.
- (c) Question does not arise.
- (d) Ministry of Shipping is not funding these projects. These projects are being funded by Paradip Port Trust, Indian Oil Corporation Limited and Private Sector.

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION NO. 1450
TO BE ANSWERED ON 26th JULY, 2018

SAFETY AND WELFARE OF SEAFARERS

1450. SHRI TEJ PRATAP SINGH YADAV:
SHRIMATI ANJU BALA:

Will the Minister of SHIPPING be pleased to state:

पोत परिवहन मंत्री

- (a) whether the Government has taken adequate steps to safeguard the interest of Indian crew members aboard foreign vessels specially in exigencies like pirate hijacking or fatal accidents and if so, the details thereof;
- (b) whether implementation of the relevant Maritime Act/Laws by the Government has been lax in such cases and if so, the details thereof along with the reaction of the Government thereto;
- (c) whether the retired seafarers have protested by hunger strike against discontinuance of the monthly ex-gratia allowance and if so, the details thereof along with the reaction of the Government thereto;
- (d) whether the Seafarers Welfare Fund Society has been set up for the welfare of Indian seafarers and their families;
- (e) if so, the details of objectives, functions and achievements thereof along with the funds released for the purpose so far; and
- (f) other welfare measures being taken by the Government in this regard?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

(a) & (b) To deal with potential maritime security situations arising out of any hijacking at sea of merchant vessels with Indian crew, an Inter-Ministerial Group (IMGO) was set up by the Government under the Ministry of Shipping to deal with the hostage situation arising out of the hijacking at sea of merchant vessels with Indian crew. Government had also approved the Contingency Plan for dealing with piracy and hijacking of merchant ships and constituted a Committee of Secretaries on Anti-Piracy and Hijacking at sea (COSAPH) under the Chairmanship of Cabinet Secretary. In addition to this, the following anti –piracy measures have been put in place for Indian flag merchant vessels and sailing vessels:

- (i) Guidelines for anti-piracy measures to be implemented on Indian Ships through issue of Merchant Shipping Notice No.1 of 2011 dated 14.1.2011. The guidelines provide for elaborate anti-piracy measures (Best Management Practices), including safe house/citadel for vessels.
- (ii) Banning of sailing vessels to ply in waters south or west of the line joining Salalah and Male through Merchant Shipping Notice No. 3/2010 dated 31.3.2010.
- (iii) Advisory issued by Directorate General of Shipping vide Notice No. 35-NT(2)/2017 dated 6th April, 2017 for not transiting through Gulf of Aden.
- (iv) Naval escort provided by Indian naval ships in the Gulf of Aden since 2008.
- (v) Enhanced vigil by the Indian Navy in the Indian Exclusive Economic Zone (EEZ) and westward upto 65 degree east longitude.
- (vi) Active participation by India in the security meetings of the International Maritime Organization, Contact Group on Piracy off the Coast of Somalia (CGPCS) and other international fora.

As regards fatal accidents, for Indian ships/vessels were caught in distress/distress-like situations due to grounding, collision, sinking, flooding, fire on board, engine failure etc., the Government of India has constituted Maritime Rescue Co-ordination Centres (MRCCs) to deal with such situations and necessary rescue measures are undertaken through various agencies.

(c) Yes, Madam. An ex-gratia allowance of Rs.200/- per month was being paid by Seafarers Welfare Fund Society (SWFS) to some retired seafarers who had worked on foreign going vessels as per government records as on 27.03.2001. SWFS has decided to discontinue the ex-gratia payment due to the erosion of the corpus of the fund on whose interest income the payment of ex-gratia was being made and instead decided to distribute the balance of the corpus amount as lumpsum payment to all the beneficiaries.

One faction of Forward Seamen's Union of India has protested on 25/26.06.2018 about this decision of SWFS. Government had already informed them that merchant shipping is governed by market forces. Seafarers job world-wide is contractual and for a specific period. Pension to an employee is paid by the employer if a provision for payment of pension is mentioned in the employment contract.

(d) to (f) Yes, Madam.

...3/-

(a) Some of the objectives as set out in the Memorandum of Association of SWFS are as follows:-

- (i) To provide and maintain a fund by the name of the Seafarers' Welfare Fund;
- (ii) To prepare the annual budget of income and expenditure in respect of the Fund for submission to the Central Government.
- (iii) To sell, lease, mortgage, surrender, exchange, dispose of, or otherwise deal with, all or any part of the movable or immovable property belonging to the Society or in its possession or occupation, subject to such limitations as the Central Government may from time to time impose;
- (iv) To invest in any security or keep in deposit with any bank and otherwise deal with any moneys of the Society in such manner as may, from time to time, be prescribed by the Central Government.
- (v) To give pension, gratuities or charitable aid to employees or ex-employees of the SWFS or to their wives, children or other relatives or dependents.

(b) The functions of the SWFS are as follows:-

- (i) To implement welfare schemes for the retired seafarers and their families on completion of age of superannuation/voluntarily retired seafarers permanently medically unfit for seafaring job.
- (ii) To implement welfare schemes for the families of the seafarers.

