

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
RAJYA SABHA
UNSTARRED QUESTION NO- 1564
ANSWERED ON - 24.12.2018

DEVELOPMENT OF NATIONAL WATERWAYS

1564. SHRI AKHILESH PRASAD SINGH:

Will the Minister of SHIPPING be pleased to state:

- (a) whether the detailed development action plan for development of all identified 106 national waterways have been prepared;
- (b) if so, the details thereof alongwith expected time-frame of completion of each project;
- (c) whether the Ministry has carried out any study, which compares use of waterways as medium of transportation as compared to railways and road transport, with respect to its cost effectiveness and effect on environment; and
- (d) if so, the details of findings of the study?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI MANSUKH L. MANDAVIYA)

- (a) & (b) Out of the 106 new National Waterways, declared under the National Waterways Act, 2016, DPRs of 30 technically viable NWs have been prepared as per details at **Annex.-I**. Out of these 30 NWs, development activities have been initiated on 10 NWs as per list at **Annex.-II**.
- (c) & (d) Inland Waterways Authority of India had commissioned RITES to undertake study on Integrated National Waterways Transportation Grid. According to report prepared by RITES in 2014, the cost comparison between Inland Water Transport (IWT) mode and other dominant modes of surface transport viz. Railways and Highways is as below:

Mode	Railways	Highways	IWT
Freight (Rs./T.km)	1.36	2.50	1.06

Similarly, the socio-economic and environmental benefits of IWT mode based on some of the studies undertaken by other organizations are at **Annex.-III**.

LIST OF 30 NATIONAL WATERWAYS FOUND FEASIBLE:

A. Final DPRs available for 30 NWs :

Sl. no.	River/Canal (NW#)	States	Length (km)
1	GHAGHRA RIVER (NW-40)	U.P & Bihar	354
2	KOSI RIVER (NW-58)	Bihar	236
3	GANDAK RIVER (NW-37)	Bihar & U.P.	296
4	SUNDERBANS WATERWAY (NW-97)	West Bengal	201
5	CUMBERJUA RIVER (NW-27)	Goa	17
6	MANDOVI RIVER (NW-68)	Goa	41
7	ZUARI RIVER (NW-111)	Goa	50
8	BARAK RIVER (NW-16)	Assam	121
9	RUPNARAYAN RIVER (NW-86)	West Bengal	45
10	SUBANSIRI RIVER (NW-95)	Assam	106
11	BAITARNI RIVER (NW-14)	Odisha	48
12	MAHANADI -LUNA RIVER (NW-64)	Odisha	98
13	AMBA RIVER (NW-10)	Maharashtra	45
14	REVADANDA CREEK - KUNDALIKA RIVER (NW-85)	Maharashtra	31
15	MAHI RIVER (NW-66)	Gujarat	247
16	NARMADA RIVER (NW-73)	Gujarat & Maharashtra	226
17	TAPI RIVER (NW-100)	Gujarat	173
18	SUBARNAREKHA RIVER (NW-96)	Odisha	30
19	AJOY (AJAY) RIVER (NW-7)	West Bengal	19
20	ICHAMATI RIVER (NW-44)	West Bengal	63
21	KABINI RIVER (NW-51)	Karnataka	23
22	CHAPORA RIVER (NW-25)	Goa	25
23	DABHOL CREEK - VASHISHTI RIVER (NW-28)	Maharashtra	45
24	MAPUSA - MOIDE RIVER (NW-71)	Goa	27
25	SAVITRI RIVER (BANKOT CREEK) (NW-89)	Maharashtra	45
26	GURUPUR RIVER (NW-43)	Karnataka	10
27	ALAPPUZHA- CHANGANASSERY CANAL (NW-8)	Kerala	29
28	ALAPPUZHA- KOTTAYAM - ATHIRAMPUZHA CANAL (NW-9)	Kerala	52
29	KOTTAYAM-VAIKOM CANAL (NW-59)	Kerala	19
30	Kalyan-Thane-Mumbai Waterway, Vasai Creek and Ulhas river (NW- 53)	Maharashtra	145

List of 10 most viable NWs on which development activities have been initiated:

