

# **CENTRAL EMPOWERED COMMITTEE**

**REPORT OF THE CEC IN APPLICATION NO. 952 OF 2006 FILED BEFORE IT BY PARISARA SAMRAKSHANA KENDRA AND WILDERNESS CLUB AGAINST THE DIVERSION OF FOREST LANDS FALLING IN THE ECOLOGICALLY SENSITIVE WESTERN GHATS IN THE STATE OF KARNATAKA FOR LAYING OF THE NEW 168.289 KM HUBLI – ANKOLA BROAD GAUGE RAILWAY LINE.**

The Application No. 952 of 2006 has been filed before the CEC by Parisara Samrakshana Kendra and Wilderness Club against the diversion of forest land falling in the ecologically sensitive Western Ghats in the State of Karnataka for laying the new 168.289kms. broad gauge railway line from Hubli to Ankola. This Report is being filed by the CEC after examining the matter during the hearings / meetings held on 13.9.2006, 17.10.2006, 7.11.2006, 3.11.2008, 23.2.2010 and 25.10.2013, the discussions held on 17.12.2013 at Bengaluru with the Chief Secretary and other concerned senior officials of the Government of Karnataka and the site visit undertaken by Mr. P.V. Jayakrishnan, Chairman, CEC, Mr. M.K. Jiwrajka, Member Secretary, CEC, Mr. Mahendra Vyas, Member, CEC and Mr. M.K. Muthoo, Member, CEC on 18<sup>th</sup> and 19th December, 2013.

## **BACKGROUND**

2. The Ministry of Railways in the year 1997-1998 sanctioned the construction of the new broad gauge railway line from Hubli (Dharwad

District) to Ankola (Uttara Kannada District) in the State of Karnataka. The total length of the railway line from Hubli junction to the Y-junction arrangement near Ankola connecting the existing Konkan Railway line is 168.289 KM and it provides a direct rail link to the West Coast. The line ends at Y- junction at 164.931 KM and two lines in the Y- junction arrangement connect Konkan Railway line (Manglore to Goa) towards Karwar and Ankola ends with a length of 1.722 KM and 1.636 KM respectively. The Ministry of Railways in the year 1999 sanctioned the estimates for initial work for a stretch of about 50 kms. from Hubli end and action was initiated to acquire revenue land and work partly started. The foundation stone for the project was laid in May, 2000 by the then Prime Minister. A Memorandum of Understanding has been entered into in September, 2000 between the Ministry of Railways and Karnataka Rail Infrastructure Development Enterprise, a Government of Karnataka agency for sharing of the cost of the project on 50 : 50 basis.

3. The total land required for the project is 1384.40 ha. out of which 965 ha.(since revised to 720 ha. and then to 667 ha.)is reserve forest land falling in District Dharwad (Dharwad Forest Division) and Uttar Kannada District (Yellapur and Karwar Forest Divisions) in the State of Karnataka, 173 ha. is wetland, 221 ha. is dry land and the remaining 25.40 ha. is miscellaneous land. The estimated cost of the project which then was Rs. 1153.08 crores has been revised to Rs. 2315.384 crores. Out of 168.3 KM of the railway track 105.179 KM is in the plain section while the balance 63.110 KM between Yellapur to

Sunksal is in the Ghat section. The total length of the alignment in embankment is 79 KM, in cutting is 68.73 KM and in tunnels is 21.88 KM. The project involves construction of 329 bridges (50 major and 279 minor) and 29 (since revised to 25) tunnels. The length of the longest tunnel is 3.53 KM. A total of 12 railway stations have been proposed along the alignment. It is also planned to construct a total of 565 staff quarters at the proposed railway stations. The railway line is falling from a level of 637 meter above MSL (at Hubli) to 18.7 meter above MSL (at Ankola). A map showing the alignment of the proposed railway line is enclosed at ANNEXURE-R-1 to this Report.

4. This railway line was planned to serve mainly freight traffic. The main premise for having this new railway line was that, in future, the potential for transportation of iron ore for export from the Bellary-Hospet sector to the proposed new ports at Tadri (near Ankola) on the West Coast of Karnataka and to the existing port of Vasco and Madgaon in Goa will be to the tune of about 16 million tonnes per annum as against the present established capacity of 6 million tonnes per annum and that at present only three million tonnes of iron ore is being transported through existing broad gauge railway track. The existing broad gauge railway line via Castle-rock and Qulem to Vasco has steep gradients and sharp curves thereby limiting the speed and haulage capacity of trains.

5. The Ministry of Railways in September, 1998 applied to the Karnataka Forest Department for diversion of forest land for the

construction of the Hubli-Ankola railway line. The Principal Chief Conservator of Forests (PCCF), Karnataka vide his letter dated 20.11.2002 addressed to the Principal Secretary (Forest), Government of Karnataka stated that there appears to be no case or national interest served by constructing Hubli-Ankola rail line inter alia observing that

- (i) Uttara Kannada is predominantly a forest district with diversified forest wealth and containing more than 3000 plant species and wildlife including tigers, elephants and bears. The railway line will not only disrupt movement of animals but it will also end up in animals getting killed from train hits. It will also bisect the district into two.
- (ii) On the other hand the Hospet-Bellary iron ore belt has several rail options such as Hubli-Vasco, Hospet-Chennai and Hospet-Kakinada / Vizag. The railway line which passes through Guntakal, Dronachallam and Guntur has been converted into broad gauge recently and has to find new traffic. The Hubli-Ankola line will cause loss of traffic to the above lines. Thus when the existing potential itself has not been tapped there appears no justification for the new line.
- (iii) The volume of iron ore traffic carried through Castle-rock-Quelem-Vasco broad gauge line is much below its capacity of 6 million per annum. The rail distance between

Hubli-Vasco is 230 kms. and that between Hubli-Ankola-Karwar is 212 kms. - almost the same.

- (iv) The Hubli-Ankola road, constructed at huge cost with aid from Asian Development Bank (ADB), is specially meant for carrying iron ore from Bellary-Hospet region to Karwar.
- (v) The requirement of iron ore for the local steel plants at Bellary will grow and which will be a value adding activity. The existing iron ore deposit of Bellary-Hospet region will suffice for about 20 years after which mining will become economically unviable.
- (vi) The Hubli-Ankola stretch of the railway line is sparsely populated and there will not be much revenue generation through passenger traffic.