(c) The achievements of the objectives of the SWFS are as follows:-

The following welfare Schemes are being implemented by the SWFS for the Seafarers-(i) Survival Benefit Scheme (ii) Invalidity Benefit Scheme (iii) Maternity Benefit Scheme for Female Seafarers. These schemes became effective from 21.08.2014 onwards.

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION NO. 1456
TO BE ANSWERED ON 26th JULY, 2018

NATIONAL WATERWAYS PROJECTS IN NER

1456. KUMARI SUSHMITA DEV:

Will the Minister of SHIPPING be pleased to state:

पोत परिवहन मंत्री

- (a) the details of National Waterways approved during the last four years, year-wise;
- (b) the details and the present status of waterways projects approved and being implemented in North-Eastern Region (NER), project-wise;
- (c) the details of the time-frame set for completion and operationalization of these waterways in NER, project-wise;
- (d) whether there are any time or cost overrun in completion of these projects in NER; and
- (e) if so, the details thereof along with the reasons therefor?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

(a) to (e) Five National Waterways (NWs) existed prior to 12.4.2016. Thereafter, 106 new inland waterways were declared as NWs under the National Waterways Act, 2016. A list of these NWs is at **Annex-I**.

20 NWs out of the 111 NWs are in North Eastern Region (NER). NW-2 (river Brahmaputra) from Dhubri to Sadiya (891 km) is operational and cruise & cargo vessels are moving on it. The present status of facilities created/ to be created in NW-2 is at **Annex-II**.

Fairway development works commenced on new NW-16 (river Barak) in 2017-18 for Phase-I from Silchar to Bhanga with scheduled completion in September, 2019. The status of feasibility studies of remaining 18 new NWs in NER is at **Annex-III**. The time frame for the development and operationalization of these NWs depends on the outcome of the feasibility studies.

List of 111 National Waterways

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
1	National Waterway 1	1620	Ganga-Bhagirathi-Hooghly River System (Haldia - Allahabad)	Uttar Pradesh, Bihar, Jharkhand & West Bengal
2	National Waterway 2	891	Brahmaputra River (Dhubri - Sadiya)	Assam
3	National Waterway 3	205	West Coast Canal (Kottapuram - Kollam), Champakara and Udyogmandal Canals	Kerala
		170	West Coast Canal (Kottapuram - Kozhikode)	
4	National Waterway 4	50	Kakinada Canal (Kakinada to Rajahmundry)	Andhra Pradesh, Telangana, Chhattisgarh, Karnataka, Tamil Nadu, Pondichery and Maharashtra
		171	Godavari river (Bhadrachalam to Rajahmundry)	
		139	Eluru Canal (Rajahmundry to Vijayawada)	
		157	Krishna river (Wazirabad to Vijayawada)	
		113	Commamur Canal (Vijayawada to Peddaganjam)	
		316	North Buckingham Canal (Peddaganjam to Central Station of Chennai)	
		110	South Buckingham canal (Central Station of Chennai to Marakanam)	
		22	Marakanam to Puducherry through Kaluvelly tank	
		1202	River Godavari (Bhadrachalam - Nashik)	
5	National Waterway 5	256	East Coast Canal and Matai river	Odisha and West Bengal
		265	Brahmani-Kharsua-Dhamra rivers	
		67	Mahanadi delta rivers (Consisting of Hansua river, Nunanala, Gobrinala, Kharnasi river and Mahanadi river)	
6	National Waterway 6	68	AAI RIVER	Assam
7	National Waterway 7	90	AJOY (AJAY) RIVER	West Bengal
8	National Waterway 8	29	ALAPPUZHA-CHANGANASSERY CANAL	Kerala

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
9	National Waterway 9	40	ALAPPUZHA- KOTTAYAM – ATHIRAMPUZHA CANAL	Kerala Alternate route: 11.5km
10	National Waterway 10	45	AMBA RIVER	Maharashtra
11	National Waterway 11	99	ARUNAWATI - ARAN RIVER SYSTEM	Maharashtra
12	National Waterway 12	5.5	ASI RIVER	Uttar Pradesh
13	National Waterway 13	11	AVM CANAL	Kerala & Tamil Nadu
14	National Waterway 14	48	BAITARNI RIVER	Odisha
15	National Waterway 15	135	BAKRESWAR - MAYURAKSHI RIVER SYSTEM	West Bengal
16	National Waterway 16	121	BARAK RIVER	Assam
17	National Waterway 17	189	BEAS RIVER	Himachal Pradesh & Punjab
18	National Waterway 18	69	BEKI RIVER	Assam
19	National Waterway 19	67	BETWA RIVER	Uttar Pradesh
20	National Waterway 20	95	BHAVANI RIVER	Tamil Nadu
21	National Waterway 21	139	BHEEMA RIVER	Karnataka & Telangana
22	National Waterway 22	156	BIRUPA - BADI GENGUTI - BRAHMANI RIVER SYSTEM	Odisha
23	National Waterway 23	56	BUDHA BALANGA	Odisha
24	National Waterway 24	61	CHAMBAL RIVER	Uttar Pradesh
25	National Waterway 25	33	CHAPORA RIVER	Goa
26	National Waterway 26	51	CHENAB RIVER	Jammu & Kashmir
27	National Waterway 27	17	CUMBERJUA RIVER	Goa
28	National Waterway 28	45	DABHOL CREEK - VASHISHTI RIVER SYSTEM	Maharashtra
29	National Waterway 29	132	DAMODAR RIVER	West Bengal
30	National Waterway 30	109	DEHING RIVER	Assam
31	National Waterway 31	114	DHANSIRI / CHATHE	Assam
32	National Waterway 32	63	DIKHU RIVER	Assam
33	National Waterway 33	61	DOYANS RIVER	Assam
34	National Waterway 34	137	DVC CANAL	West Bengal
35	National Waterway 35	108	DWAREKESWAR RIVER	West Bengal
36	National Waterway 36	119	DWARKA RIVER	West Bengal
37	National Waterway 37	296	GANDAK RIVER	Bihar & Uttar Pradesh
38	National Waterway 38	62	GANGADHAR RIVER	Assam & West Bengal
39	National Waterway 39	49	GANOL RIVER	Meghalaya
40	National Waterway 40	354	GHAGHRA RIVER	Bihar & Uttar Pradesh
41	National Waterway 41	112	GHATAPRABHA RIVER	Karnataka
42	National Waterway 42	514	GOMTI RIVER	Uttar Pradesh
43	National Waterway 43	10	GURUPUR RIVER	Karnataka
44	National Waterway 44	63	ICHAMATI RIVER	West Bengal
45	National Waterway 45	650	INDIRA GANDHI CANAL	Punjab , Haryana

