

A Report on

3rd Programme on “Realizing Hydrocarbon Vision 2030 for North East India held on March 6-7, 2020 at Gangtok, Sikkim.

The 3rd one and half day workshop on “Realizing Hydrocarbon Vision 2030 for North East India was held at the Hotel Lemon Tree, Gangtok on March 6-7, 2020. The workshop was participated by Oil & Gas Companies like ONGC, IOC, OIL, Cairn-Vedanta, IGGL, TNGCL, HOEC, Schlumberger etc operating in North East States.

Opening Session

In his Opening Address, **Dr. R. K. Malhotra, Director General, FIPI** reiterated the key objectives of North East Vision document i.e. leveraging hydrocarbon sector for the development of the Region. He also mentioned that two such programs (in 2017 at Kaziranga and 2018 at Shillong) were organized by FIPI to review the progress and capture the challenges and constrains in the Region. He stated that the region has witnessed various development in hydrocarbon exploration & production activities in recent years and under HELP policy new contracts were signed for 20 blocks under OALP-1, five blocks under OALP III and 9 small field contracts were signed under DSF round I & II. Apart from that Oil & Gas companies are investing more than Rs. 10,000 Crore in next five years for exploration & production activities in the region.

He also mentioned that in the Natural Gas sector, 721 KM pipeline from Barauni to Guwahati commenced under Urja Ganga Pipeline project in 2019. This will connect the upcoming Indradhanush Gas Grid network. On the Downstream segment NRL is expected to complete expansion of its Refinery 3 MMTPA to 9 MMTPA to meet the deficits of petroleum products in the North East region.

There were three more eminent speakers in the Opening Session representing the major oil & gas companies operating in the North East Region.

1. Shri Manoj Sharma, Executive Director (Operations), Indian Oil Corporation Limited (IOCL)

Shri Manoj Sharma in his opening address brought out the major intent of the vision document which is to develop common and shared structure for benefiting people of the North East region.

He also mentioned that the objectives of the hydrocarbon vision document are to leverage the region, enhance access to clean fuels, improve availability of petroleum products for the economic activities in the region.

He emphasized on the five Pillars i.e. People, Policy, Partnership, Projects and Production on which the North East vision rests. IOCL as the Nodal Coordinator for Downstream sector has focused on expansion of the refinery and the old refineries of Digboi, Guwahati and Bongaigaon are under revamping and expansion mode. He also mentioned about the infrastructure upgradation in marketing of products, POL, Petrochemical etc. As North East Refineries have been designed for NE Crude as feedstock and currently due to lower production, Crude Oil is transported from imported sources to NE refineries through pipelines. He mentioned the need of more aggressive exploration and production from Upstream Companies in North East.

2. Dr. Deben Buragohain, CEO, Indradhanush Gas Grid Limited (IGGL)

Dr. D. Buragohain, in his Opening Address mentioned about IGGL's plan and present status for building Natural Gas distribution network and the issue of the Gas pricing for making the project viable. He also stated that Govt. is having plan for trading gas with neighboring countries and connecting to the rest of the India. This can improve the living standard of the people by bringing Gas into the household.

The Gas vision also speaks about connecting Agartala to Guwahati. Gangtok is also mandated to connect to the Gas Grid. He also reiterated that the requirement of Gas in North East is around 23 MMSCMD and upstream companies are urged to enhance their exploration and production activities to meet the demand.

3. Dr. P. Chandrasekaran, Director (Exploration & Development), Oil India Limited (OIL)

Dr. P. Chandrasekaran, Director (E&D), OIL in his Opening Address brought out the potential and challenges of the different basins of North East and its potential to produce more Gas and Oil both by OIL and ONGC along with Cairn- Vedanta in the coming future. He called the two basins of North East i.e Assam & Assam Arakan basins as the two super basins and capable of producing more hydrocarbons in near future.

He mentioned that Assam and Tripura together are the largest onshore gas producers in India which are contributing 45% of onshore gas production.

He desired that the following supports are required from DGH and Govt for an effective exploration and production in North East:

- Additional time – 2 years for exploration blocks in North East
- Swapping of MWP
- Availability of Oil field Services
- Availability to use contracts of other operators.
- Zero phase – without conditions

- Tax Holiday
- Development of Gas based economy
- Start-up of eco system

At the end, he mentioned OIL is working relentlessly to enhance production through Exploration & Development and demand to embark EOR projects. He assured that there is considerable potential for enhancement of oil & gas production as Assam and Assam Arakan basin are truly India's super basins.