A copy of the above said letter dated 25.11.2002 of the PCCF, Karnataka is enclosed at ANNEXURE-R-2 to this Report.

6. The Government of Karnataka, notwithstanding the objections of the PCCF, Karnataka to the said railway project, in March, 2003 asked the PCCF to submit the proposal for diversion of forest land for the construction of the said railway line. Meantime the Railways started the project works on non-forest land. The PCCF, Karnataka vide his letter dated 27.9.2003 addressed to the Chief Engineer, South Western Railway requested the Railways to stop forthwith the work on the non-forest land stating that the work on the non-forest land has been started in violation of the FC Act guidelines and that,

since the project involves diversion of more than 900 ha. of forest land in the Western Ghats, the approval of Government of India for the diversion of the forest land cannot be taken for granted.

A copy of the above said letter dated 27.9.2003 of the PCCF, Karnataka is enclosed at ANNEXURE-R-3 to this Report.

7. The PCCF, Karnataka, after carrying out site inspection, vide his letter dated 20.10.2003 submitted along with relevant details to the State Government the formal proposal seeking approval under the Forest (Conservation) Act, 1980 for the diversion of 965 ha. of forest land (55.62 ha. in Dharwad Forest Division, 528.31 ha. in Yellapur Forest Division and balance 381.03 ha. in Karwar Forest Division) and felling of 2,47,554 trees (30,400 trees in Dharwad Forest Division, 19019 trees in Yellapur Forest Division and balance 1,98,135 trees in Karwar Forest Division) for the construction of the Hubli-Ankola railway line. The PCCF, Karnataka recommended the proposal subject to standard conditions and stating that

*"the proposed alignment has been inspected by me on 25.9.2003 and found that the forest and terrain really do not permit a railway line. However the fact that there are already more than one commitment by the State Government, Government of India, Ministry of Railways, the present proposal has to be considered in that light. Hon'ble Prime Minister has also formally inaugurated the line. In view of all this, I recommend this proposal for diversion of forest land for*

*construction of Hubli-Ankola Railway line and request to move the same with the Government of India under Forest (Conservation) Act, 1980 in favour of the Chief Engineer (Central) Construction, S.W. Railway, Bangalore Cantonment as per the conditions stipulated in Annexure 'A' .*

A copy of the above said letter dated 20.10.2003 of the PCCF, Karnataka is enclosed at **ANNEXURE-R-4** to this Report.

8. Earlier the project area was inspected by the Conservator of Forests, Canara Circle on 27.5.2003 and who opined that the proposal is not feasible from forestry point of view.

9. The Government of Karnataka vide letter dated 29.11.2003 forwarded the above said proposal to the Ministry of Environment and Forest (MoEF) with the observation that

*"This new railway line will further fragment the forests and expose fresh areas to anthropogenic pressures. However these appear inevitable given the importance of the line for the State".*

A copy of the letter dated 29.11.2003 of the Government of Karnataka addressed to the Government of India, Ministry of Environment and Forests is enclosed at **ANNEXURE-R-5** to this Report.

10. The Forest (Conservation) Act, 1980 guidelines, at the relevant time, prescribed that in respect of the proposals involving diversion of

more than 40 ha. of forest land site inspection shall be done by the officer(s) of the concerned Regional Office of the MoEF and that the Forest Advisory Committee (FAC) shall examine such proposals along with the Site Inspection Reports of the Regional Office. Accordingly the Deputy Conservator of Forests (Central), Regional Office, MoEF, Bengaluru carried out a site inspection of the forest land proposed for diversion for the present project and thereafter the CCF (Central), Regional Office, MoEF, Bengaluru vide his letter dated 15.4.2004 submitted a detailed Report to the MoEF.

11. In the Report of the CCF (Central) / Site Inspection Report inter alia it has been observed that

- (i) out of the proposed 168 kms. of track-issue approximately 120 kms. would pass through reserved forest. 63 kms. of the stretch would be almost in forest and having moist deciduous prime forest of Sahyadri hills of Western Ghats in Karnataka. About 2,65,834 trees are estimated to be felled. The proposed track would badly fragment habitat and essential corridor of elephants in Western Ghats. The area is habitat of rare and endangered endemic flora and fauna. The forest area proposed to be diverted for the project forms the catchment area of the major river system of Uttara Kannada District and the project would be detrimental to the hydrological system of the area;



- (ii) though all the concerned officers of the State Government have recommended the proposal but all have unanimously expressed same views that for the prime forests of Western Ghats this project would play a havoc;
- (iii) ecological cost of the project would be very huge as compared to tangible benefits of the project;
- (iv) the proposed new track would help only iron and manganese mines of Bellary-Hospet area for transportation of their ore to Goa, Tadri and Dharwad Ports; and
- (v) Ankola and Hubli are already connected with excellent road and which is grossly underutilised.

12. The CCF (Central) recommended for rejection of the proposal stating that

*"Considering all the above facts, the comments of the officers of State Forest Department and the facts found in site inspections, I am of the opinion that construction of the proposed new railway track from Hubli to Ankola for transporting mainly iron ore from Bellary area of Karnataka to the new upcoming ports of Tadri and Karwar has no much justification. On the other hand, this will simply be a tragedy on the prime forest of Western ghats and of the much talked about biological hot-spot of the country. Vast stretch of prime forest shall be subject of serious soil loss, bio-diversity degradation, adverse*

*impact on hydrological system of major rivers and irreversible effect of fragile ecological system of Western ghats. There are instances that many countries in the world are taking a special care for preserving their iron ore and other minerals for their future use and meeting their present requirements by purchasing the same. It is not advisable to take decision to export (exhaust) our natural resource (iron ore) so fast and also to sacrifice more than 2.5 lakhs trees in a bio-diversity rich fragile eco-system. No amount of mitigation shall compensate the huge cost of ecological damage which this project of rail track shall bring to the Western ghats. Under such situation, I shall only recommend rejection of this project by the Government of India".*

A copy of the above said letter dated 15.4.2004 of the CCF (Central), Regional Office, MoEF, Southern Zone, Bengaluru is enclosed at ANNEXURE-R-6 to this Report.