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
				&Rajashtan
46	National Waterway 46	35	INDUS RIVER	Jammu & Kashmir
47	National Waterway 47	131	JALANGI RIVER	West Bengal
48	National Waterway 48	590	JAWAI-LUNI-RANN OF KUTCH RIVER SYSTEM	Gujarat & Rajasthan
49	National Waterway 49	110	JHELUM RIVER	Jammu & Kashmir
50	National Waterway 50	43	JINJIRAM RIVER	Assam & Meghalaya
51	National Waterway 51	23	KABINI RIVER	Karnataka
52	National Waterway 52	53	KALI RIVER	Karnataka
53	National Waterway 53	145	KALYAN-THANE-MUMBAI WATERWAY, VASAI CREEK AND ULHAS RIVER SYSTEM	Maharashtra
54	National Waterway 54	86	KARAMNASA RIVER	Bihar & Uttar Pradesh
55	National Waterway 55	311	KAVERI - KOLLIDAM RIVER SYSTEM	Tamil Nadu
56	National Waterway 56	22	KHERKAI RIVER	Jharkhand
57	National Waterway 57	50	KOPILI RIVER	Assam
58	National Waterway 58	236	KOSI RIVER	Bihar
59	National Waterway 59	19	KOTTAYAM-VAIKOM CANAL	Kerala
60	National Waterway 60	80	KUMARI RIVER	West Bengal
61	National Waterway 61	28	KYN Shi RIVER	Meghalaya
62	National Waterway 62	86	LOHIT RIVER	Assam & Arunachal Pradesh
63	National Waterway 63	336	LUNI RIVER	Rajasthan
64	National Waterway 64	426	MAHANADI RIVER	Odisha
65	National Waterway 65	80	MAHANANDA RIVER	West Bengal
66	National Waterway 66	247	MAHI RIVER	Gujarat
67	National Waterway 67	94	MALAPRABHA RIVER	Karnataka
68	National Waterway 68	41	MANDOVI RIVER	Goa
69	National Waterway 69	5	MANIMUTHARU RIVER	Tamil Nadu
70	National Waterway 70	245	MANJARA RIVER	Maharashtra & Telangana
71	National Waterway 71	27	MAPUSA / MOIDE RIVER	Goa
72	National Waterway 72	59	NAG RIVER	Maharashtra
73	National Waterway 73	226	NARMADA RIVER	Maharashtra & Gujarat
74	National Waterway 74	79	NETRAVATHI RIVER	Karnataka
75	National Waterway 75	142	PALAR RIVER	Tamil Nadu
76	National Waterway 76	23	PANCHAGANGAVALI (PANCHAGANGOLI) RIVER	Karnataka
77	National Waterway 77	20	PAZHYAR RIVER	Tamil Nadu
78	National Waterway 78	262	PENGANAGA - WARDHA RIVER SYSTEM	Maharashtra & Telangana
79	National Waterway 79	28	PENNNAR RIVER	Andhra Pradesh
80	National Waterway 80	126	PONNIYAR RIVER	Tamil Nadu
81	National Waterway 81	35	PUNPUN RIVER	Bihar
82	National Waterway 82	58	PUTHIMARI RIVER	Assam