He requested FIPI to facilitate these wish-lists for an effective implementation of government aspiration for enhancing oil & gas production in NE Region.

At the end of Inaugural Session, **Shri T.K. Sengupta, Director (Exploration & Production), FIPI** proposed a vote of thanks to the eminent speakers for presenting good progress in North East region. He mentioned that after policy reform in upstream sector huge work has been initiated in NE region both in Award of blocks to Surveys and drilling exploratory well; As the Eminent speakers reassured the true potential of reserves, the result is expected soon in augmenting the production. A good amount of work is going on in the midstream i.e Gas infrastructure projects and both GAIL & IGGL are working relentlessly to fulfill the need of NE people. Downstream sector are moving ahead as per plan. He thanked all the speakers for sharing their knowledge .

The summit was split into three **Technical Sessions** covering Exploration, Development & Production; Midstream, Natural Gas & Marketing and Technology & Downstream, Operations & Pipelines. The session were chaired by eminent experts namely Dr. P. Chandrasekaran, Director (E&D), OIL; Shri T.K. Sengupta, Director (E&P), FIPI & Shri N.K. Bansal, Director (Oil Refining & Marketing), FIPI.

Technical Sessions

I. Session on Exploration, Development & Production Session witnessed five presentations which are given below:

- **Chairperson: Dr. P. Chandrasekaran Director (E&D) OIL**

1. Leveraging Exploration for Realizing NE Vision 2030, Shri Puneet Suri, ED, ONGC

Shri Puneet Suri while delivering his presentation reiterated the objectives of NE Vision document and stated that it is essential to leverage hydrocarbon sector for development of the region. He also highlighted the Five Pillars (People, Policy, Partnership, Projects and Production) of the vision documents. ONGC is planning to increase its 3D seismic survey by three times by

the year 2020. ONGC drilled 54 exploration wells in last three years out of which 22 are hydrocarbon bearing. The company has planned to do more 79 wells in the next three years. He also insisted that mutual knowledge sharing with PEER companies for better understanding of the basin.

Nagaland could be the potential new frontier for company's exploration activities. New technologies like airborne hydrocarbon sensing system, passive seismic tomography, low frequency passive seismic, and node based system helps company in improving its seismic activity.

Three action points for ONGC with respect to vision 2030 are:

- Production from Matured fields
- Availability of field services
- Enhancing exploration activity

Concluding the presentation Shri. Suri insisted on the need of cooperation from the Government and resolution of disputed areas in the Belt for better exploration & production activity.

1. YTF – A Campaign in Assam Arakan Basin, Shri Indrajit Barua, Chief GM, OIL

Shri Indrajit Barua speaking on the Oil & Gas potential in the North East, said that discovered resources in the region is 2046 MMTOE while the undiscovered potential is 5588 MMTOE. Despite the presence of huge potential, the region faces geological complication impacting the field development activity. Major hindrance in acquiring reasonably good quality seismic data in these areas are the presence of high dipping beds (max. up to 60-70 degree) and surface and sub-surface thick boulder beds which affects energy penetration resulting in poor signal to noise ratio.

Exploration and development activities in the region have high challenges as the exploration targets are much deeper. To minimize the exploration risks a multi-pronged approach deploying the latest suitable technology and expertise has been adapted by OIL. Dense forest cover varying from 5% to 65% is hindering the exploration in OALP blocks. Environmental challenges delays in getting clearances and logistical challenges are some of the key challenges faced by the company in the region.

He also called for the need for improved policy support from the government and concerned bodies for fast tracking exploration in the region.

2. Production Enhancement – Challenges & Opportunities: ONGC North East , Shri Hemasundara Rao, IRS ONGC

Shri Hemasundara Rao speaking on the NE vision 2030, said increasing production on matured fields and capacity addition on the new fields are the two major focus areas for the company. The region has multiple hydrocarbon bearing pays with good to moderate permeability. The current recovery is 15% of In-place reserves and there is a scope for improving water injection for improved recovery rate. Production enhancements through horizontal wells recovery improvement through high volume liquid withdrawal are some of the opportunities available for the company.