13. The Forest Advisory Committee (FAC), constituted by the Central Government under Section 3 of the Forest (Conservation) Act, 1980, at its meeting on 27.5.2004 considered the said proposal along with the above said Report of the CCF (Central) when the Committee observed that

*"The construction of the proposed new railway track from Hubli to Ankola for transporting mainly iron ore has no much justification. On the other hand, this will simply be a tragedy on the prime forests of Western Ghats and of the biological hot spot of the country. Vast*

*stretch of prime forests shall be subject to serious soil loss, biodiversity degradation, adverse impact on hydrological system of major rivers and irreversible effect on fragile ecosystem of Western Ghats".*

*"The rail distance between existing Hubli-Vasco railway line is 230 kms., whereas the distance between proposed Hubli-Ankola-Karwar is 212 kms. There is a marginal difference of 18 kms. in the distance between the existing and the proposed railway track for which such a large area of beautiful forests and biological hot-spot eco-fragile Western Ghats should not be sacrificed and it will also not help to local people as no passenger traffic is envisaged. It is proposed mainly for transportation of iron and manganese ores from Bellary-Hospet region".*

*"The mines are continuously depleting resources and hence the utility of the proposed railway line may not exist in long run".*

The Ministry of Environment and Forests, keeping in view the above observations made by the Forest Advisory Committee, vide letter dated 10/11.6.2004 rejected the proposal on merit.

A copy of the above said letter dated 10.6.2004 of the MoEF addressed to the Government of Karnataka is enclosed at **ANNEXURE-R-7** to this Report.

14. The Member (Engineering), Railway Board, following the above rejection of the proposal by the MoEF, wrote to the MoEF on 16.7.2004 about the benefits of the Hubli-Ankola railway line

particularly that with increase in demand globally for iron ore the speedy construction of the said line has become even more essential and requested the MoEF for reconsideration of the proposal. On 29.10.2004 a letter on the above lines was also written by Minister of Railways to the Minister of Environment and Forests, Government of India.

A copy each of the above said letters of the Member (Engineering), Railway Board and the Minister of Railway dated 16.7.2004 and 29.10.2004 respectively are enclosed at ANNEXURE-R-8 (COLLY) to this Report.

15. Thereafter the FAC, in its meeting held on 20.9.2004, re-examined the proposal when it observed that

*"about 900 ha. falls in very good forest and the proposal will involve large scale felling that will be detrimental to the ecology of the Western Ghats, a biodiversity hot spot. Moreover the existing railway lines and the National Highways are under utilized and alternatives have not been explored by the user agency".*

The FAC asked the user agency to critically revise the proposal in consultation with the Regional Chief Conservator of Forests, Bengaluru and try to reduce the requirement of the area including the width of the strip of the land for the proposed railway line and submit a revised proposal for the construction of the railway line from Hubli to Kalaghatgi along with details of other alternatives explored.

In this regard a copy of the letter dated 4.11.2004 of the MoEF addressed to the Government of Karnataka is enclosed at ANNEXUR- R-9 to this Report.

16. The Ministry of Railways, vide letter dated 23.6.2005, submitted a proposal to the Principal Chief Conservator of Forests, Government of Karnataka and wherein the requirement of forest land was reviewed and reduced to 720 ha. A copy of the above letter dated 23.6.2005 of the Ministry of Railways addressed to the PCCF, Karnataka is enclosed at ANNEXURE-R-10 to this Report.

17. While the above matters were under process the present Application No. 952 was filed before the CEC. The matter was heard by CEC on 13.09.2006 when it was observed that though the project has been rejected by the MoEF under the Forest (Conservation) Act, 1980 yet work on the 40 kms. stretch of non-forest land is in progress. The Railways informed the CEC that the work is being taken as part of contingency plan and the expenditure incurred thereon will not become infructuous even if the approval under the FC Act is not accorded. The CEC, during the hearing, considering that (a) the proposal for use of forest land has already been rejected on merit by the MoEF; (b) the said stretch of 40 kms. also includes 1.1 kms. of forest land and (c) the work is being undertaken in violation of the guidelines issued by the MoEF for implementation of the Forest (Conservation) Act, 1980 advised the Ministry of Railways to stop the work being done in the non-forest area. The CEC further advised

the MoEF not to issue any permission in the present case till the matter is examined in its totality and a Report is filed by the CEC before the Hon'ble Supreme Court. A copy of the letter dated 15.9.2006 of the CEC addressed to the Ministry of Railways, the Ministry of Environment and Forests (MoEF) and the Government of Karnataka is enclosed at ANNEXURE-R-11 to this Report.

18. The Ministry of Railways, as advised by the CEC during the hearing on 13.9.2006, stopped the work in the non-forest area. The details of physical progress of work in Hubli-Ankola project, prior to advise of CEC on 13.9.2006 to stop the work being done on the non-forest land, between Hubli and Kiravatti station (47.75 km.), is as below:

| Item                       | Scope of work | Progress |
|----------------------------|---------------|----------|
| Land Acquisition (Hect)    | 315           | 258      |
| Earthwork (Lac. Cum)       | 82            | 66       |
| Major Bridges (Nos.)       | 7             | 5        |
| Minor Bridges (Nos.)       | 55            | 39       |
| ROBs (Nos.)                | 11            | 0        |
| RUBs (Nos.)                | 5             | 0        |
| Track Linking (Kms.)       | 48            | 0        |
| Power Line Crossing (Nos.) | 78            | 54       |

80% of earth and bridge works up to 47.75 kms. (from Hubli end to Kiravatti) has been completed. In this regard a copy of the

letter dated 8.6.2015 from South Western Railway is enclosed at ANNEXURE-R-12 to this Report.