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
83	National Waterway 83	31	RAJPURI CREEK	Maharashtra
84	National Waterway 84	44	RAVI RIVER	Jammu & Kashmir, Himachal Pradesh & Punjab
85	National Waterway 85	31	REVADANDA CREEK - KUNDALIKA RIVER SYSTEM	Maharashtra
86	National Waterway 86	72	RUPNARAYAN RIVER	West Bengal
87	National Waterway 87	210	SABARMATI RIVER	Gujarat
88	National Waterway 88	14	SAL RIVER	Goa
89	National Waterway 89	45	SAVITRI RIVER (BANKOT CREEK)	Maharashtra
90	National Waterway 90	29	SHARAVATI RIVER	Karnataka
91	National Waterway 91	52	SHASTRI RIVER - JAIGAD CREEK SYSTEM	Maharashtra
92	National Waterway 92	26	SILABATI RIVER	West Bengal
93	National Waterway 93	63	SIMSANG RIVER	Meghalaya
94	National Waterway 94	141	SONE RIVER	Bihar
95	National Waterway 95	106	SUBANSIRI RIVER	Assam
96	National Waterway 96	311	SUBARNREKHA RIVER	Jharkhand, West Bengal & Odisha
97	National Waterway 97	172	SUNDERBANS WATERWAY	West Bengal
		56	BIDYA RIVER	West Bengal
		15	CHHOTA KALAGACHI (CHHOTO KALERGACHI) RIVER	West Bengal
		7	GOMAR RIVER	West Bengal
		16	HARIBHANGA RIVER	West Bengal
		37	HOGLA (HOGAL)-PATHANKHALI RIVER	West Bengal
		9	KALINDI (KALANDI) RIVER	West Bengal
		22	KATAKHALI RIVER	West Bengal
		99	MATLA RIVER	West Bengal
		28	MURI GANGA (BARATALA) RIVER	West Bengal
		53	RAIMANGAL RIVER	West Bengal
		14	SAHIBKHALI (SAHEBKHALI) RIVER	West Bengal
		37	SAPTAMUKHI RIVER	West Bengal
64	THAKURRAN RIVER	West Bengal		
98	National Waterway 98	377	SUTLEJ RIVER	Himachal Pradesh & Punjab
99	National Waterway 99	62	TAMARAPARANI RIVER	Tamil Nadu
100	National Waterway 100	436	TAPI RIVER	Maharashtra & Gujarat
101	National Waterway 101	42	TIZU - ZUNGKI RIVERS	Nagaland
102	National Waterway 102	87	TLWANG (DHALESWARI RIVER)	Assam & Mizoram
103	National Waterway 103	73	TONS RIVER	Uttar Pradesh
104	National Waterway 104	232	TUNGABHADRA RIVER	Karnataka, Telangana &

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
				Andhra Pradesh
105	National Waterway 105	15	UDAYAVARA RIVER	Karnataka
106	National Waterway 106	20	UMNGOT (DAWKI) RIVER	Meghalaya
107	National Waterway 107	46	VAIGAI RIVER	Tamil Nadu
108	National Waterway 108	53	VARUNA RIVER	Uttar Pradesh
109	National Waterway 109	166	WAINGANGA - PRANAHITA RIVER SYSTEM	Maharashtra &Telangana
110	National Waterway 110	1080	YAMUNA RIVER	Delhi, Haryana & Uttar Pradesh
111	National Waterway 111	50	ZUARI RIVER	Goa
		20162.5		

Status of projects constructed and under implementation on NW-2

1. Facilities already created / constructed

- i. Navigational channel with least available depth of 2.5 m between Bangladesh Border - Neamati, 2.0 m between Neamati - Dibrugarh and 1.5 m between Dibrugarh - Sadiya / Oriumghat are maintained.
- ii. Multimodal terminal at Pandu with Low Level and High Level Jetty.
- iii. Ro-Ro terminal at Dhubri with RCC Ro-Ro Jetty.
- iv. Floating terminal at 11 locations on NW-2 i.e. Hatsingimari, Jogighopa, Pandu, Tezpur, Silghat, Biswanathghat, Neamati, Bogibeel, Sengajan, Oakland/ Dibrugarh and Oriumghat.
- v. Differential Global Positioning System (DGPS) at Dhubri, Jogighopa, Biswanathghat and Dibrugarh for safe navigation.
- vi. Ro-Ro service for providing connectivity between north bank (Dhubri) and south bank (Hatsingimari) of river Brahmaputra. The Ro-Ro service has created a direct link between Assam and Meghalaya enabling trucks/ vehicle to avoid circuitous road route of approx. 220 km through Jogighopa Bridge. The Ro-Ro services between Dhubri and Hatsingimari started w.e.f. 01.07.2017.
- vii. Day navigational aids for safe shipping and navigation in entire stretches of NW-2.
- viii. Night navigational aids for safe shipping and navigation in Bangladesh Border – Pandu and Pandu – Silghat stretches of NW-2.
- ix. River Conservancy Works like bandalling and dredging for maintaining navigable depth in shallow location.
- x. Fortnightly/ Monthly Thalweg Survey in entire stretches of NW-2.
- xi. Regular cargo service on NW-2 is carried out by IWAI through departmental tug and 400 tonne capacity barge (taken from IWT Assam).

2. Projects under implementation in NER:

- i. Channelization of navigational route between Burhaburhi to Hatsingimari in Bangladesh Border – Pandu stretch through Water Resource Department, Govt. of Assam. The expected date of completion is by August 2018.
- ii. Two more Ro-Ro routes have been identified between (i) Neamati to Kamlabari at an estimated cost of Rs. 215 cr. with length of 12.7 km by waterway (which otherwise takes 410 km of travel by road) to be operationalised by December 2018, and (ii) Maijan (Dibrugarh) to Sengajan at an estimated cost of Rs. 182 cr. and length of 24.7 km by waterway (which otherwise takes 640 km of travel by Road) to be operationalised by August 2019.
- iii. Procurement of 2 Self-Propelled Cutter Suction Dredgers (SPCSDs) by February 2020.