Assam and Jorhat asset, Tripura asset combine produced 5-6 MMSCMD of gas. New exploitation strategy has improved productivity in Geleki fields. Due to horizontal drilling there is a threefold increase in production. Currently, the company is studying on feasibility of chemical EOR and yearly monetization of discovery on fold built area. With the induction of new technologies, company is looking at production enhancement in the region.

3. Production Enhancement Initiatives of OIL, Shri Anish Borkakoty, Superintending Geologist, OIL

Shri Anish Borkakoty while delivering his presentation, said that there is a surge in exploration activities to maximize chances of new finds and subsequent monetization of acreages. Area-wise workover execution is planned to retrieve production from non-flowing wells. Implementation of IOR/EOR schemes for potential reservoir is done in addition to the ongoing activities. The technology improvement like radial drilling, produced water re-injection, ESP/SRP, Gravel pack completion, extended reach drilling, Acidisation, chemical water shut off and carbon dioxide flooding are implemented to improve the recovery. Company is also working on infrastructure augmentation and diversification plants for improving the gas supply connectivity in the region.

4. Unraveling the Hydrocarbon Potential of NE India – Strategy & Approach by Vedanta Limited, Shri Sudhir Mathur, Cairn Oil & Gas – Vedanta Ltd

Shri Sudhir Mathur, spoke about the diversified portfolio of Cairn across the country. In the NE Cairn has got 12 blocks under OALP for exploration. Despite being a matured basin NE has a large under explored area with significant presence of hydrocarbon. Using state of Art technology, Cairn is looking to maximize potential of exploration blocks, reduce time to production and optimize the source and maximize value of information.

Technologies like Satellite based exploration, airborne FTG survey helps in reducing the project time, and covers inaccessible and difficult terrain. Use of Azimuthal processing must apply in processing the seismic data acquire in RDG field. Alkaline – Surfactant- Polymer Flood has improved the production with increased permeability

Shri. Mathur called for the need of collaboration of all operators in the Region. Banking upon strength of operators specific to NE India, Sharing ideas and technology implementation and best industry practices, the collaboration can improve the working efficiency of the companies in the region.

He requested FIPI to facilitate an expedite critical approval for E&P activities in the NE. He concluded that there is a need for policy support to fast-track approvals and maximize hydrocarbon production in NE.

Other than the papers presented in the session there was a presentation on **Challenges and Solution by Schlumberger representative Shri Joseph Zacharia, Domain Champion (Petro physics), Schlumberger** . He said geological conditions in NE is complex with folding and faulting. Three major challenges are seismic interpretation, drilling & completion and formation evaluation. Equipment failure, poor quality log data, poor cementing are some cascading effects due to wellbore stability. Hole cleaning, tripping, removal of cavings leads to higher non-productive time, thereby decreasing the drilling efficiency. Using advanced Sonic scanner based geomechanics study, measuring 3D stress and strain can improve wellbore stability. Use of HydroFrac design and execution in EOCENE wells have improved the well flow and connected the untouched zone. Low resistivity pays across the region is common. Using single run integrated formation evaluation with pulsar quantifies gas saturation and oil saturation. Improving seismic data quality is the key challenge for operators in the NE. Using cross well 3D imaging surface can predict petro physical properties in the sub-surface. Schlumberger can provide fit for purpose evaluation and characterization solutions for the operators in the NE.

II. Session on Midstream, Natural Gas & Marketing and Technology witnessed three presentations which are given below:

- **Chairperson: T.K.Sengupta Director (E&P) FIPI**

1. India Natural Gas Summary, Shri Anand Vaidyanathan, Senior Assistant Director (E&P), FIPI

Shri Anand Vaidyanathan started his presentation with an overview of India's Energy basket. The share of oil (29.6%) in the India's primary energy mix is near to the global average (33.6%). However, the share of natural gas in India (6.2%) is significantly lower than that of the global average (23.9%), he said. With a population of 1.3 billion people would require energy solutions

that are - Reliable, Convenient, Low Carbon intensive, sustainable and affordable. Natural gas has 4 key value propositions i.e. Abundance, Availability, Affordability and Acceptability as it has a cleaner footprint makes it an ideal fuel to propel India's sustainable economic development, he further added.