19. Thereafter a detailed affidavit dated 17.10.2006 was filed before the CEC on behalf of Ministry of Railways inter alia stating that -

- (i) The Hubli-Ankola Railway Line has tremendous potential for transportation of iron ore for export. In addition, this line would cater to the bulk transport needs of other commodities like coal, fertilizers, foodgrains, fuel products etc. This line would result in less consumption of fuel and lesser pollution and better protection of the environment. The traffic on the existing roads will reduce greatly and lead to better environment protection as far lesser number of trucks would be required for carrying the iron ore.
- (ii) This line would serve mainly freight traffic. It would also serve the needs of the people of the area via passenger trains. This line would serve as a vital link for passenger train services connecting vast hinterland of Karnataka to the West Coast thereby helping in overall economic development of the region.
- (iii) The Railways have developed a Contingency Plan as per which the project will be taken up in Phases. At each Phase an iron ore unloading dump (within revenue land) is planned and further movement of the material from the dumps will be done by road as these dumps will be

adjacent to the existing National Highway 63. The project is viable even by commissioning in stages.

- (iv) In the first Phase it is proposed to commission the line for a distance of 35 kms. Upto Kalghatgi (the FAC while reconsidering the proposal for construction of railway line from Hubli to Ankola had in November, 2004 asked the Railways to submit a revised proposal from Hubli to Kalghatgi along with details of other alternatives explored). This stretch of 35 kms. railway line from Hubli to Kalghatgi passes through 1.15 kms. length of forest land and would require diversion of 5.5 ha. of forest land. In the second Phase the railway line upto Devikoppa (km. 41) will be constructed and which will pass through 400 metre length of forest land and would involve diversion of 1.0 ha. of forest land. Thus in the first two Phases a total of 1.55 kms. (1.15 kms. + 400 m.) of the track will be passing through forest land and requiring diversion of 6.5 ha. (5.5 + 1.0 ha.) of forest land. The stretch of 1.15 kms. length of forest land involved in Phase I of the project is on the fringe of forest land and mainly consists of bushes and shrubs. The Railways vide letter dated 13.4.2006 have already submitted a separate proposal to the DCF, Dharwad for diversion of 5.5 ha. of forest land required for Phase I. A similar proposal for diversion of 1.0 ha. of forest land



required for Phase II will also be submitted in due course and after clearance for Phase I is received.

- (v) The Government of Karnataka may be asked to take action for clearing the proposal for diversion of 727 ha. of forest land for the broad gauge railway project from Hubli to Ankola. Pending the above, the proposal for diversion of 5.5 ha. of forest land for Phase I of the project may be cleared.

A copy of the above said Affidavit dated 17.10.2006 filed before the CEC by the Ministry of Railways is enclosed at ANNEXURE-R-13 to this Report.

20. The Government of Karnataka vide letter dated 9.6.2008 informed the CCF (Central), MoEF, Bengaluru that as per the comprehensive report received from the PCCF, Karnataka the total area of forest land required for the Hubli-Ankola railway line project is 683.63 ha. only as against the original proposed requirement of 965 ha. (revised 720 ha.). A copy of the above said letter dated 9.6.2008 of the Government of Karnataka addressed to the Chief Conservator of Forests (Central), Regional Office, MoEF, Southern Zone, Bengaluru is enclosed at ANNEXURE-R-14 to this Report.

21. Subsequently the CCF (Central), Regional Office, MoEF, Bengaluru vide letter dated 7<sup>th</sup> October, 2008 informed the MoEF that the Government of Karnataka has vide letters dated 28.01.2008 and 9.6.2008 respectively forwarded the following two proposals:

- i) Diversion of 5.015 ha. of forest land for laying of new broad-gauge railway track between Hubli-Kalaghatgi in Dharward Forest Division, Karnataka (Dharward Circle).
- ii) Diversion of 683.62 ha. of forest land for laying broad-gauge railway line from Hubli to Ankola in District North Canara (Canara Circle).

22. The CCF (Central) in the above letter dated 7<sup>th</sup> October, 2008 while giving the background of the proposed Hubli-Ankola railway line also referred to the earlier Site Inspection Report of the Regional Office as well as the earlier decision of the MoEF to reject the project on merit and stated that

- (i) during the site inspection the railways informed that their requirement is 720 ha. of forest land and that they cannot complete the alignment with 683.62 ha. of forest land. Accordingly they have written to the PCCF, Karnataka on 29.8.2008 to forward the proposal for diversion of 720 ha. forest land to the Government of India, MoEF;
- (ii) the proposal for diversion of 5.015 ha. of forest land for the construction of the new broad gauge line from Hubli to Kalaghatgi has been forwarded on 28.1.2008 by the State Government to the Regional Office of the MoEF. It is stated in Part I of the proforma proposal that the total forest land required for the Hubli-Ankola railway line project is 720 ha. and in Phase-I 5.015 ha. of forest land

is required (i.e. for Hubli-Kalaghatgi portion of the railway line);

- (iii) the present proposal for diversion of 683.62 ha. of forest land in District North Canara is not different from the proposal earlier submitted in respect of the alignment of the track. Therefore the stand taken earlier while forwarding the Site Inspection Report to MoEF vide letter dated 15.4.2004 (refer annexure R-6) is reiterated i.e. the proposal is recommended for rejection.
- (iv) as regards the proposal for diversion of forest land falling in Dharward Circle (for railway track between Hubli to Kalaghatgi) the MoEF may consider the same because the extent of forest land required is only 5.015 ha. and the proposal does not involve felling of any tree.

Thus the Regional Office of the MoEF has, while recommending that the diversion of the forest land required for the construction of Phase I (Hubli-Kalaghatgi portion) of the project may be considered favourably, at the same time also recommended that the proposal for diversion of forest land for the balance portion of the proposed Hubli-Ankola line i.e. for the portion between Kalaghatgi-Ankola may be rejected.

A copy of the above letter dated 7<sup>th</sup> October, 2008 of the Regional Office, CCF (Central), MoEF to the MoEF is enclosed at **ANNEXURE-R-15** to this Report.