STATUS OF STUDIES / DEVELOPMENT WORKS IN NEW NATIONAL WATERWAYS :
NORTH-EASTERN STATES

Sl. No.	Name of the Waterways	States	Length of the Waterway (km)	Status
1	SUBANSIRI RIVER (NW-95)	Assam	111	Stage-I: Feasibility study completed, DPR received.
2	DHANSIRI / CHATHE RIVER (NW-31)	Assam	110	Stage-I: Feasibility study completed
3	TIZU - ZUNGKI RIVERS (NW-101)	Nagaland	42	Stage-I: Feasibility study completed
4	LOHIT RIVER (NW-62)	Assam & Arunachal Pradesh	100	Stage-I: Feasibility study completed. Not found technically feasible.
5	AAI RIVER (NW-6)	Assam	71	Field work completed. Draft hydrographic survey reports received.
6	BEKI RIVER (NW-18)	Assam	73	
7	DEHING RIVER (NW-30)	Assam	114	
8	DIKHU RIVER (NW-32)	Assam	63	
9	DOYANS RIVER (NW-33)	Assam	61	
10	KOPI LI RIVER (NW-57)	Assam	46	
11	PUTHIMARI RIVER (NW-82)	Assam	72	
12	TLWANG (DHALESWARI) RIVER (NW-102)	Assam & Mizoram	86	
13	GANGADHAR RIVER (NW-38)	Assam & West Bengal	62	
14	JINJIRAM RIVER (NW-50)	Assam & Meghalaya	43	
15	GANOL RIVER (NW-39)	Meghalaya	49	
16	UMNGOT (DAWKI) RIVER (NW-106)	Meghalaya	20	
17	SIMSANG RIVER (NW-93)	Meghalaya	62	
18	KYN Shi RIVER (NW-61)	Meghalaya	28	
TOTAL		-	1213km	

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION NO. 1479
TO BE ANSWERED ON 26th JULY, 2018

PROJECTS IN KERALA UNDER SAGARMALA PROGRAMME

1479. SHRIMATI P.K. SREEMATHI TEACHER:

Will the Minister of SHIPPING be pleased to state:

पोत परिवहन मंत्री

- (a) the details of projects sanctioned in the State of Kerala under the Sagarmala Programme;
- (b) the details of estimated expenditure for these projects along with the allocation of funds for the purpose during the current year;
- (c) whether any proposal has been received from the Government of Kerala regarding Azheekal Container-cum-Passenger Terminal under this Programme; and
- (d) if so, the details and the present status thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

(a & b) Projects are being sanctioned by various Line Ministries, State Governments and other agencies under Sagarmala Programme. 4 projects (cost: Rs. 103 Crore) have been sanctioned by Ministry of Shipping in State of Kerala under the Sagarmala Programme for financial assistance of Rs. 33.8 Crore. Ministry of Shipping has already released Rs. 27.7 Crore and made adequate budgetary allocation for release of fund during the current year.

(c) No, Madam.

(d) Question does not arise.

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION No.1494
TO BE ANSWERED ON 26th July, 2018

NEW MAJOR PORT AT DUGARAJAPATANAM

1494. SHRI RAM MOHAN NAIDU KINJARAPU:
SHRI MUTHAMSETTI SRINIVASA RAO (AVANTHI):
SHRI KESINENI NANI:

Will the Minister of SHIPPING be pleased to state:

पोत परिवहन मंत्री

- (a) the present status of setting up of a new Major Port at Dugarajapatanam in Andhra Pradesh;
- (b) whether the Government proposes to invite bids for execution of the said project and if so, the details thereof;
- (c) the time by which the work on the said project is likely to be started; and
- (d) the details of projects taken up under the Sagarmala Programme in the State of Andhra Pradesh in view of its long coastline?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

(a) to (c) The development of a new Major Port at Duggirajapatnam Port in Andhra Pradesh is included in Schedule XIII of the AP Reorganisation Act, 2014. The development of new Major Port at Duggirajapatnam was examined by NITI Aayog in consultation with Ministry of Shipping, Ministry of Finance and Government of Andhra Pradesh and it has been concluded that the project will not be viable due to strong competition from nearby Ports of Krishnapatnam, Ennore and Chennai which are 40, 80 & 80 KMs away respectively from the proposed Port. Ministry of Shipping has requested Government of Andhra Pradesh to furnish comments on the recommendations of NITI Aayog along with suggestions for alternate site (s) for development of a Major Port. The response from Government of Andhra Pradesh is still awaited. Ministry of Shipping, in the meanwhile, has constituted an Expert Committee to examine the issue and recommend further course of action.

(d) Total 104 projects have been identified with investment of Rs. 164,413 Crore in Andhra Pradesh under Sagarmala programme. The number of approved projects and investments across various categories of Sagarmala Programme are shown in Table below, out of which 14 projects are completed and 31 projects are ongoing.