Speaking on sector wise consumption, he said Fertilizer and Power industry consume close to 50% of natural gas in the Indian market followed by City Gas Distribution industry. Considering the Gas Vision, India needs to increase its gas consumption from 53 BCM to 251 BCM to have a 15% for natural gas in the energy basket. This requires increase in LNG regasification capacity, increase in domestic gas production and expanding pipeline network to connect across the country. Expansion of CGDs will drive the demand for gas, with Eleventh round of CGD coming; the country's gas demand might increase further. Shri. Vaidyanathan further mentioned the various policy reforms like HELP policy, DSF policy, Gas pricing reforms, will further help in augmenting the natural gas production in India.

NE region has a vital role to play in achieving Gas Vision 2030. Tripura being the onshore gas producing state can help transform the region. Indradhanush Gas Grid will connect the NE region with Barauni - Guwahati pipeline, which is a part of Jagdishpur – Haldia & Bokaro – Dhamra Natural Gas Pipeline Project, popularly known as 'Pradhan Mantri Urja Ganga'. This will boost the consumption of Natural Gas in the region. Considering the long term environmental and societal benefits of switching to a cleaner fuel, transforming India to a gas-based economy can become the backbone of India's sustainable economic development, he concluded.

2. How TNGCL is Shaping Up its CGD Infra in Line With NE Hydrocarbon Vision 2030 , Shri Joyjeet Choudhuri, Senior Manager (Marketing & Corporate Communication, TNGCL)

Shri Joyjeet Choudhuri started the presentation by providing a glance of TNGCL-CGD. 97% of the gas supplied by TNGCL-CGD goes to the power sector, he said. The company got two Geographical licenses in Tripura in the 9th CGD round and at present they have a corridor with 3 mother stations and 10 Distribution points.

Speaking on the upcoming and future plans, Shri. Choudhuri said TNGCL-CGD is planning to add 6 more Daughter Booster stations and 40kms of CNG corridor to boost the availability and coverage of CNG stations. Over 2020-2022 and 2022-2024, the company will be adding 3 mother stations and 16 more Daughter Booster stations. The CNG corridor will see further addition of 140 kms and 184kms pipeline and 2020-22 and 2022-24 respectively as a part of 5 year roadmap. In terms on CNG conversion, Shri. Choudhuri said that the state has a potential of 65,000 vehicles which has the viability for conversion into CNG.

Mentioning about the challenges, Shri. Choudhuri called for faster gas allocation process and the need for single window clearance to obtain the required clearances and approval from

governments and other bodies. He further said that, North East region must be given participation in the policy making considering the role on the region in the India Oil & Gas industry.

3. North East Gas Grid (NEGG): An arm to Realize Hydrocarbon Vision-2030 for North East Region

Dr. Deben Buragohain, gave a background about the North East Gas Grid (NEGG) which was conceived as per Hydrocarbon Vision 2020 for North East India. Indradhanush Gas Grid Limited was formed by Joint venture agreement by the five PSU's IOCL, OIL, ONGC, GAIL & NRL with 20% equal equity contribution was signed on 20.07.2018.

NEGG would ensure reliability and uninterrupted natural gas supplies to various types of consumers viz. industrial, commercial, PNG (Domestic), CNG (Transport) etc. in all the eight states of North-East, he further added. Availability of Natural gas across the region through this pipeline grid is expected to boost industrial growth without impacting the environment and would offer better quality of life in general to the people in all the eight states of North-East due to use of cleaner and green fuel.

Speaking on the project, he said the grid will have a length of 1,656 kms and a throughput of 4.75 MMSCMD with achievable capacity of 16 MMSCMD. The project is planned in three phases namely I, II & III. Phase I contains three sections namely, Guwahati-Gohpur-Dergaon-Numaligarh, Dergaon-Dimapur and Gohpur-Itanagar, and the phase is planned for completion by March 2024 along with Phase –II containing the sections namely Guwahati-Shillong-Silchar-Panisagar, Panisagar-Agartala and Panisagar-Aizawl. Phase – III of the project will consist of sections Dimapur-Kohima-Imphal and Siliguri-Gangtok and the completion target is March 2025.

On 8th January 2020, Viability Gap Fund of Rs 5,559 crores was approved by Cabinet Committee on Economic Affairs. He concluded saying that, the project has got active support and monitoring from all 8 North Easter states and from the five PSU companies as promoters.

