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जलमार्ग • Jalmarg

(त्रैमासिक ई-पत्रिका)

भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण ● INLAND WATERWAYS AUTHORITY OF INDIA

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INSIDE THE ISSUE :

संदेश

भाअजप्रा की विकासात्मक गतिविधियों को प्रदर्शित करने वाली त्रैमासिक ई–पत्रिका ''जलमार्ग'' के द्वितीय अंक हेतु संदेश के रूप में अपने विचार व्यक्त करते हुए मुझे अत्यंत प्रसन्नता हो रही है। वस्तुतः ई–पत्रिका को आगे ले जाने के उद्देश्य से विचार सहज ही आने लगते हैं। मैं सचिव, भाअजप्रा के नेतृत्व में संपादकीय टीम के दृढ़ संकल्प की सराहना करती हूँ।

डिजिटलीकरण और ई–पहल के बढ़ते कदमों के साथ भाअजप्रा की यह ई–पत्रिका हितधारकों के लिए राष्ट्रीय जलमार्गों में मालवाहक और यात्रियों के लिए अंतर्देशीय जलमार्ग परिवहन को बढ़ावा देने हेतु विभिन्न स्थानों पर की जा रही विकासात्मक गतिविधियों के बारे में और अधिक जानने के लिए एक मंच है।

वास्तव में पत्रिका में अंतर्विष्ट सामग्रियां यथा ड्रेजिंग और 'आत्मनिर्भर राष्ट्रीय जलमार्ग – 3' अंतर्देशीय जलमार्गों को परिवहन का एक स्थायी साधन बनाने के दृष्टिगत भाअजप्रा की समर्पित प्रतिबद्धता को दर्शाती हैं। योग्य सुझाव भी निर्दिष्ट राष्ट्रीय जलमार्गों को परिवहन के अन्य सतही साधनों की अपेक्षा परिवहन को अधिक लागत प्रभावी और पर्यावरण के अनुकूल बनाने व निजी भागीदारी को आकर्षित करने हेतु हमारे प्रयासों को और बेहतर करने में सहायक होंगे। इस अवसर पर मैं भाअजप्रा के अधिकारियों व कर्मचारियों से आग्रह करती हूँ कि वे भाअजप्रा की अन्य गतिविधियों और पहलों को ई–पत्रिका के माध्यम से विभिन्न हितधारकों तक पहुँचाने में अपना योगदान दें।

इस पुनीत कार्य को जारी रखने के लिए मैं सभी संबंधित सहयोगियों को हार्दिक शुभकामनाएं देती हूँ और ई–पत्रिका को निरंतर व समय पर और सफलतापूर्वक प्रकाशित करने के लिए तथा इस हेतु भावी प्रयासों के लिए शुभकामनाएं देती हूँ।

MESSAGE

It gives me immense pleasure to pen down the message for the second quarterly e-Magazine "JALMARG" showcasing the developmental activities of IWAI. The beginnings of an idea for bringing forth e-Magazine has quickly comes to fruition, and I appreciate the editorial Team led by Secretary, IWAI for their focused determination.

As we transit towards digitization and e-initiatives, the IWAI e-Magazine is a platform for the stakeholders to know more about the various developmental activities taken up by IWAI to promote ease of inland waterways transportation of cargo and passengers across the national waterways to different locations.

The contents of the magazine viz., Dredging and 'Atmanirbhar NW-3' are truly reflecting the dedicated commitment of IWAI in making inland waterways a sustainable mode of transport. The merited suggestions would also help in furtherance of improvement of our efforts to make the designated national waterways more cost effective and eco-friendly mode of transportation against other surface modes of transport thus by attracting more private participation. I take this opportunity to urge officers / staff of IWAI to contribute more on several activities and initiatives of IWAI in e-Magazine to reach out various stakeholders.

I extend my warm wishes to all concerned to continue the good work and make the e-Magazine continuation a timely and successful one and wish the very best in future endeavours.

डॉ. अमिता प्रसाद, भा.प्र.से.
अध्यक्ष

परिचय :

(i) रेलवे, सड़क परिवहन, तटीय नौवहन, अन्तर्देशीय जल परिवहन, पाइपलाइन और वायु परिवहन युक्त परिवहन क्षेत्र किसी भी देश के आर्थिक विकास हेतु अहम अवसंरचना है। एक विकसित परिवहन प्रणाली मल्टीमॉडल नेटवर्क में परिवहन की ईष्टतम लागत को मामला दर मामला आधार पर सभी मॉडलों की शक्तियों का प्रयोग करते हुए संभव बनाती है। ऐसे गलियारों में जहां अन्तर्देशीय जल परिवहन को तुलनात्मक रूप से बड़े आकार के नौचालन चैनल के साथ विकसित कर इन्हें तकनीकी– वाणिज्यिक व्यवहार्य बनाया जा सकता है, वहां ये लागत प्रभावी, पर्यावरण सुलभ और ईंधन दक्ष परिवहन साधन प्रदान कर सकते हैं, विशेषकर इसका प्रयोग भारी मात्रा में सामानों, संकटपूर्ण कार्गो और अति बड़े आकार के कार्गो के लिए किया जा सकता है। कुछ विकसित देशों (जैसे अमेरिका, चीन और अनेक यूरोपीय देशों में) जहां अन्तर्देशीय जल परिवहन (आई डब्लू टी) क्षेत्र के विकास पर विशेष ध्यान दिया जाता है, वे अपनी अर्थव्यवस्थाओं के विकास में इसका काफी उपयोग कर रहे हैं।

(ii) भारत में अनेक नदियां, नहरें, संकरी खाड़ी और बैकवाटर है, जिन्हें लागत प्रभावी और पर्यावरण अनुकूल परिवहन साधन के रूप में उपयोग में लाने की काफी संभावनाएं हैं। 20वीं शताब्दी के प्रारंभ तक आईडब्लूटी को देश के विभिन्न भागों में परिवहन के महत्वपूर्ण साधन के रूप में प्रयोग किया गया था। तथापि, सड़कों और रेलवे के तीव्र विकास, देश में थोड़े औद्योगिक विकास, सहित अनेक कारणों से अन्तर्देशीय जल परिवहन इत्यादि के अनुरक्षण और विकास पर काफी कम ध्यान दिया गया, अनेक जलमार्ग, रेल और सड़क साधनों की तुलना में प्रतिस्पर्धात्मक रूप से पीछे रह गए।