23. It is relevant to mention that in the above said letter dated 7.10.2008 of the CCF(C) it is also stated that

*"the Principal Secretary, Forest, Ecology and Environment Department, Government of Karnataka vide letter dated 4.3.2008 requested the Principal Secretary, Infrastructure Development Department, Govt. of Karnataka to drop the proposal relating to the construction of the railway line from Kalaghatagi to Ankola as the proposed line serves no useful purpose and it will only benefit iron ore/manganese ore miners / exporters and no traffic is envisaged in the proposed route".*

24. The Government of Karnataka, vide letter dated 19.12.2008, filed before the CEC the submissions dated 18.12.2008 of the Principal Secretary (Forests), Government Karnataka giving details of the original proposal for diversion of 964.96 ha. of forest land for the project, adverse observations made by the FAC on the proposal, rejection of the proposal by the MoEF, re-examination of the proposal by the FAC, revised proposal for diversion of 720 ha. submitted by the Railways, findings of revised survey and alignment, revised requirement of 687.07 ha. of forest land assessed during the resurvey (641.57 ha. In Canara Circle and 45.50 ha. in Dharwad Circle) and revised assessment regarding 2,76,840 no. of trees required to be felled. It has been stated by the Principal Secretary (Forests), Government of Karnataka that

- (i) as per the proposal submitted by the Railways the project is mainly for transportation of bulk commodities like Iron ore, Coal, Fertilizers, Timber, Food grains etc.
- (ii) as per the Report of the PCCF, Karnataka-

*"the proposed Ankola-Hubli Railway line passes through dense evergreen / semi evergreen forest areas with canopy density of 0.8 and above. The entire area falls in Western Ghats, which is one of the mega Bio-diversity hot spots recognised by the United Nations and is home to several endemic and endangered species of Flora and Fauna.*

*These are pristine undisturbed natural wilderness areas. The area receive heavy to very heavy rainfall with average of 3000 mm. and above and the tract involves several valleys and ridges and is highly prone to soil erosion. The entire proposed area is catchments of Kali and Gangavali (Bedthi) rivers. Disturbance to these areas lead to heavy erosion leading to choking of natural drains and siltation of drainage system, thus disturbing the life support systems and destruction of down stream estuaries due to siltation. The forest area falling between the existing Hubli-Ankola National Highway-63 and with the realization of the proposed Railway line the forest tract becomes instantly fragmented contributing to rapid*

*degradation of the fragmented forest area. There is a traditional elephant migratory path in the Kirwatti Range of Yellapur Forest Division which will be intercepted by the proposed railway line adversely affecting the migratory elephant movements. Thus the cost of the ecological damage is beyond comprehension".*

- (iii) the diversion of forest land will have disastrous ecological disturbance in the Western Ghats region due to fragmentation of land scape affecting migratory routes of wild animals thus impacting the breeding cycle and population dynamics of the wild animals in the Western Ghats. Further, the cutting of trees will result in loss of valuable endemic species in the region causing disturbances in species, composition and re-generation capacity of forests. The construction of Railway line through pristine forests of Western Ghats will promote tremendous anthropogenic pressure on the forests causing rapid degradation of these life supporting systems.

25. While strong and convincing submissions have been made by the State Government highlighting the severe damage that will be caused by the project to the ecology of the pristine Western Ghats in Karnataka at the same time the State Government has stated that

*"This project is needed for Social and Economic development of backward Uttara Karnataka. At present there is no proper railway connectivity to the coast. For the*

*inland Commerce and Industries to develop the connectivity to the Ports is required. With this railway line not only the development of Commerce and Industries, but additional infrastructure will be available for tourism and will facilitate development of backward region.*

*It also appears inevitable that the Western Ghats has to be pierced through at some point to ensure this connectivity between coast line and Eastern plains of the state.*

*Considering all the points mentioned above, the State Government strongly recommends for laying of Hubli-Ankola Railway line. The State Government will arrange to convert other revenue lands as forest land as per rules".*

A copy of the above said letter dated 19.12.2008 together with the submissions dated 18.12.2008 filed by the Government of Karnataka before the CEC is enclosed at ANNEXURE-R-16 to this Report.

26. The Government of Karnataka in its letter dated 30.12.2008 addressed to the MoEF reiterated the stand taken in the submission made before the CEC and requested the MoEF to communicate the approval of the Government of India for diversion of 965 ha. (since revised to 720 ha. and then to 667 ha.) of forest land for the construction of the new broad gauge Hubli-Ankola railway line. A copy of the above said letter dated 30.12.2008 of the Government of

Karnataka addressed to the Ministry of Environment and Forests is enclosed at ANNEXURE-R-17 to this Report.

27. The MoEF has vide its letter dated 18.11.2009 filed its response in the matter before the CEC and wherein the factual position, regarding the Project as stated in earlier paragraphs, have been reiterated. A copy of the above said letter 18.11.2009 of the MoEF is enclosed at ANNEXURE-R-18 to this Report.

28. The MoEF on 8.12.2009 constituted a Committee with (i) Additional Director General of Forests (FC), MoEF, (ii) Regional Chief Conservator of Forests (Central), Regional Office, Bengaluru and Chief Wild Life Warden, Government of Karnataka as Members with the mandate to conduct a site inspection, interact with the Railway Officers and the people's representatives and submit its Report on the proposed Hubli-Ankola Railway line. The Committee after conducting the site visit on 28.12.2009 and after holding the meeting on 29.12.2009 with the Chief Secretary, Karnataka and other concerned senior officers of the Government of Karnataka submitted its Report dated 17.2.2010 to the MoEF wherein the discussions held during the meeting held at Karwar, observations made during the site visit of the project area, submissions made by the Karnataka Forest Department, status of the wildlife and the biodiversity, view point of the Members of Parliament, submissions made by the Chief Secretary, Karnataka and Principal Secretary (Infrastructure Development), Govt. of Karnataka, status of the project etc. have



been dealt with. While the said Committee did not make any specific recommendation regarding the project it has at one place made an observation that it is not clear if ecological considerations were kept in mind for selection of the alignment. At another place it has observed that a mere reading of the EIA Report submitted by the Railways indicates that the said EIA Report has not been able to look into the real dimensions of the impact on the flora and the fauna. A project of the dimension of the present railway line requires a much more indepth study.

A copy of the above said Report dated 17.2.2010 of the Committee constituted by the MoEF is enclosed (without enclosures) at ANNEXURE-R-19 to this Report.