Table

Project Category	No. of identified Projects	No. of Approved Projects	Total investments in Projects (Rs. Cr)
Port Modernization	25	13	21,070
Port Connectivity	57	25	47,250
Port Industrialization	11	6	93,548
Coastal Community Development	11	5	2,544

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION NO. 1528
TO BE ANSWERED ON 26TH JULY, 2018

PROFITABILITY OF PORTS

†1528. SHRI MANSHANKAR NINAMA:

Will the Minister of SHIPPING be pleased to state:

पोत परिवहन मंत्री

- (a) the details of Government ports that earned profit during each of the last three years along with the steps taken to ensure profitability of these ports;
- (b) the details of Government ports that incurred losses during the said period along with the reasons therefor; and
- (c) the number of small, medium and major ports being developed in the country and the structural reforms proposed to be undertaken in their construction and management to ensure their profitability?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

(a & b) Details of Major Ports that earned profit (Operating Surplus) during the last three years are **annexed**. All the 12 Major Ports have earned operating surplus during the last three years. This has been possible on account of various infrastructure & development projects undertaken by the Ports which is an ongoing process and also because of constant monitoring of the Port operations.

(c) Infrastructural development and capacity augmentation of 12 Major Ports is a continual process. Under the Sagarmala programme, 107 Projects for various Major Ports have been identified for modernization and infrastructure development of the Ports. Major Port Authorities Bill, 2016 which aims to provide greater operational freedom to the boards of major ports in tune with the present day requirement has been introduced in the Lok Sabha to replace Major Port Trusts Act, 1963. Non-major ports (small, medium) are under the jurisdiction of respective State Maritime Boards/State Governments.

ANNEXURE**PROFIT (OPERATING SURPLUS) AT MAJOR PORTS****DURING 2015-16 TO 2017-18****(Rs.in Crores)**

PORT	OPERATING SURPLUS		
	2015-2016	2016-2017	2017-2018
KOLKATA	463.01	544.02	781.42
PARADIP	448.49	536.99	677.68
VIZAG	355.85	385.94	510.51
KAMARAJAR (ENNORE)	494.91	483.93	497.86
CHENNAI	196.50	217.20	229.92
V.O.CHIDAMBARANAR	311.45	350.02	372.05
COCHIN	70.90	127.72	159.58
NEW MANGALORE	116.80	171.66	213.56
MORMUGAO	103.62	175.61	151.83
MUMBAI	402.49	366.13	357.03
J.N.P.T.	971.98	896.00	1139.64
DEENDAYAL (KANDLA)	360.56	724.36	804.72
ALL PORTS	4296.56	4979.58	5895.80

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION NO. 1540
TO BE ANSWERED ON 26th JULY, 2018

WORKSHOP ON SKILL DEVELOPMENT

1540. SHRI GANESH SINGH:

Will the Minister of SHIPPING be pleased to state:

पोत परिवहन मंत्री

- (a) whether the Government in association with the Deen Dayal Upadhyaya Grameen Kaushalya Yojana(DDU-GKY) has conducted any workshop on skill development in the Port and Maritime Sector in the country;
- (b) if so, the details along with the achievements made as a result thereof;
- (c) whether the said workshop brought together employers, training partners and the Government institutions working in the Port and Maritime Sector;
- (d) if so, the details of employment generated and the number of beneficiaries along with the amount spent on such workshop; and
- (e) the details of funds spent on improving Occupational Safety and Health in shipbreaking yards in the country along with the number of beneficiaries during the last three years and the current year?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

(a): Yes Madam. The Ministry of Shipping in association with Deen Dayal Upadhyaya Grameen Kaushalya Yojana(DDU-GKY) of the Ministry of Rural Development organized a workshop on skill development in Port and Maritime sector on 8th June, 2018 at India Habitat Centre, New Delhi.

(b) & (c) The workshop sensitized stakeholders about skill development initiatives and strengthened cooperation between State Governments, Ministry of Shipping's institutions, employers and training providers to accelerate implementation of skill development initiatives and provided a common platform to discuss future opportunities for skill development in the Port and Maritime Sector.

(d) The workshop was aimed at sensitizing various stakeholders' about skill development initiatives undertaken by Ministry of Shipping. An amount of Rs 3, 13,173/- spent on the workshop.

(e) The Ministry of Shipping has been working in close association with Gujarat Maritime Board(GMB) to ensure that Alang's business environment and working conditions of the workers improve significantly. The Ministry under its flagship programme, Sagarmala has sanctioned Rs.30 Crore in the year 2016-17 out of which Rs 10 Crore has been released for skill development of the workers focused on Occupational Safety and Health training. Under the programme, 3046 and 3271 workers have been trained in year 2017 and 2018 respectively. Rs 6.58 Crore has been spent so far by Gujarat Maritime Board from Ministry of Shipping's grant.