(iii) अपर्याप्त अवसंरचनात्मक सुविधाएं जैसे वर्ष भर प्रचालन हेतु आईडब्लूटी जलयानों की आवाजाही हेतु आवश्यक गहराई और चौड़ाई, कार्गो के लदान और ढुलाई के लिए टर्मिनल और सड़क/रेल के साथ संपर्क, दिन और रात के दौरान सुरक्षित और अबाधित नौवहन हेतु नौवहन सहायता और आईडब्लूटी जलयानों की कमी कुछ ऐसी मुख्य बाधाएं हैं, जिनका सामना अन्तर्देशीय जल परिवहन क्षेत्र द्वारा किया जा रहा है। पर्याप्त आईडब्लूटी आवाजाही के लिए इस बात पर बल दिया जा रहा है कि आवश्यक अवसंरचना (मुख्यतः सरकारी वित्तपोषण) का निर्माण हो और इसके साथ–साथ मुख्यतः निजी क्षेत्र द्वारा आईडब्लूटी बेड़े में वृद्धि की जाए।

(iv) भारतीय अंतर्देशीय जलमार्ग प्राधिकरण को वर्ष 1986 में संसद के अधिनियम द्वारा स्थापित किया गया है। प्राधिकरण के गठन का उद्देश्य नौवहन और नौचालन के लिए और उनसे जुड़े या प्रासंगिक मामलों के लिए अंतर्देशीय जलमार्गों का विनियमन और विकास करना है।

(v) भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण (भा.अ.ज.प्रा.) अधिनियम, 1985 की धारा 14 के तहत भा.अ.ज.प्रा. ऐसे जलमार्गों के विकास और विनियमन के लिए अधिदिष्ट है जो राष्ट्रीय जलमार्ग के रूप में घोषित हैं। वर्ष 2014 तक निम्नलिखित जलमार्गों को राष्ट्रीय जलमार्ग (रा.ज.) घोषित किया गया था :–

(i) **राष्ट्रीय जलमार्ग –1 :** उत्तर प्रदेश, बिहार, झारखण्ड और पश्चिम बंगाल राज्यों में गंगा–भागीरथी–हुगली नदी प्रणाली (हल्दिया से इलाहाबाद तक–1620 किमी.) – वर्ष 1986 में घोषित किया गया।

(ii) **राष्ट्रीय जलमार्ग –2 :** असम राज्य में ब्रह्मपुत्र नदी (धुब्री से सदिया तक – 891 किमी.) – वर्ष 1988 में घोषित किया गया।

(iii) **राष्ट्रीय जलमार्ग –3 :** केरल राज्य में उद्योगमण्डल और चम्पाकारा कैनाल सहित पश्चिम तट कैनाल (कोट्टापुरम से कोल्लम तक) (205 किमी.) – वर्ष 1993 में घोषित किया।

(iv) **राष्ट्रीय जलमार्ग –4 :** आंध्रप्रदेश, तमिल नाडु और संघशासित प्रदेश पुडुचेरी राज्यों में गोदावरी और कृष्णा नदियों सहित काकीनाडा से पुडुचेरी कैनाल तक (1078 किमी.) – वर्ष 2008 में घोषित किया गया।

(v) **राष्ट्रीय जलमार्ग –5 :** पश्चिम बंगाल और उड़िसा राज्यों में ब्राह्मणी नदी और महानदी डेल्टा सहित पूर्व तट कैनाल (588 किमी.) – वर्ष 2008 में घोषित किया गया।

वर्ष 2016 में संसद द्वारा **राष्ट्रीय जलमार्ग अधिनियम, 2016** पारित किया गया, जिसके तहत देश के 106 नए जलमार्गों को राष्ट्रीय जलमार्ग के रूप में घोषित किया गया। इस प्रकार, देश में पूर्व के 5 राष्ट्रीय जलमार्गों को मिलाकर अब कुल राष्ट्रीय जलमार्गों की संख्या 111 हो गई है। इन जलमार्गों में व्यवहार्य जलमार्गों के विकास हेतु भा.अ.ज.प्रा. द्वारा कई विकासात्मक कार्य किए जा रहे हैं।

इसके अलावा, भा.अ.ज.प्रा. व्यापार और पारगमन हेतु भारत–बांग्लादेश प्रोटोकॉल मार्ग के तहत कई कार्य कर रहा है, जिससे एक देश का अन्तर्देशीय जलयान दूसरे देश के विनिर्दिष्ट मार्गों से होकर चल सकता है।

Environmental Aspect of Dredging

-Nikhilesh Jha, IAS (Retd.)
Senior Consultant (Environment), IWAI

For a total length of about 25,000 kilometers of major rivers/canals in India, the navigable length is about 14,500 kms. Of this length, about 4,500 kms of waterway stretch comprising mainly the five national waterways (NW-1 to 5) is under use.

Inland water transport, though a safe and environmental friendly mode of transportation, may have impacts on different aspects of environment due to civil works, vessel and barge movements as well as dredging operations. There is a need to carry out maintenance dredging and to dispose dredged materials during the operation of the waterways in order to maintain navigability in an inland waterway transport system. Dredging may create an impact on natural environment (air, water and land), ecological environment, human health and safety and on socio-economic environment as well. While considering the environmental aspect of dredging we need to appreciate that it is advisable to go in for preventive measures instead of mitigatory or compensatory measures.

It may be appropriate to know about the legal aspects of inland waterways and maintenance dredging in India. The environmental assessment and clearance process was earlier governed by the EIA Notification 2006, which did not mention "waterways" in its list of projects needing environmental clearance. However, the draft notification of March, 2020 (issued by Ministry of Environment, Forest & Climate Change) places "Maintenance Dredging"[1] under Clause 26 of the draft notification. The projects under Clause 26 are exempted from prior Environmental Clearance or prior Environmental Permission from the Appraisal Committee.

The availability of a liberal legal position notwithstanding, there is a need to plan maintenance dredging in our waterways in such a way that our physical environment, ecological environment as well as Social, Economic and Cultural environments are affected minimally. This can be ensured by disposing dredged materials carefully so that our flora, fauna, water quality and soil quality are not affected negatively. We also need to restrict dredging activities in biologically sensitive locations like dolphin sanctuary, turtle sanctuary, in confluence zone of major rivers and during breeding and spawning season of fish and migratory birds. At the same time, we need to keep in consideration economic activities such as fishing and boat movements and also social and cultural activities on the river banks and different river stretches. These precautions will ensure that maintenance dredging do not become subject of undue criticism by social and environmental organisations.

