

IMPACT ON LOGISTICAL CONFIGURATIONS IN THE AREA DUE TO THE PROJECT:

Dalpahar Iron and Manganese ore mine, over an area of 101.171 Ha is approachable from Major District Road (MDR) connecting Joda & Palasponga via Nayagarh, Malda, Parjanpur. The Iron & Mn ore dispatches from mines are made through truck transport to nearby railway sidings namely Joruri, Banspani, Nayagarh for loading into railway wagons for ultimate destinations.

The railway siding capacities and approximate present utilization details are as follows:

Sl.No	Name of the Railway siding	Number of lines	Rakes capacity	Number of rakes capacity per Year (Approx)	Rakes movement per Year	
					Year 2009	Year 2012
1.	Jururi RS	2	8	2000	1487	1034
2.	Banspani	3	12	3000	1175	907
3.	Nayagarh	3	12	3000	597	280
4.	Parjanpur	1	4	1000	Nil	Negligible
	Total			9000	3259	2221

From the above the following inferences are made:

- All the railway sidings are having more surplus capacity and is being underutilized.
- Even while comparing with peak demand period of year 2009 and the recent 2012 data the rail transport has come down drastically.
- The additional capacity created at Nayagarh RS and the new one at Parjanpur RS is very much underutilized due to greater transport distance for the other lessees which can be advantageously used.
- Considering the future ore transport growth and demand Railway has made various arrangements like increasing the tracks, wagons etc. Indian Railways is carrying out

double lane work in the region in order to reduce the traffic congestion and to meet the future demand. Subsequently the rake capacity is expected to increase almost two fold.

PROJECTED INCREASE IN TRAFFIC:

Yearly ore dispatch : 0.404 million tones (including Iron & Mn)
No of transport days : say 300
Daily transport : 1347 T Say 1350 T

a) No of trucks loads per day:

Through 10 T tippers (1350 * 0.8/10) - 108 Trips

Through 17 T trucks (1350 * 0.2/17) - 16 Trips

Total - 124 Trips per day or assuming 15 hours of transportation then just 9 trips per hour.

TRANSPORTATION SCHEME AFTER EXPANSION

Rail Network:

One rake capacity is around 3700 T. Hence the present material dispatch capacity requirement of 1350 T per day after expansion **is less than one rake capacity**. As already mentioned, the railway siding capacity and utilization are as follows:

- As against the planned rakes capacity of each siding the actual rake movement so far is far less. This may be due to non availability of wagons for loading, rail crossing facilities. However, Railway department has made necessary arrangement for obviating these problems in the future.
- Even in the achieved rake movement between year 2009 and 2012, there is a huge decline due to slump in ore movement leading way for more transport possibility.
- The additional newly created sidings Nayagarh is not utilized up to its potential.
- The parjanpur RS is almost not utilized at all.

From the above it is evident that the additional Rail Transport requirement of just one rake per day can be easily achieved from the nearby Jururi & Banspani RS itself.

Road Network:

As far as the road network for short trip transport to the siding is concerned, the Jururi RS is nearer to the mine lease. There is a specific road from mine to railway siding will be utilized by the mining leases for transport purpose and hence this road can easily absorb the meager increase of just 9 trips per hour capacity.

Even in case if it is desired to use the other railway sidings like Nayagarh, Banspani via MDR / KIDCO road, it is found that based on Indian Road Congress: 86-193 specification, for this Kidco / Express highway road (2lane 7 to 7.5m wide), the capacity in PCU per hour for various traffic condition for “Roads with frontage access but no standing vehicle and high capacity intersections” for two way traffic flow is “1200” PCU. Considering the PCU Equivalency factor of 3 for trucks, the hourly capacity of this road can be 400 vehicles per hour.

However, based on the Traffic survey, the average hourly truck movement towards Joruri side varies from 193 to 275 on Day 1 of survey and 193 on day 2. The average hourly truck movement towards Nayagarh side varies from 152 to 217.

As already mentioned, the hourly additional truck traffic after expansion in the road will be 9 no’s only. So even after adding the additional traffic due to expansion, by judicial redistribution of traffic the density of the trucks on the road can be managed within the IRC norms.

Conclusively, it can be mentioned that the meager increase in traffic will not have any adverse load stress on the existing traffic. On the other hand of the positive side, the proposed expansion of the mines will ultimately pave way for improved employment opportunities and life style of the poor tribals and other population of the area. Further, this will enable for the meeting of increased Iron ore demands of various industries. Besides, the State and Central Governments will stand to gain in a big way financially from increase in royalties, duties, taxes etc.

* * * * *



Shri Avin Jain
(Legal Heir of Sri.D.C.Jain)