29. The Infrastructure Development Department, Government of Karnataka vide letter dated 19.2.2011 engaged the Indian Institute of Science, Bengaluru to undertake the investigations related to biodiversity, Environment Impact Assessment (EIA) and mitigative measures in respect of the proposed Hubli-Ankola railway line project. A copy of the Executive Summary of the Technical Report dated February, 2012 of the Indian Institute of Science, Bengaluru captioned " Biological Diversity, Ecology and Environment Impact Assessment with Mitigation Measures: Hubli-Ankola New Broad Gauge Railway Line" is enclosed at ANNEXURE-R-20 to this Report. The Technical Report deals with the salient features of the Project, methodology followed for carrying out the studies, Environment

Impact Assessment (EIA), Environment Management Plan (EMP) and alternatives suggested at Micro Level to reduce the impact on forests.

30. While dealing with the salient features of the Project, the Technical Report states that the Hubli-Ankola railway line connects the densely populated coastal Karnataka (West Coast of the nation) to the hinterland. The alignment will pass through the Western Ghats covered with forest. The proposed line will be of use specially for its connection to Belakeri, Tadri and Karwar ports and cater to the traffic of about 27 million tonnes cargo. The line will be linkage between the ports on the west coast and naval harbours with the industrially and agriculturally developed vast hinterlands of Karnataka and Maharashtra and will be a vital link for connecting West Coast with the East Coast. It will be a better alternative for mail and express trains from North, North-East and Central India to Southern States. It will link Vasco and Mangalore ports through Konkan Railway. It will be used for transportation of imported coal / coke through Marmagao / Mangalore Port to steel industries and coal based thermal power station in Bellary-Hospet region. The railway line will also be ideal for transportation of timber imported through Mangalore Port and for oil and gas from MRPL, Mangalore and that this line will be the most viable alternative route for movement of iron ore from Bellary-Hospet sector to Murmagoa Port in Goa.

31. In the Environment Impact Assessment (EIA) carried out by the IIS the following important observations have been made:

- (i) the proposed alignment passes through the Western Ghats forests and the region is part of Bedthi conservation reserve (at Yellapur), closer to Dandeli Hornbill Conservation reserve and a part of it is located in the buffer region of Anshi Dandeli Tiger Reserve (about 6.5 kms. from Anshi Dandeli Tiger Reserve at the closest point). From 0 KM to 76 KM and 136 KM to 168 (total 108 KM) the proposed railway line passes through plateau region and in the balance 60 KM, from 76 KM to 136 KM (Yellapur to Sunksal), passes through the Ghat section. 112 KM of the line passes through the forest region including evergreen, semi-evergreen, moist deciduous and dry deciduous forests. About 1.95 lakh trees would be removed from their natural habitat;
- (ii) the total forest land area to be acquired for this project is 727 ha. of which the major proportion is formed by Yellapur taluk (Yellapur Forest Division, Uttara Kannada District) with 357.07 ha. of land (49.12%) and Ankola taluk (Karwar Forest Division, Uttara Kannada District) with 326.54 ha. (44.92%). The forest land to be acquired in Hubli region (Dharwad Forest Division, Dharwad District) forms a minor portion of 43.38 ha. (5.96%). The terrain, in

the railway zone between Hubli to Kalghatgi, is flatter with gentle undulations and the landscapes are dominated by grasslands and scrubs, bamboo areas intermixed with sparse tree vegetation and monocultures of mainly teak, eucalypts and acacia. The forests in better form begin to appear from Kaghatgi towards Kirwatti. The Kirwatti to Yellapur zone is characterized mainly by moist deciduous forests as the rainfall exceeds 1200 mm and steadily increases towards Yellapur to over 1800 mm favouring occurrence of semi-evergreen forests. Yellapur to Sunksal is a very rugged terrain of steep rising hills and valleys with altitude ranging from 150 to 450 amsl, dense forests and heavy rainfall (1800 – 2500 mm). The natural forests here are of evergreen to semi-evergreen types characterized by several endemic tree species. Unplanned development in the region will diminish the biodiversity – most importantly the endemic and endangered species, hydrology and ecology of the region. The destruction of forests and cutting of dense trees will alter the species composition of the region and alter the overall ecological and hydrological regimes of the existing biomes. Sunksal to Ankola, a width of about 30 kms. belong to the foothills zone of the Western Ghats, which is very hilly (18 to 150 amsl) and dominated by secondary moist deciduous to semi-evergreen forests;

- (iii) for scientific documentation of the vegetation along the proposed railway line, the linear stretch of about 169 kms. was divided into 13 sectors each of 13 kms. length. The 13 kms. sectors were serially numbered 1 to 13 from Ankola towards Hubli. As only the first 10 sectors had forest tree vegetation, the main forest studies were confined to these sectors. The other sectors between Kalghatgi and Hubli has mainly scrub and grasslands with isolated stunted trees and bamboos and some eucalyptus plantations;
- (iv) the floristic study in the Hubli-Ankola railway zone reveals the presence of 43 families, 106 genera and 134 species of trees and 58 families, 128 genera and 146 species of shrubs along the proposed rail alignment. Besides this, 10 species of pteridophytes belonging to 9 families and 9 genera are also present in the Ghat section. Out of the ten sectors studied on the proposed alignment, sector-6 and 7 comprised of evergreen to semi-evergreen forest along a high rainfall rugged hilly terrain with lesser human disturbances. The Sector 6 with lofty evergreen to semi evergreen forests was found to be having the highest basal area / ha. ( $84.15 \text{ m}^2$ ) and the highest tree number/ha (598) and showed the presence of magnificent trees belonging to *Lophopetalum wightianum*, *Perseamacrantha*, *Ficus nervosa* etc. with GBH (Girth at

Breast Height) more than 400 cm. The species diversity analysis in the Hubli-Ankola railway zone revealed that the sectors 6,7 and 8 had highest species diversity as they harboured evergreen to semi-evergreen forests and had less human disturbances compared to the other sectors. The highest percentage of tree endemism (45%) along with a high percentage of evergreens (87%) was found in Sector-6 covering Vajralli – Birgadde villages in Yellapur taluk along a rugged terrain of steep hills and narrow wet valleys;