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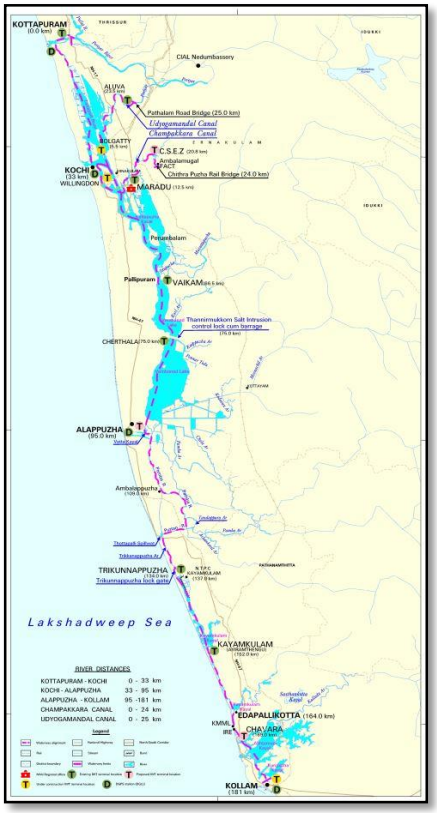
[1]*Maintenance Dredging as defined in sub clause 32, Clause 3 of DFA Notification of MoEFCC dt March 20, 2020,"means the periodic removal of shoals or sediments from existing navigational channels, berths, swinging moorings etc. in order to maintain an appropriate safe depth of water for navigation, construction or operational purposes".*

An Opportunity for "Atmanirbhar NW-3"

- Neelakandan Unni
Former Chief Engineer of IWAI
and former Director of NW-3



The Kollam-Kottapuram stretch of the West Coast Canal in Kerala state together with the Champakara canal and Udyogamandal canal (205 km) was declared as National Waterway (NW-3) in 1993. This waterway runs parallel to the coast of Arabian Sea and is a tidal waterway in its major part. The distance between sea coast and the farthest point in the waterway may not be more than 15 km. NW-3 does not have a lean season like NW.1 or NW-2 during which time availability of natural depth is too low restricting navigation. Being a tidal waterway, steady water depth is available throughout the year. These are great opportunities for unobstructed round the year, round the clock navigation. Something that is not available except in tidal stretches of NW.1, Sunderbans waterway, rivers in Goa or tidal reaches of various west / east flowing rivers.

To add to the above, the waterway offers pristine natural beauty all along its route which is a major factor attracting tourists from all over the world to Kerala. Parts of the NW-3 like Vembanad lake and Ashtamudi lake are Ramsar Sites considered important internationally. NW-3 is inseparable from large communities that are identified with sub-sea level rice cultivation in Kuttanadu, Nehru Trophy Boat race & House boats in Alappuzha and a navigational culture all along its route. Therefore, the efforts of IWAI to develop and maintain NW-3 for inland navigation and cargo movement touches directly and indirectly the life line of 4-5 districts. On the other hand, the waterway is also having another face supporting trade & industry in Kochi and its suburbs. Transportation of industrial raw materials by barges between Kochi Port and FACT, containers by Ro-Ro vessels and occasional ODC movement are pictures of this vibrant side of modern IWT.

However, dredging is an essential activity required for maintaining the NW.3 navigable. As the waterway is located in such naturally sensitive, thickly populated region and because of multiple users of the waterway, dredging and disposal of the dredged material without causing environmental and social issues is the single biggest challenge faced by IWAI. In recent years, this problem has become much more pronounced. Resolving this problem is fundamental to improved utilization of the waterway. Aids for 24 hours navigation is already provided in the entire route. The opportunity for addressing this challenge may be provided by nature itself. The 205 km long NW-3 has direct connectivity with the sea at both its ends Kollam and Kottapuram and in addition at two more place in between – Kochi and Kayamkulam.

IWAI may focus on this matter to work out a plan of action and engineering solutions to collect, carry and dispose in to the sea the silt and muck dredged from NW-3 channel. This may call for a detailed study, altogether new types of hardware, and skills. Certainly it is a possible task. This could offer long term business opportunity for private players interested to invest in this area. Once IWAI is able to resolve the LAD issues gradually, the automatic spin offs could be increased confidence in IWT and better utilization of various IWT infrastructure already created by IWAI over the years. That could also be the beginning of an " Atmanirbhar NW-3 " less dependent upon budgetary support in future.

Efficiency of Cutter Suction Dredging units for inland navigation

- **S. Dandapat**
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The dredging, a temporary & annual recurrence nature of operation is a sought after and important river conservancy work for developing and maintaining the fairways in the Inland navigation system in India because of its ease of operation with quick result. However, the efficiency of the dredging unit comprising CSD (Cutter Suction Dredger), work boat or heave Up Boat & piping system on the waterways for navigation is influenced significantly in achieving the output by several factors and same may be of two types of efficiencies as explained below.

- **Operating Efficiency**: - The operating efficiency is basically the ratio of effective hours of deployment for dredging operation against the total hours deployed. It is governed mainly on account of the time loss for break down repair & maintenance, dumping & disposal problem, shifting of pipelines, spuds & anchors, stoppage of operation for cleaning cutter head because of choking of debris, giving passage to other vessels, fuelling and also time loss because of law & order issues. In the dredging scenario of Indian waterways, it is usually between 0.35 to 0.5%.