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION NO. 1572
TO BE ANSWERED ON 26th JULY, 2018

DEVELOPMENT OF PORT INFRASTRUCTURE

1572. SHRI PR. SENTHIL NATHAN:
SHRI K.N. RAMACHANDRAN:
SHRIMATI V. SATHYA BAMA:
SHRI BHARATHI MOHAN R.K.:

Will the Minister of SHIPPING be pleased to state:

पोत परिवहन मंत्री

- (a) whether the Government has provided adequate funds for enhancing port infrastructure facilities under the Sagarmala Programme and to increase the capacity of ports in the country;
- (b) if so, the details thereof during the last two years and the current year along with the details of ports constructed/ expanded;
- (c) whether the Government has allowed private sector in the establishment/improvement of ports in the country and if so, the details thereof; and
- (d) the details of private ports established/proposed to be established in the country?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

(a&b) Under Sagarmala Programme, 243 projects (cost: Rs. 142,989 crore) have been identified for enhancing the infrastructure at Indian ports upto 2035. Out of these 44 projects (cost: Rs.8549 crore) completed and 79 projects (cost: Rs. 36,399 crore) are under implementation. These projects are being implemented by Major Port Trusts, State Maritime Boards, State Government/UTs and Private Sector.

12 Major ports have spent Rs. 5,431 Crore in last two Financial years (FY2016-17 and FY2017-18) and have planned to spend Rs. 4,552 Crore in current Financial year (FY2018-19) for developing port infrastructure. Additionally, Ministry of Shipping has released Rs. 446 Crore to various implementing agencies in last two years for 35 port infrastructure projects costing Rs. 1,879 Crore.

(c&d) Government has allowed private sector participation in the development of new ports and development of infrastructure at existing ports. More than 67 projects costing Rs. 89,567 Crore from major ports are being implemented by Private sector under PPP model. There are 34 existing private ports where port infrastructure are being developed by Private Sector (**Annex-I**). Also, 15 new port licenses have been granted by State Govts. to Private Sector for development (**Annex-II**).

List of Existing Private Ports in India

Sr. No.	State	Port Name
1	Gujarat	Sikka
2	Gujarat	Hazira / AHPPL
3	Gujarat	Mundra / GAPL
4	Gujarat	Pipavav / GPPL
5	Gujarat	Dahej
6	Gujarat	Mul-Dwarka
7	Andhra Pradesh	Kakinada Deepwater Port
8	Andhra Pradesh	Machilipatnam
9	Andhra Pradesh	Krishnapatnam
10	Andhra Pradesh	Gangavaram
11	Maharashtra	Dahanu
12	Maharashtra	Bandra
13	Maharashtra	Trombay
14	Maharashtra	Ulwa-Belapur /(Panvel)
15	Maharashtra	Dharamtar (sub-port of Karanja Port)
16	Maharashtra	Thal (Rewas)
17	Maharashtra	Revdanda
18	Maharashtra	Rajpuri / Dighi
19	Maharashtra	Bankot
20	Maharashtra	Kelshi
21	Maharashtra	Dabhol
22	Maharashtra	Jaigad
23	Maharashtra	Vijaydurg
24	Maharashtra	Redi
25	Maharashtra	Kiranpani
26	Maharashtra	Ratnagiri
27	Puducherry	Karaikal
28	Tamil Nadu	Ennore
29	Tamil Nadu	Thirukkadaiyur
30	Tamil Nadu	PY-3 (Oil field)
31	Tamil Nadu	Kattupalli
32	Tamil Nadu	Kudankulam
33	Odisha	Gopalpur
34	Odisha	Dhamra

List of Proposed Private Ports in India

Sr. No.	State	Port Name
1	Gujarat	Umargaon/Nargoal
2	Gujarat	Chhara
3	Andhra Pradesh	Bhavanapadu
4	Andhra Pradesh	Kakinada SEZ Port
5	Karnataka	Honnavar
6	West Bengal	Kulpi
7	Tamil Nadu	Thiruchopuram
8	Tamil Nadu	Panaiyur
9	Tamil Nadu	Silambimangalam
10	Tamil Nadu	Parangipettai
11	Tamil Nadu	ChettinadTharangambadi
12	Tamil Nadu	Udangudi
13	Odisha	Astaranga
14	Odisha	Kendrapada
15	Odisha	Subatnarekha Mouth (Kirtania)

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION NO.1588
TO BE ANSWERED ON 26TH JULY,2018

IMPROVEMENT OF PORTS UNDER SAGARMALA PROGRAMME

1588. SHRI. K.C.VENUGOPAL

Will the Minister of Shipping be pleased to state:

पोत परिवहन मंत्री

- (a) the details of steps taken/being taken by the Government to improve the functioning of various ports including fishing ports so far under the Sagarmala Programme;
- (b) whether the Government proposes to sanction fund under the Sagarmala Programme for renovation works at Thottappally and Arthunkal fishing harbours in Kerala;
- (c) if so, the details thereof;
- (d) the details of funds sanctioned under the Sagarmala Programme to various States/UTs including Kerala; and
- (e) whether the Government has received any proposal from the State Government in this regard and if so, the details and the present status thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

(a) Under Sagarmala Programme, a roadmap has been created for increasing the Indian port capacity to 3500+ MMTPA to cater to the projected traffic of 2500 MMTPA by 2025. Following steps have been taken to improve the functioning of various ports.

Master planning of major ports was done and 107 capacity augmentation and efficiency improvement projects (cost: Rs. 68,092 Crore) have been identified that are under various stages of development and implementation.

As per Berthing Policy 2016 released by Ministry of Shipping, a standardized methodology was laid down to calculate norms for dry bulk berths. An exercise was undertaken to benchmark port capacity with global standards set by the berthing policy and re-rate the capacities of major ports. Declared capacity of major ports was 1066 MTPA in 2016-17 which increased to 1359 MTPA after the re-rating exercise as on 01.04.2017.