III. Session on 'Downstream' segment witnessed four presentations on various actions in NE :

Chairperson: N.K.Bansal Director (R&M) FIPI

1. Readiness of Refineries in NE Region, Shri Santanu Bhar, DGN(Technical), IOCL, Refinery Head Quarters

Shri Santanu Bhar, in his talks said Five pillars of energy are People, Policy, Partnership, Projects and Production which are essential for the growth of the region. Shri. Bhar gave the background

of NE Vision 2030 and the overview of the actions in NE to ramp-up the capacity of refineries and development in Pipelines and Marketing Infrastructure. IOCL mentioned that crude , gas and LPG supplies in NE may continue to exhibit deficit trends by 2030 and therefore it is essential to add supply lines for import of crude and LPG. Integrated approach on the front by the concerned companies needs to be ensured till the last minute to ensure timely and synchronised completion of the Vision 2030. Demand –Supply outlook shows that while consumption in NE is expected show higher growth rates for MS and HSD, the overall will continue to be surplus. Hence export of HSD to Myanmar and Bangladesh need to be maintained. Still product may have to move out of NE till demand pick-up. Current pipeline capacity is 1,500 kms for crude supply to refineries and the proposed LPG pipeline is 495 kms. Existing Product Pipeline length is 1084 kms with utilization greater than 100% and Proposed Product pipeline is 1752 kms. Speaking on the issues of CFBC Boilers, he called for the need for upgradation to meet the environmental guidelines

2. NRL Journey, Shri Pranta Pratim Singha, Senior Manager (Corporate Planning), NRL

Opening his presentation, Shri. Singha insisted on the Integrated expansion project to meet the demand for Refined products in the North Region. NRL, in the capacity of a major player in the NE Vision 2030 related developments in downstream presented the status of their projects in respect of Refinery capacity expansion to 9.0 million MT per annum (MMTPA). Project completion schedule is October 2024 and the Licensor selection is in progress.

NRL has started export of HSD by road to Myanmar through Moreh – Tamu International border since August 2017 on a trial basis and the proposed pipeline will help in exporting HSD to Myanmar on sustainable basis. Estimated cost is approx. INR 1,200 CR (around 410 KM) . Viability Gap Funding will be required as Project may not be feasible on its own due to low volume.

2G ethanol production bio-refinery project of NRL is in progress with 8.9 % physical completion with total schedule of Sept. 2021. EIL is EPCM. Indo- Bangladesh Friendship Pipeline from Siliguri to Parbatipur in Bangladesh is 23.8% complete and total project is scheduled to be completed by June 2021. NRL also mentioned that industry using polymers as raw material must be set up at faster pace to consume rise in petrochemical productions.

3. Realising Vision 2030 , Shri Nirmal C Borah, DGM (Operation), IOCL

Presenting the Vision 2030 from IOCL's perspective, Shri. Borah, gave the details for Retail business units. He spoke on current infrastructure for marketing network in NE (including LPG) and actions to revamp the total infrastructure to meet the market demand as per the NE Vision 2030. He pressed for the need for boosting Infrastructure in the region in meet the increasing

demand. Tankage facility is less in the region and the depots in the region are road fed. He also spoke on the details of revamping terminals, Depots, across different states.

4. Construction of Pipelines in NE- Issues and Challenges, Shri Deva Kumar R , Chief Project Manager, IOCL

Opening his talk, Shri. Deva Kumar presented the facts of IOCL pipeline infrastructure and details of POL/Depots/Terminals in the North East Region. He said, though HSD/MS is surplus in the region and exported out, LPG Prodn is deficit. Total forest cover of the N-E region is 1,71,964 sq.km, which is 65.6% of its geographical area (2,62,230 sq.km) against the national forest cover of 21.3%. It includes significant proportions of very highly/moderately dense forest. Five states of N-E region have > 75% forest cover and N-E India is homeland of a large number of tribes and it constitutes around 12% of total tribal population of India and 25.8% of total population of N-E India. Considering these aspects, obtaining forest/environment clearances and clearances for land acquisitions and construction activities in tribal areas would be a big Challenge. Special dispensations would be required from Central/State authorities viz. MoEF&CC and Ministry of Tribal affairs. He brought out the operational issues in Pipelines due to un-even terrain and steep slopes due to which multiproduct pipelines may face the issue of larger interface generation within pipelines especially when the demand is lower than pipeline fill. He also mentioned that fast track environmental and Forest clearances are essential to meet the timelines.