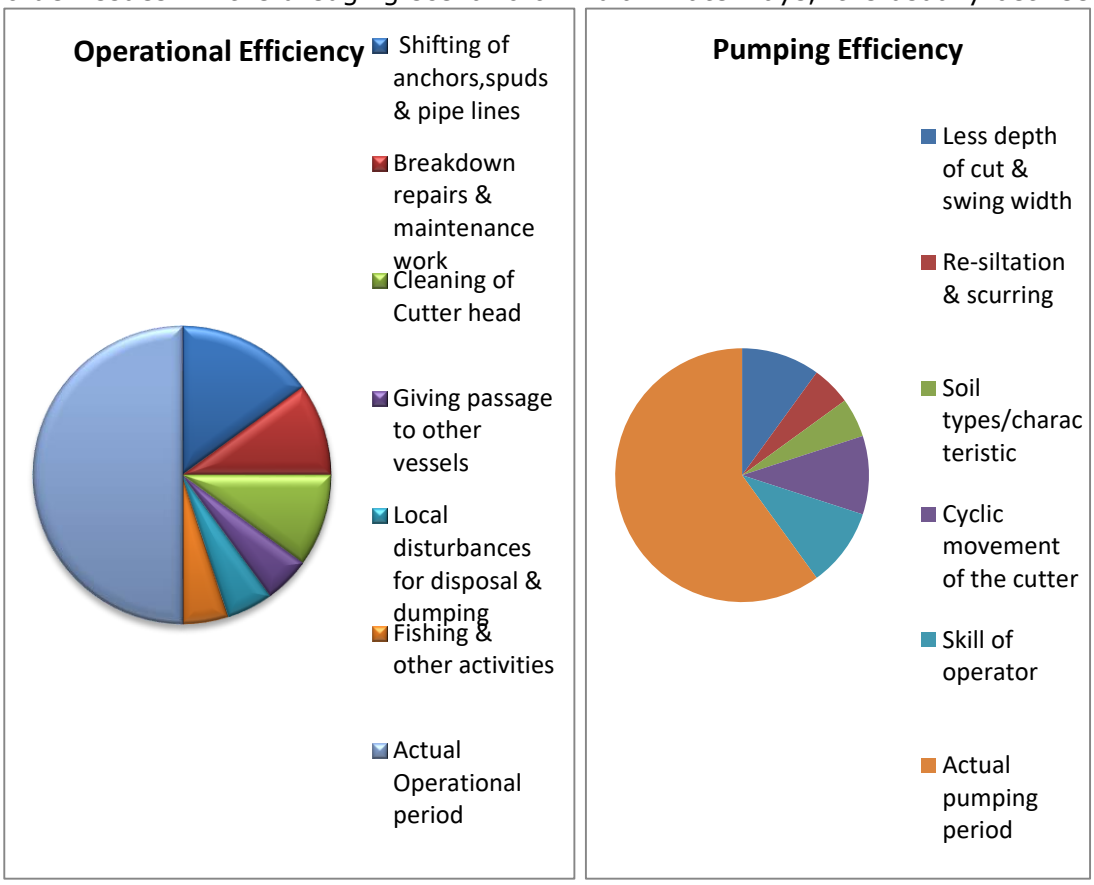

Fig-1: Operational Efficiency & Pumping Efficiency

- **Pumping Efficiency**: -

This is another important efficiency in dredging operation. It is the ratio of actual capacity achieved by the dredge pump against its rated capacity. The pumping efficiency is influenced by less depth of cut, swing width, the dumping distance with or without booster pump, cyclic movement of the cutter, the soil types, current, rate of de-siltation, scurrying, skill of the dredge master/operator, etc. It usually varies between 0.5 to 0.6%.

- **Period of Deployment/operation**

In all types of inland dredging activities, it is difficult to deploy the dredgers for 24x7 days operation and round the year. In a day, the operation could be practically feasible for 12 to 18 hours maximum.

On an average, it is 12 hours for factors like dumping issues, difficulties in ensuring required logistic on time & also with no interruption basically for operation in remote area, disturbance because of fishing activity, non-availability of crew for three shift operation, local issues and weather like dense fogs & rain.

In a month, number of days available for deployment may also depend on the shifting of the dredging unit from one shoal to another shoal, policy for granting weekly off & Government holidays, preventive & annual repairs, local law & order, etc. Therefore, the deployment is feasible between 15 to 25 days maximum in a month.

The smooth & effective dredging operation could also be feasible only during non-monsoon period. In rare cases, the operation is allowed during monsoon. Depending on the onset & closure of monsoon, the receding of water level and the tide condition, the dredging operation is carried out for 6 to 8 months in a year.

- **Production of a CS dredging unit & number of units for a project**

In consideration the various factors & efficiencies as narrated above, the annual production of a cutter suction dredger and the number of dredging units for deployment may be calculated as below: -

Q= CxHxDxMxEoxEp & N= Qt/Q

Where
- Q = Total dredging quantity achieved per annum in cub.mt per unit
- Qt = Total dredging quantity available in the project
- N = Number of dredging units required for deployment
- C = Rated capacity of the dredger per hour in cub.m
- H = No of hours deployed in a day
- D = No of days deployed in a month
- M = No of months deployed in a year
- Eo = Operating efficiency
- Ep = Pumping efficiency

Therefore, for achieving the higher efficiency in both the cases for dredging production, it is essential for understanding these issues and challenges before any measures such as deployment of suitable types, size & numbers of dredgers & equipment, dredging plan & scheduling, spoil disposal & management and also adoption of suitable dredging survey & quantity measurement method could be taken up for ensuring effective and economic dredging operation.

The operational efficiency between 0.60 to 0.7 and for pumping efficiency up to 0.7 to 0.8 are reported to be achieved with the suitable measures.

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JAL MARG VIKAS PROJECT (JMVP) :

The Jal Marg Vikas Project for capacity augmentation of National Waterways -1 (Ganga-Bhagirathi-Hooghly) river system is implemented by the Inland Waterways Authority of India, Ministry of Shipping with technical and financial assistance of The World Bank with revised project cost of INR 4633.81 Crores.

The development objective of JMVP project is to enhance transport efficiency and reliability of Inland Waterways for handling logistics. The project comprises of several components and subset activities that aiming to develop Inland shipping, the improvement in ports and marine infrastructure may increase navigability for 1000-1500 Dead Weight Tonnage barges along NW-1 stretch from Haldia-Varanasi (1320 Kilometres) by FY 2023.

National Waterway-1 from Allahabad – Haldia stretch of Ganga-Bhagirathi-Hooghly river system truly considered for national economic importance perspectives, the National Waterways-1 corridors of NW-1 passes through densely populated states of Uttar Pradesh, Bihar, Jharkhand and West Bengal, the hinterlands located potential Industries, economic clusters, urban settlements, regional rural villages and towns etc.

Jal Marg Vikas Project is the flagship project on development of Inland Water Transport sector in India, the various scoping missions of World Bank & several market feasibility studies and detailed engineering studies revealed that operationalization of NW-1 corridors enables transportation of bulk cargo like cement, fly ash, fertilizer, food grains, edible oil, containers, construction materials, project cargo and over dimensional cargo etc. Additionally the regional economic integration may improves due to enhanced connectivity with support of Ro-Ro & Ferry services and the development of cruise vessel operations may also spurt roots for promoting several tourism sites of historical, cultural, religious and pilgrimages etc.