- (v) the current study also highlights the presence of many wild and cultivated species of medicinal plants used widely by the local population residing in and around the Hubli-Ankola railway zone;
- (vi) the forests in Hubli-Ankola railway zone are also rich in wildlife with the presence of 29 species of mammals, 256 species of birds, 8 species of reptiles and 50 different species of butterflies. Most of the mammals found in this zone figured in the IUCN Red List signifying their high conservation status and almost all of them were protected under the Schedules of Indian Wildlife Protection Act (IWPA), 1972. The presence of Tiger (Endangered and Schedule-I species), which is a very powerful symbol (keystone species) associated with different cultures

around the world has been recorded in the Yellapur and Karwar forest divisions. The birds recorded from this region such as Hornbills figure in Schedule-I of the Indian Wildlife Protection Act whereas birds including Barbets, Babblers, Bulbuls, Egrets, Fairy Blue bird, etc. figure in Schedule-IV of the IWPA indicating their rarity and high conservation importance. The Bedthi river basin harbors 33 different species of amphibians of which 55% are endemics to the Western Ghats. *Philautuscf. leucorhinus*, a species possibly thought extinct has been recorded from this region;

- (vii) the belt of Kalghatgi range, coming under Devikoppa, Tambur and Sangtikoppa sections, adjoining Kirwatti and Bhagwati is the traditional elephant corridor. The herd of elephants moves from Dandeli Wildlife Sanctuary and passes through Bhagwati, Kalghatgi, Kirwatti, Mundgod, Katur before reaching Hanagal. The elephants usually move in Kalghatgi range during the months of September to December. The proposed line passes through the region which is an important movement path for the elephants during September to February months. The construction of railway track will fragment the existing movement path of the elephants and will also pose a threat of train-hits on elephants. The fragmentation of the movement path will result into the elephants wandering in

the nearby areas (mostly agricultural and horticultural lands) leading to problems like crop destruction, damage to hoardings / houses, injuring people, etc. Thus, the incidences of human-animal conflict will increase because of the fragmentation of natural habitats and movement paths.

- (viii) the analysis shows that in an area of 727 hectares, removal of trees leads to the loss of 2,25,214.59 tons of carbon apart from sequestration potential of 1,580 tons of carbon per year (conservative estimate, based on average values of above ground biomass increment) or 3,696 t per year (considering higher increment values);
- (ix) The forests of Hubli-Ankola railway zone are very productive and provide a large number of tangible and intangible goods and services to the people residing in this region. The total economic value (TEV) including provisioning, regulating, supporting and information functions for the forests of Hubli-Ankola railway zone was found to be Rs. 2,970,435,934 per year with a productivity value of Rs. 4,085,882/ha/yr.
- (x) the proposed project will induce both positive and negative impacts on the eco-system and life of the community in the railway zone.



The Negative Impacts include (a) changes in the land use / land cover of the region, (b) displacement of people and cutting of large number of trees, (c) impacts on wild animals and their movement paths, (d) risks due to landslides, mudslides and earthquakes, (e) smuggling of timber and forest goods, (f) loss of habitats for wild animals and effects of blasting on fauna, (g) loss of carbon sequestration ability due to large amount of vegetation removal, (h) members of work force trespassing inside the forests and leading to human-animal conflicts and (i) solid waste and liquid waste generation during the operation phase.

The Positive Impacts include (a) fuel savings and reduction in green house gases as compared to road traffic, (b) economical means of transportation to the local people, (c) vital link for connecting the eastern and western coasts, (d) significant role in the overall development of northern Karnataka and (e) convenient movement of materials, equipments and work force for various projects like Project Seabird, Kaiga Nuclear Power Plants, etc.;

- (xi) the Western Ghats stretch from Yellapur to Sunksal is rich in floral diversity, endemism and evergreenness with a high tree density and basal area. The natural forests in this

region are of evergreen to semi-evergreen types characterized by several endemic tree species. The ecological condition of this region supports a rich ground flora which involves a good number of endemic and medicinal herbs.

32. In the Environment Management Plan (EMP) prepared by the IIS a number of mitigative measures have been proposed. These include Compensatory Afforestation over 796 ha. land, afforestation of degraded forest lands, setting up of peoples' nurseries, fencing of about 800 ha. of forest land, creation of fodder reserve for wildlife, creation/maintenance of water bodies, afforestation of blanks and degraded areas with trees and shrubs producing berries and seeds consumed by birds, care of Hornbill nesting trees, bridging the steep cuts, provision of camera traps, minimising sharp curves, construction of trenches, joint patrolling by Forest Department and Railways, imposing speed limits in vulnerable stretches, gentler embankments in the elephant crossing areas, increase in the formation width of cuttings, development and harvesting of non-timber forest produce through self-help groups and JFM committees, involvement of affected persons in the eco-system restoration works, adequate drainage of alignment, identification of landslide prone areas and undertaking of mitigative measures therein to prevent landslides and mudslides, mitigative measures during construction phase, constitution of an independent Waste Management Cell, providing basic amenities for the work force, use of renewal energy like solar

energy for lighting of railway signals and constituting the post Project Monitoring Task Force. The total estimated expenditure for implementing various mitigative measures suggested in the Environment Management Plan is Rs. 450 crores.

33. In the above said Technical Report of the Indian Institute of Science, Bengaluru, reduction of track length by 3.85 kms. (from 168.289 kms. to 164.439 kms.), reduction in requirement of forest land by 60 ha.(from 727 ha. to 667 ha.), reduction in number of tunnels by 4(from 29 to 25) and reduction in number of trees to be felled by about 0.37 lakh (from about 1.95 lakh to about 1.58 lakh) has also been suggested. The above suggestions are stated to have been accepted by the project authorities.