Under Project Unnati, the global benchmarks were adopted to improve the efficiency and productivity Key Performance Indicators (KPIs) for 12 major ports. Around 116 initiatives were identified across 12 major ports to unlock more than 100 MTPA capacity just through

efficiency improvement.86 initiative have already been completed that have added 80MTPA to the port capacities.

Under Coastal Berth Scheme, financial assistance of Rs. 586 Crore has been sanctioned to over 31 projects to improve port infrastructure and promote coastal shipping.

Various connectivity projects have been undertaken to improve the evacuation from the ports.

For improving infrastructure of fishing harbors in the country, Ministry of Shipping has sanctioned Rs. 323 Crore for financial assistance to 13 fishing harbor projects.

(b&c) No proposal has been received from State Government of Kerala for financial assistance for renovation works at Thottappally and Arthunkal fishing harbor projects.

(d) Rs. 1,427 Crore has been sanctioned under Sagarmala programme by Ministry of Shipping for 67 projects (cost: Rs. 4,480 Crore) from coastal States/UTs. From Kerala, 4 projects (cost: Rs. 103 Crore) have been sanctioned for financial assistance of Rs. 34 Crore under the programme.

(e) Ministry of Shipping has received 23 project proposals from Kerala which include 20 road projects, 2 fishing harbor projects and one rail connectivity project.

Out of the 20 road project proposals, 11 projects are under consideration for inclusion in Bharatmala Pariyojna.

For rail connectivity to Vizhinjam port, land acquisition details are awaited from Government of Kerala.

For extension of breakwater at Thanurand Vellayil Fishery Harbours, the proposal is under examination with Department of Animal Husbandry Dairying & Fisheries (DADF).

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION NO. 1592
TO BE ANSWERED ON 26th JULY, 2018

CAPACITY OF MAJOR PORTS

1592. DR. A. SAMPATH:

Will the Minister of SHIPPING be pleased to state:

पोत परिवहन मंत्री

- (a) the capacity and capacity utilisation of Major Ports in the country during each of the last three years and the current year;
- (b) the targets set by the Government to improve the capacity of all the Major Ports in the country;
- (c) whether the Government has finalized the process of corporatisation of Major Ports in the country; and
- (d) if so, the details thereof and if not, the details of alternative steps being taken to modernise and develop these ports?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

(a) & (b) Capacity augmentation at Major Ports is a continuous process. Government is regularly monitoring the Port projects for development/expansion of the Major Ports. Port Projects such as construction of berths, installation of state of the art equipment, mechanisation of cargo handling system and dredging projects to accommodate large size vessels, etc. help in increasing the capacity at major ports. Capacity and Capacity utilization of Major Ports during each of the last three years and the current year is given at **Annexure**.

(c) & (d) Government has decided not to corporatize the Major Ports but instead replace the existing Major Port Trusts Act, 1963 by the Major Port Authorities Bill, 2016 to give greater operational freedom to the board of Major Ports in tune with present day requirements. The Bill has already been introduced in the Lok Sabha.

Capacity and Capacity utilization of Major Ports

Year	Capacity (MTPA)	Capacity Utilisation (Traffic in MT)
2015-16	965.36	606.47
2016-17	1359.00*	648.40
2017-18	1451.19	679.37
2018-19 (upto June, 2018)	1462.90	174.02

(*) Port Capacity re-rated based on Berthing Policy as per international norms. Major Ports re-rated capacity during 2016-17 was 1359 MTPA.

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION NO. 1593
TO BE ANSWERED ON 26th JULY, 2018

REVIVAL OF BUCKINGHAM CANAL

1593. SHRI KONAKALLA NARAYANA RAO:

Will the Minister of SHIPPING be pleased to state:

पोत परिवहन मंत्री

- (a) whether the Government proposes to revive the Buckingham Canal along the coastal Andhra Pradesh;
- (b) if so, the details and the present status thereof;
- (c) the details of funds earmarked and released for the purpose so far;
- (d) whether any work has been started in this regard and if so, the details and the present status thereof; and
- (e) the time frame set for completion of the project?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

- (a) to (e) The Buckingham canal (258 km) is part of National Waterway (NW)-4. Development of NW-4 is considered in 3 phases as mentioned below:
- Phase-I: Vijayawada – Muktyala stretch of Krishna River: Development of Phase-I works between Vijayawada-Muktyala stretch of Krishna River has been taken up at a total cost of Rs.96.00 crore out of which Rs.18.00 crore has been utilized so far. This includes dredging and setting up of four floating terminals, land acquisition for construction of permanent terminal facilities at Ibrahimpatnam, Harischandrapuram and Muktyala.
 - Phase-II: Kakinada to Vijayawada and Rajahmundry to Polavaram: Tendering process has been undertaken by the Inland Waterways Authority of India (IWAI) for a comprehension hydrographic and navigation study for this.
 - Phase-III: Balance stretches of NW-4 including portion of Buckingham canal. On completion of Phase-I and II the balance stretches of NW-4 are planned for development in Phase-III. No funds have been allocated as yet for development of this stretch.