The major engineering interventions are proposed under the Jal Marg Vikas Project are as follows:

- Construction of three multi-modal terminal at Varanasi, Sahibganj and Haldia
- Construction of Inter-modal terminals at Ghazipur and Kalughat
- Construction of New Navigational Lock at Farakka
- Fairway development to provide LAD of 3 meter from Haldia – Barh, 2.5 meter from Barh-Ghazipur and 2.2 meter from Ghazipur-Varanasi etc.
- River training works and re-engineering and bend corrections works
- Strengthening of Navigational Aids such as Channel Marking, Bandalling, Night Navigational Aids, including DGPS, river maps and charts etc.
- Provision for development of River Information System and Vessel Traffic Management System along NW-1
- Construction of five Ro-Ro Pairs
- Construction of Integrated ship repair facility and maintenance complexes etc.

Multimodal terminal at Varanasi and Multimodal terminal at Sahibganj have been inaugurated by the Hon'ble Prime Minister on 12.11.2018 and 12.9.2019 respectively.

In addition to the above, "Arth Ganga programme" has been conceptualised under Jal Marg Vikas Project to energise the economic activity along the hinterlands of river Ganga. The Arth Ganga Programme objectively planned to boost the economic activity and provide project benefits to grass root level community living along hinterlands of NW-1. Under this programme, about 60 floating jetties and 10 Ro-Ro terminals have been planned for development on river Ganga. It is expected that the implementation of this programme will bring down the logistics cost for farmers in movement of agriculture produce/local cargo and help in access to local markets.

The implementation of JMVP is monitored periodically. Recently, Hon'ble Minister of Ports, Shipping and Waterways visited the construction sites of MMT Haldia on 06.12.2020 and New Navigation Lock Gate Farakka construction site on 22.12.2020 to review the progress of the projects.

Hon'ble Minister of State (Independent Charge), Ports, Shipping and Waterways visited MMT, Haldia on 06.12.2020 to review the progress of the project.

Hon'ble Minister of State (Independent Charge), Ports, Shipping and Waterways visited New Navigation Lock Gate Farakka construction site on 22.12.2020 to review the progress of the projects.

IWT Traffic :

- Bangladesh vessel "M.V. Premier 6" sailing from Narayanganj, Bangladesh carrying 125 MT cement cargo reached Karimganj (Assam), India on 09.11.2020. The vessels successfully unloaded cargo at Karimganj and sailed back to Narayanganj, Bangladesh on 11.11.2020. Bangladeshi vessels "MB Jannt" and "MB Hazi Basir Mia" arrived at Karimganj, India on 07.11.2020 and left Karimganj for Bangladesh on 17.11.2020 carrying 100 MT and 125 MT limestone boulders respectively.
- Five Bangladeshi vessles viz. MB Bajlu Bhuiyan 1, MB Redita Enterprise, MB Kasfia Hanif, MB Bismillah 3 and MB Newaz arrived at Dhubri on 25.11.2020 from Bangladesh for loading crushed stone chips.
- 3398.232 MT of relief materials / goods (rice and other food materials) was handled at Dhubri terminal during the month of November 2020.
- Two Over dimensional cargo voyages of 551 MT (227+324 MT) of Hindustan Urvarak & Rasayan Ltd. (HURL) were completed from Kolkata to Semaria / Sahibganj on NW-1.
- One Over Dimensional Cargo (203 MT) of Bharat Heavy Electricals Ltd. (BHEL) for the Project Bangladesh – India Friendship Power Company (Private) Limited to Rampal, Mongla, Bangladesh is transported through NW-86/PIWT&T route.
- "M.V. Nidhiswari" loaded with 2154 MT of stone chips is transported from Pakur Jetty/GR Jetty-2 to Narayanganj, Banglaesh through PIWT&T route.
- 2.45 lakh MT Cargo moved in Protocol on Inland Water Transit & Trade (PIWT&T) route.
- 2.44 MT Cargo moved using NW-1.

Events & other highlights :

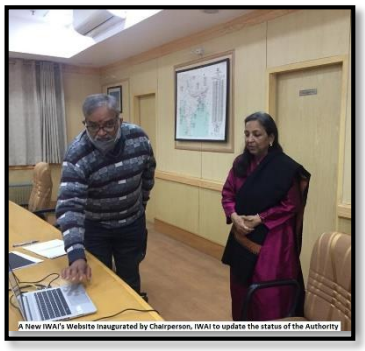
- IWAI have started operations from Bandel Jetty located at Tribeni, Hooghly under and agreement with West Bengal Power Development Corporation Ltd.
- The Navigational Lock at Farakka on National Waterway no. 1 has been made operational from 12.11.2020 and since then 21 barges have passed through the lockgate.
- NIT for dredging contract for Tribeni – Farakka has been published on 21.11.2020.
- NIT for Global Request for Qualification (RFQ) published for Operate, Manage & Develop (OMD) of Multimodal Terminal, Sahibganj, Jharkhand.
- IWAI Ro-Ro Vessels namely M.V. Adi Shankara and M.V. C. V. Raman were handed over to KSINC (Kerala Shipping and Inland Navigation Corporation) for "Operation and Management" in NW-3.
- Temperature screening for COVID-19 for the crew of vessels plying in Protocol on Inland Water Transit & Trade Routes is being carried out by Kolkata RO at Hemnagar LCS in protocol route and Haldia, Budge Budge & Jetties located in / around Kolkata.
- An MoU has been shared between Govt. of Uttarpradesh and IWAI on taking over of 2 no. Ro-Ro vessels by State Tourism Department.
- A site visit conducted at Kalughat, Saran, Bihar by Chairperson, IWAI to discuss the land issue with concerned authorities.
- Following e-Initiatives of IWAI are operational :
    - **E-Office :** For creation & processing of e-files.
    - **MIRS** (Management Information Reporting Solution) : It is a web-based solution developed by IWAI for tracking of all the works undertaken by IWAI which includes Scheme approval, procurement/tender process, project progress tracking and IWAI owned asset utilization tracking.
    - **CAR-D** (Cargo Data) portal : CAR-D is an easy to access web-based portal for collection, compilation, analysis and dissemination of all the Cargo and Cruise movement data for IWAI and its stakeholders.
    - **PANI** : (Portal for Assets and Navigational Information) : Portal for Assets and Navigational Information.