The vote of thanks was given by Shri N.K. Bansal Director (Refinery & Marketing) FIPI.

The program was a grand success.

Action Points, Issues that need support from FIPI

1. Issues for Upstream Companies and Support required :-

OIL:-

1. Additional time – 2 years for exploration blocks in North East
2. Swapping of MWP
3. Availability of Oil field Services
4. Availability to use contracts of other operators.
5. Zero phase – without conditions
6. Tax Holiday
7. Development of Gas based economy
8. Start-up of eco system

ONGC:-

1. Resolution of Disputed Area Belt
2. Award of relinquished areas to NoCs on Nomination basis with first right of refusal to NoC operating near that area
3. Flexibility to Operator to carry out outstanding MWP in similar blocks
4. Increased timelines for challenging Blocks
5. Boundary demarcation of forest and non-forest area in land records
6. Concept of zero phase exploration period to be included in the PSC
7. Amalgamation of PMLs based on geological grounds to ensure proper development of these discoveries for maximization of economic recovery of oil and gas with better portfolio management and regulatory compliances.

Cairn-Vedanta :-

1. Collaboration of all Operators in the region.
2. Bank upon strengths of operators consortium, specific to NE-India.
3. Knowledge sharing sessions across value chain

4. Sharing ideas on technology implementation and best industry practices
5. We recommend FIPI to facilitate and expedite critical approval for E&P activities in NE-India
6. Requires support to ease up policies for fast track and maximize hydrocarbon production in NE-India

Common:-

1. Environmental & Forest Clearances: -
2. Cumbersome process of application
3. As per North East Vision 2030, Single Window Clearance for Environment and Forest & Boundary demarcation of Forest & non-forest areas recommended

2. Issues for Midstream /Gas Companies and Support required: -

Challenges / Support Required- EXTERNAL for CGD Companies like TNGCL, a Joint venture CGD company of GAIL.TIDCL, Govt of Tripura & AGCL ,Govt of Assam

- Gas Allocation Process to be made faster
- Gas Source –faster processing
- ROU – PWD / NHAI/ RAILWAY-Single Window Clearance
- Clearance from PESO for CNG Stations
- Increasing participation from NE in policy making

3. Issues for Downstream-

Following are points of focus and fast track actions to achieve the timeline targets:

1. Current refining capacity of four NE refineries is about 7.0 million MT per annum (MMTPA) whereas crude supply from indigenous sources is around 4.2 MMTPA. With current expansion projects, the combined refining capacity of these refineries will be about 16 MMTPA by 2024-25. With no certainty of indigenous crude availability matching regional refining capacity in near future, NRL is laying a 1400 km long pipeline with 9.0 MMTPA for importing crude through Paradip Port connecting Bongaigaon and Guwahati Refineries en-route. This is beside extension of reverse pumping facilities of Barauni - Bongaigaon pipelines up to Guwahati Refinery. Construction of NRL crude

pipeline matching with timelines of capacity expansion projects needs to be monitored closely.

2. POL demand - supply outlook up to 2030 indicate surplus position. As such backward evacuation of POL outside NE is expected to continue Economic viability through State Governments incentive may have to continue till regional demand pick-up in the long run.
3. Export of POL (HSD) to Bangladesh and Myanmar has to be tied up with infrastructure projects completion in time to ensure product supplies in line with Govt. policies. This will also help in product evacuation from NE.
4. LPG demand - supply outlook indicate continuation of deficit status with wider gap by 2030. LPG pipelines projects; one from Numaligarh to Imphal and other from Chittagong (Bangladesh) to Agartala with extension up to Silchar and Aizwal need to be firmed up fast.
5. PESO approval to receive bulk LPG through road carriers of Bangladesh to be followed up.
6. Environmental clearance on proposal of Guwahati Refinery to use low pet coke as fuel for boiler from State Pollution Control to be expedited.
7. Pipelines for pumping multiple products pose special technical and operational challenges due to undulation in the geography and steep slopes. Shutdown of pipelines due to low demand may cause larger interface mixing and product down gradation. This may pose extra challenge in the size of marketing tankages.
8. Implementation of Guwahati- Silchar-Imphal product pipeline project depends on Utility Corridor of NHAI which will come with 4 lane widening of highway NH 37. HHAH is yet to firm up plans. This project also seeks VGF up to 40 % of cost for which Govt. approval is awaited.