Name of the Waterway	Status and Time-frame
1. River Barak (NW-16)	Development at a cost of Rs. 76.01 crore for years 2016-17 to 2019-20 for Phase -I of NW-16 from Silchar to Bhanga has commenced. Maintenance dredging for fairway development work in Silchar-Bhanga stretch has commenced. Consultant has been engaged for the upgradation of terminals at Badarpur, Karimganj and new floating terminal at Silchar. Waterway is operational with limited infrastructure facility.
2. River Gandak (NW-37)	Development at a cost of Rs. 12.91 crore for years 2017-18 to 2018-19 including fairway maintenance work has commenced. Waterway is operational with limited infrastructure facility.
Waterways in Goa 3. NW-27-Cumberjua 4. NW 68 – Mandovi 5. NW 111 – Zuari	A proposal for the development of NWs in Goa at an estimated cost of Rs. 22.65 crore for years 2017-18 to 2018-19 has been approved. Work is proposed to be executed through Government of Goa with the assistance of Mormugao Port Trust. A Tripartite MoU has been signed for the commencement of works. Tendering for 4 floating jetties is under process. NWs of Goa are operational.
6. Alappuzha – Kottayam – Athirampuzha Canal (NW-9) :	Proposal for development of the waterway at an estimated cost of Rs. 1.60 crore for years 2017-18 to 2018-19 has been approved. Night navigation facilities has been procured and installed. Dredging is proposed departmentally. Waterway is already operational for ferry services.
7. River Rupnarayan (NW-86)	Proposal for development of the waterway at an estimated cost of Rs. 24.00 crore for years 2017-18 to 2018-19 has been approved. Work has been awarded for setting up of floating terminal. Tendering for dredging is at an advanced stage. Waterway is operational.
8. Sunderbans Waterways (NW-97)	Proposal for the development of waterway at an estimated cost of Rs. 18.10 crore for years 2017-18 to 2018-19 has been approved. Work order has been issued for dredging. Waterway is part of Indo-Bangladesh Protocol route and already operational for vessels.
9. River Kosi (NW-58)	Project proposal sanctioned for Rs. 15.68 crore for years 2018-19 to 2019-20 to develop the waterway with minimum required infrastructure (bandalling, channel marking, floating terminals and conducting monthly survey etc.). Waterway is operational.
10. River Ghagra (NW-40)	An amount of Rs. 11.60 crore for years 2018-19 to 2019-20 has been approved for fairway development by bandalling and day channel marking, creation of floating terminals and monthly surveys.

The Socio-economic and environmental benefits of IWT Mode:

1. Cheaper operating cost and relatively lesser fuel consumption

Factors considered	Rates Considered			Source
	Waterways	Road	Rail	
Energy Consumption	0.0048 Litre/TKm	0.0313 Litre/TKm	0.0089 Litre/TKm	11 th Plan Working Group Report on Shipping & IWT
Vehicle Operating Cost	0.843 Rs./TKm	1.170 Rs./TKm	1.009 Rs./TKm	Planning Commission : TTS Study

2. Less polluting mode of transportation

Factors considered	Rates Considered (Rs./TKm)			Source
	Waterways	Road	Rail	
Air Pollution	0.03	0.202	0.0366	Planning Commission : TTS Study
Noise Pollution	Negligible	0.0032	0.0012	Permanent International Association of Navigation Congresses (PIANC)
Soil and Water Pollution	Negligible	0.005	Negligible	PIANC

3. Relatively safer mode of transportation

Factor considered	Rates Considered (Rs/TKm)			Source
	Waterways	Road	Rail	
Accidents	Negligible	0.0620	0.0010	Planning Commission: TTS Study

4. Lesser requirement of land relative to other modes of transportation

Factor considered	Rates Considered (Rs/TKm)			Source
	Waterways	Road	Rail	
Surface occupation	Negligible	0.0002	0.0001	PIANC

5. More environment friendly mode of transportation

Factor considered	Rates Considered (Rs/TKm)			Source
	Waterways	Road	Rail	
Emission of GHGs	0.0006	0.0031	0.0006	12 th Five Year Plan