- **NOC** : To obtain clearance from the Authority before construction of any structure across National Waterway. This portal has been created to speed up the process of issuing NOC and ensure transparency.
- **e-Granthalaya** : Digital platform for library management system.

- A new IWAI's Website inaugurated by Chairperson, IWAI.


MoU Shared between Govt. of Uttar Pradesh and IWAI on taking over of 2 no. Ro-Ro vessels by State Tourism Department.


A Site visit conducted at Kalughat (Dist. Saran, Bihar) by Chairperson, IWAI to discuss the land issue with concerned Authorities.


A New IWAI's Website inaugurated by Chairperson, IWAI to update the status of the Authority

- **Various interventions of Water Aerodromes**

- Ministry of Civil Aviation (MoCA) intended to setup water aerodrome across the country under RCS UDAN scheme and selected 16 sites for the same. Airport Authorities of India & MoCA requested IWAI to conduct Hydrographic survey at 5 locations (Sabarmati River Front, Guwahati River Front, Sardar Sarovar Dam, Shatrunjay Dam and Umrangso Reservoir) for setting up water aerodromes and later on requested assistance in setting up jetties for facilitating the passenger movement.
- Initially the Water Aerodromes at Sabarmati River front and Sardar Sarovar Dam (pond no. 3) were planned for inauguration by Hon'ble Prime Minister on 31.10.2020 (since inaugurated) and various interventions were undertaken by IWAI viz Hydrographic Surveys, setting up of floating jetties and technical hand holding for navigational buoys.

A google imagery of Sardar Sarovar Dam Pond No 3


Survey Team at Sabarmati River Front

- **HYDROGRAPHIC SURVEYS**: - The work for hydrographic survey was carried out by IWAI through M/s GMI. The data was vetted by NTCPWC IIT Madras.

- **FLOATING CONCRETE JETTIES**: - IWAI did set up state of art floating concrete jetties (12 nos RCC encapsulated Polystyrene Core Floating pontoons of size 12.0 m x 3.0 m) at Sabarmati River front and Sardar Sarovar Dam (pond no. 3).



Floating Concrete Jetty at Sabarmati River Front


Floating Concrete Jetty at Sardar Sarovar Dam (Pond No. 3) Kevadia

- **Navigational Buoys:** The work for laying the navigational buoys for water aerodromes at Sabarmati River Front and Sardar Sarovar Dam was carried out by DGLL with technical hand holding of IWAI.

Birds Eye View of Navigational Buoys at Sardar Sarovar Dam Pond No.-3

माननीया अध्यक्ष महोदया श्री एस.वी.के. रेड्डी, मुख्य अभियंता (तकनीकी) को सी-प्लेन के सफल ऑपरेशन हेतु प्रशस्ति पत्र प्रदान करते हुए

माननीया अध्यक्ष महोदया श्री राजीव सिंघल, वरिष्ठ जलीय सर्वेक्षक को सी-प्लेन के सफल ऑपरेशन हेतु प्रशस्ति पत्र प्रदान करते हुए

माननीया अध्यक्ष महोदया श्री सोहेल रफत, कनिष्ठ जलीय सर्वेक्षक को सी-प्लेन के सफल ऑपरेशन हेतु प्रशस्ति पत्र प्रदान करते हुए

माननीया अध्यक्ष महोदया श्री संजीव कुमार सहायक निदेशक को सी-प्लेन के सफल ऑपरेशन हेतु प्रशस्ति पत्र प्रदान करते हुए

भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण, नौएडा में **सतर्कता जागरूकता सप्ताह – 2020** मनाया गया। इस दौरान दिनांक 28.10.2020 को निम्नलिखित विषय –

1. भ्रष्टाचार उन्मूलन से भारत को कैसे सम्पन्न बनाया जा सकता है?
2. भारत से भ्रष्टाचार उन्मूलन में महिलाओं की भूमिका
3. भ्रष्टाचार उन्मूलन में ई–गवर्नेंस की भूमिका

पर एक निबंध लेखन प्रतियोगिता आयोजित की गई। विजयी 13 प्रतिभागियों को वरीयता क्रम में प्रथम, द्वितीय, तृतीय एवं प्रोत्साहन पुरस्कारस्वरूप क्रमशः रुपए 1500/–, 1000/–, 500/– एवं 200/– (10) के नकद पुरस्कार एवं प्रमाण पत्र माननीया अध्यक्ष महोदया द्वारा प्रदान किए गए। विजयी प्रतिभागियों का विवरण इस प्रकार है :–

प्रथम पुरस्कार – सुश्री प्रभलीन कौर, डाटा इंट्री ऑपरेटर
द्वितीय पुरस्कार– श्री अवधेश कुमार, अनुभाग अधिकारी
तृतीय पुरस्कार– सुश्री काजल, डाटा इंट्री ऑपरेटर

श्री ब्रिजपाल, डाटा इंट्री ऑपरेटर, श्री महेश चन्द्र शर्मा, सहायक, श्रीमती रजनी बक्शी, ड्राफ्ट्समैन, श्री विवेक वर्मा, डाटा इंट्री ऑपरेटर, सुश्री किरण, एमटीएस, श्री नीरज खरे, ड्राफ्ट्समैन, ग्रेड–I, श्री अजय शर्मा, डाटा इंट्री ऑपरेटर, श्री मदन कुमार, डाटा इंट्री ऑपरेटर, श्रीमती स्तुति कुमारी, डाटा इंट्री ऑपरेटर, श्री अमित सिंह, डाटा इंट्री ऑपरेटर को प्रोत्साहन पुरस्कार प्रदान किए गए।

माननीया अध्यक्ष महोदया सुश्री प्रभलीन, डाटा इंट्री ऑपरेटर को प्रथम पुरस्कार प्रदान करते हुए

माननीया अध्यक्ष महोदया श्री अवधेश कुमार, अनुभाग अधिकारी को द्वितीय पुरस्कार प्रदान करते हुए

माननीया अध्यक्ष महोदया सुश्री काजल, डाटा इंट्री ऑपरेटर को प्रथम पुरस्कार प्रदान करते हुए

माननीया अध्यक्ष महोदया श्री महेश चन्द्र शर्मा, सहायक को प्रोत्साहन पुरस्कार प्रदान करते हुए

माननीया अध्यक्ष महोदया श्री मदन कुमार, डाटा इंट्री ऑपरेटर को प्रोत्साहन पुरस्कार प्रदान करते हुए

माननीया अध्यक्ष महोदया श्री अजय शर्मा, डाटा इंट्री ऑपरेटर को प्रोत्साहन पुरस्कार प्रदान करते हुए

- **संसदीय राजभाषा समिति की पहली उपसमिति** द्वारा भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण, नौएडा का दिनांक 14.10.2020 को राजभाषा विषयक सफल निरीक्षण किया गया। बैठक में प्राधिकरण की तरफ से **अध्यक्ष महोदया के साथ-साथ सदस्य (यातायात एवं प्रचालन), सचिव** एवं **हिन्दी अधिकारी** ने भाग लिया। बैठक के दौरान समिति के सदस्यों द्वारा प्राधिकरण में राजभाषा नीति के प्रगामी कार्यान्वयन के बारे विचार-विमर्श किया गया।
- बैठक के दौरान सचिव महोदय द्वारा प्राधिकरण की गतिविधियों के साथ-साथ राजभाषा हिन्दी में किए जा रहे कामकाज को पीपीटी प्रदर्शन के माध्यम से समिति के सदस्यों के समक्ष प्रस्तुत किया गया। निरीक्षण के दौरान समिति के माननीय सदस्यों के अवलोकनार्थ प्राधिकरण में हिन्दी में किए जा रहे कामकाज एवं अन्य गतिविधियों की एक प्रदर्शनी भी लगाई गई, जिसका माननीय सदस्यों द्वारा प्रशंसा की गई।
- निरीक्षण के दौरान समिति के माननीय सदस्यों से प्राप्त आवश्यक दिशा-निर्देशों का पालन प्राधिकरण में सुनिश्चित किया जा रहा है।

Employee corner's :

- Sh. Rajesh Kumar Pathak, IP&TFS assumed the charge of Member (Finance), IWAI on 16.10.2020.
- Sh. Ram Babu, Draftsman, Grade-I, IWAI, Noida superannuated on 31.09.2020.
- Sh. Ajay Kumar Gupta, Director (F&A), IWAI, Noida superannuated on 31.10.2020.
- Sh. Rajkumar Singh, Draftsman, Grade-I, IWAI, Patna superannuated on 30.11.2020.
- Sh. Mukesh Kumar Sharma, Dy. Director (F&A), IWAI, Noida passed away on 10.10.2020.
- Sh. Randhir Singh, AHS, IWAI, Prayagraj passed away on 29.11.2020.

Major IWT activities at a glance

Over Dimensional Cargo Barge reached at their destination (Sahibganj) on NW-1

Over Dimensional Cargo (ODC) Barges Crossing Farakka Navigational Lock on NW-1

Stonechips loading at Pakur to export Narayanganj (Bangladesh) through NW-1 and IBP route

Details of Hydrographic persons of Head office and Regional/Sub-Offices of IWAI					
Sl.No.	**Name of the employees**	**Designation**	**Sl.No.**	**Name of the employees**	**Designation**
1	Sh. P. Srinivasa	DIRECTOR (Hydrography)	**79**	Sh. Radhey Chaudhary	Master II
2	Sh. A. Selvakumar	DIRECTOR (Hydrography)	**80**	Sh Yogesh Prasad Mondal	Master II
3	Sh. Ram Nath	S.H.S.	**81**	Sh. Mithilesh Kr Jha	Master II
4	Sh. Mathew George	S.H.S.	**82**	Sh. Bhaskar Manjhi	Master II
5	Sh. Rakesh Kumar	S.H.S.	**83**	Sh. Kaji Sarfraj	Master II
6	Sh. Rajiv Singhal	S.H.S.	**84**	Sh. Subrata Das	Master II
7	Sh. P.Palani Raj	A.H.S.	**85**	Sh. Sunil Kumar Maithi	Master II
8	Sh. Lehru Lal Jat	A.H.S.	**86**	Sh. Manas Gaine	Master II
9	Sh. Anil Kumar	A.H.S.	**87**	Sh. Upendra Rai	Master II
10	Sh. R. Venkateshan	A.H.S.	**88**	Sh. Prashant Kr Bera	Master II
11	Ms. Lissi I	A.H.S.	**89**	Sh. Tajuddin SK	Master II
12	Sh. Anupam Sinha	A.H.S.	**90**	Sh. Sahibul Seikh	Master II
13	Sh. R.C. Pandey	A.H.S.	**91**	Sh. Manish Kr Dubey	DRIVER I CLASS
14	Sh. Sunil Shinde	A.H.S.	**92**	Sh. Harihar Maithi	DRIVER I CLASS
15	Sh. Sanjay Kumar Shukla	A.H.S.	**93**	Sh. Kalas Asim Amitabh	DRIVER I CLASS
16	Sh. Susanta Basu	A.H.S.	**94**	Sh. Rahul Kumar	DRIVER I CLASS
17	Sh. J.L. Pradhan	INLAND DREDGE MASTER	**95**	Sh. Aakash Raj	DRIVER I CLASS
18	Sh. Sorendra Santra	INLAND DREDGE MASTER	**96**	Sh. Kamlesh Kumar	DRIVER I CLASS
19	Sh. Niraj Nirala	INLAND DREDGE MASTER	**97**	Sh. Pankaj Kumar	DRIVER I CLASS
20	Sh. Ramdev Mandal	INLAND DREDGE MASTER	**98**	Sh. Chandi Charan Das	DRIVER I CLASS
21	Sh. Gopeswer Kundu	JHS	**99**	Sh. Gautam Kumar	DRIVER I CLASS
22	Sh. Suhail Rafat	JHS	**100**	Sh. Mithilesh Kr Mahto	DRIVER I CLASS
23	Sh. R.K. S. Solanki	JHS	**101**	Sh. Ajay Kumar	DRIVER I CLASS
24	Sh. Sukumar Kundu	JHS	**102**	Sh. Shyam Krishan	DRIVER I CLASS
25	Sh. Budh Dev Ghosh	JHS	**103**	Sh. Gunadhar Singh	DRIVER II CLASS
26	Sh. Arun Kumar	JHS	**104**	Sh. Durgvijay Yadav	MASTER III
27	Sh. Sumukh Chatterjee	JHS	**105**	Sh. Md. Saddam	MASTER III
28	Sh. Gautam Halder	JHS	**106**	Sh. Sudipt Das	MASTER III
29	Sh. Sharwan Kumar Verma	JHS	**107**	Sh. Anodh Singh	LASCAR
30	Sh. Poojan Kumar	JHS	**108**	Sh. Shyamkant Pandey	LASCAR
31	Sh. Ashok Kumar	JHS	**109**	Sh. Suresh Choudhary	LASCAR
32	Sh. Dharamnath Prasad	JHS	**110**	Sh. Viswanath Das	LASCAR
33	Sh. Madan Mohan Sharma	JHS	**111**	Sh. Ramanand Choudhary	LASCAR
34	Sh. Sonu Singhal	JHS	**112**	Sh. Amar Nath Choudhary	LASCAR
35	Sh. Abhishek Kumar	JHS	**113**	Sh. Ramu Choudhary	LASCAR
36	Sh. Birendra Kumar Vimal	JHS	**114**	Sh. Mahesh Choudhary	LASCAR
37	Sh. Avinash Kushwaha	JHS	**115**	Sh. Shyam Babu Choudhary	LASCAR
38	Sh. Yatender Kumar	JHS	**116**	Sh. Shyam Nath Choudhary	LASCAR
39	Sh. Rahul Ritu Raj	JHS	**117**	Sh. Anil Kumar Choudhary	LASCAR
40	Sh. Devender Meena	JHS	**118**	Sh. Dharikshan Mahota	LASCAR
41	Sh. Jayesh Pattidar	JHS	**119**	Sh. Ram Chander Ch.	LASCAR
42	Sh. Gurevelli Pd. Rao	JHS	**120**	Sh. Rohit Choudhary	PILOT INSPECTOR
43	Sh. Vinod Kumar	JHS	**121**	Sh. P. Payeng	PILOT INSPECTOR
44	Sh. Tarun Kumar	JHS	**122**	Sh. Umashankar Mishra	SEACUNNY

45	Sh. Anas Ali Khan	JHS	**123**	Sh. Tileshwar Choudhary	SEACUNNY
46	Sh. Abhiney Verma	JHS	**124**	Sh. J. Choudhary	HEAD PILOT
47	Sh. Sanjeev Kumar	JHS	**125**	Sh. K.P. Choudhry	HEAD PILOT
48	Sh. Neeraj Khare	DFT. GRADE-I	**126**	Sh. Abdul Hamid	HEAD PILOT
49	Sh. Shivaji Singh	MASTER - I	**127**	Sh. Ram Balak Rai	MARKING DANDI
50	Sh Jayont Kumar Mondal	MASTER - I	**128**	Sh. Dasrath Choudhary	MARKING DANDI
51	Sh. Anup Kumar Ballav	MASTER - I	**129**	Sh. Dewanand Choudhary	MARKING DANDI
52	Sh. Barun Kumar Mondal	DREDGE CONTROL OPERATOR	**130**	Sh. Ram Naresh Rai	MARKING DANDI
53	Sh. R.K. Mishra	DREDGE CONTROL OPERATOR	**131**	Sh. Parmanand Ch.	MARKING DANDI
54	Sh. Kuntal Mitra	DREDGE CONTROL OPERATOR	**132**	Sh. Basant Rai	MARKING DANDI
55	Sh. Abhineet Kumar	DREDGE CONTROL OPERATOR	**133**	Sh. Radhe Singh Kewat	MARKING DANDI
56	Sh. Vipin Kumar	DREDGE CONTROL OPERATOR	**134**	Sh. Ram Sagar Choudhary	MARKING DANDI
57	Sh. Durga Singh	DREDGE CONTROL OPERATOR	**135**	Sh. Ragunath Pd. Singh Kewat	MARKING DANDI
58	Sh. Manoj Kumar	DREDGE CONTROL OPERATOR	**136**	Sh. Gulab Chandra Choudhary	MARKING DANDI
59	Sh. Anindya Dey	DREDGE CONTROL OPERATOR	**137**	Sh. K. P. S. Kewat	MARKING DANDI
60	Sh. Kirti Ranjan	DFT GR.II	**138**	Sh. Rajeshwar Paswan	MARKING DANDI
61	Sh. Rajeev Kr. Ranjan	DFT GR.II	**139**	Sh. Sanjeet Kr. Choudhary	MARKING DANDI
62	Sh. Kalesh Kumar Singh	DFT GR.II	**140**	Shri Tribhuan Kumar Singh	MARKING DANDI
63	Sh. Kailash Kumar Pandey	DFT GR.II	**141**	Sh. Jayant Manjhi	MARKING DANDI
64	Sh. G.J. Reddy	DFT GR.II	**142**	Sh. Ram Ekbal Mohato	MARKING DANDI
65	Smt. Ira Devi	DFT. GR. III	**143**	Sh. Rakesh Kumar Choudhary	COOK
66	Smt. M.P. Jaya Devi	DFT. GR. III	**144**	Sh. Jawahar Choudhary	COOK
67	Sh. H.M. Meena	DFT. GR. III	**145**	Sh. Nikku Kumar	COOK
68	Sh. Ranjan Naskar	DFT. GR. III	**146**	Sh. Tapan Kumar. Sarkar	COOK
69	Smt. Rajni Bakshi	DFT. GR. III	**147**	Sh. Sovnath Mahato	MANJHI
70	Sh. Sanjay Kumar	PIPE LINE INCHARGE	**148**	Sh. Motilal Choudhary	MANJHI
71	Sh. Rajesh Vishwakarma	FIELD ASSISTANT	**149**	Sh. Jawahar Choudhary	MANJHI
72	Sh. Bipin Kumar	FIELD ASSISTANT	**150**	Sh. Shankar Choudhary	MANJHI
73	Sh. Sandeep Kumar	FIELD ASSISTANT	**151**	Sh. Arjun Rai	MANJHI
74	Sh. Ashwini Kumar	PIPE LINE ASSISTANT	**152**	Sh. Virendra Kumar. Singh	MANJHI
75	Sh. Harender Kumar	Master II	**153**	Sh. Ram Das Choudhary	MANJHI
76	Sh. Sabrata Parui	Master II	**154**	Sh. Radheshyam Choudhary	PILOT
77	Sh. Nil Ratan Samanta	Master II	**155**	Sh. Joy Payeng	PILOT
78	Sh. K.L. Biswas	Master II			

<u>For F.Y. 2021-22 following subjects be taken up :</u>

- **January to March - NW-1 and JMVP**
- **April to June - NW-2 & IBP**
- **July to Septemper - NW-3 & NW-4**
- **October to December- Vessels and activities of Mech. Marine / I.V. Act.**
- **January to March - Project Management and NWs**