34. In the above said Technical Report, it is also stated that for Hubli-Ankola railway line four different alignments namely ALT-1, ALT-2, ALT-3 and ALT-4 were considered and after critical techno-economic and environment evaluation finally the alignment ALT-2 was finalised and approved. The salient features of these four different alignments are given in the statement enclosed at **ANNEUXRE-R-21** to this Report. The approved alignment (ALT-2) runs generally along the NH-63 road alignment as close as possible in the plains and deviates from the road alignment to the nearest contours in the hills and valleys. This deviation is a technical requirement as roads could go in hairpin bends and sharp curvatures

whereas railway line has to be loaded in much flatter gradient and curvature. Accordingly, the railway alignment is closely following the National Highway alignment between kms. 20-76 and kms. 121-167 while it detours between kms. 0-20 and 76-121.

35. Before the Site visit undertaken by the CEC on 18<sup>th</sup> and 19<sup>th</sup> December, 2013, a meeting was held with the Chief Secretary, Karnataka and other senior officers of the State Government at Bengaluru on 17<sup>th</sup> December, 2013 and when the Indian Institute of Science, Bengaluru also made a presentation before the CEC. During the meeting the State Government strongly pleaded for an early approval of the Hubli-Ankola railway line stating that

- (i) 300 kms. of coastal belt of Karnataka is not connected to the hinterland blocking many opportunities for economic development as bulk and cost effective movement of cargo between the ports and hinterland is possible only through rail transportation. The rail transportation also results in substantial fuel saving and reduction in green house and gas emission as compared to road traffic. Among all the possible rail routes to the ports, Hubli-Ankola railway line project is economically as well as environmentally most viable one;
- (ii) the present annual movement of cargo is about 26 million tonnes (MMT), (23.8 MMT of imported coal and coke, 2.5 MMT of steel for exports). The projected cargo on the

proposed Hubli-Ankola corridor based on the upcoming projects in the hinterland, is estimated to be more than 100 MMT. Presently, the entire cargo and the passenger traffic is through NH-63 (Hubli-Ankola) and SH-69 (Tadsa-Sirsi-Kumita). The road capacity is no match for the projected cargo of more than 100 MMT;

- (iii) the road transportation has limitations and cannot become a viable alternative due to capacity constraints, pollution and accidents besides being inherently uneconomical;
- (iv) the Hubli-Ankola railway line will result in huge savings on the fuel required for transportation and will catalyse the development of Northern Karnataka region. It will sustain the Project Sea Bird and Kaiga Nuclear Power Project and the further power projects in the hinterland;
- (v) the proposed alignment of Hubli-Ankola railway line is based on techno-economic survey, the route length is relatively shorter and amongst all the chosen alternatives, the forest land required is minimal. The Project can be implemented with minimal disturbance to the forest and wildlife habitat and adverse environment impacts can effectively be mitigated;
- (vi) considering that the project is to be implemented in the ecologically sensitive Western Ghats area, it has to

negotiate seasonal elephant corridors at two places, involves the construction of 22.5 kms. of tunnels across the Ghats and requires extra-ordinary care during project implementation phase, the State Government has specially chosen Indian Institute of Science, Bengaluru, known for its impeccable integrity, to assess the environmental impacts in the corridor and to suggest mitigative measures. The Indian Institute of Science, Bengaluru studied the entire corridor for one full season and thereafter have come out with a detailed Report along with mitigative measures.

- (vii) the State Government is ready to take up mitigative measures suggested by the Indian Institute of Science, Bengaluru and also to take up any other additional mitigative measures, that are prescribed. The State Government will not pursue Talguppa-Honnavar railway line. The widening of NH-63 also will not be taken up; and
- (viii) in public interest the Hubli-Ankola railway line project may be cleared subject to compliance of all the statutory commitments, implementation of mitigative measures suggested by the Indian Institute of Science, Bengaluru and other additional mitigative measures, if any.

36. The Government of Karnataka identified a project for the development of a multipurpose, all weather green field sea port at Tadadi in Kumta Taluk, Uttar Kannada District, with a capacity of 34.25 Million MT per annum in Phase I for development on Public Private Partnership (PPP) mode. The Konkan Railway Line and National Highway (NH17) pass close to proposed Port. About 1419 acres of land acquired by the State Government is reserved for the development of the above said proposed port. Subsequently, the State Government, in response to the Ministry of Shipping, Government of India letter dated 17.8.2011 offered development of the said Tadadi Port by the Ministry of Shipping. In response, the Ministry of Shipping communicated that Tadadi can initially be developed, at a cost of about Rs. 184 crores, as Barge Port for 4 meter vessels and later it can be developed as a Major Port when there is significant traffic available. The State Government has in March / April, 2015 again requested the Ministry of Shipping to take up the development of Tadadi Port as a major Port. The State Government has stated that even though Karnataka is endowed with a coastline of 300 kms. there is only one major port namely New Mangalore Port located at the southern end of coastline in Karnataka. There are other minor ports but they cannot handle the quantity of exports / imports that is taking place or envisaged in Karnataka and that the State urgently needs a new major port on its coast line. Therefore if the approval for hinterland rail connectivity through Hubli

to Ankola is given, this port will become a vital connecting point and lead to much needed development of the Hyderabad Karnataka belt.

In this regard a copy each of the letter dated 30.3.2015 and 29.4.2015 of the Chief Minister and the Chief Secretary, Government of Karnataka respectively are enclosed at ANNEXURE-R-22 (COLLY) to this Report.

37. The Hon'ble Supreme Court has since May, 2011 passed a series of directions in W.P.(C) No. 562/2009 to regulate mining in an environmentally sustainable manner in the Bellary-Hospet sector and also in Districts of Chitradurga and Tumkur in the State of Karnataka. The Hon'ble Supreme Court by judgement dated 18<sup>th</sup> April, 2013 has prescribed a ceiling of 25 Million Metric Tones (MMT) for total production of iron ore from all the mining leases in District Bellary and a ceiling of 5 MMT for production of iron ore from all the mining leases in Districts Chitradurga and Tumkur together. The Hon'ble Supreme Court has directed that the iron ore which becomes available should be used for meeting the iron ore requirement of the steel plants and associated industries located in Karnataka and also of those plants located in the adjoining States which have been using the iron ore from the mining leases located in these Districts. Exports, outside the country, should be permissible only in respect of the material which the steel plants and associated industries are not willing to purchase on or above the average price realized by the Monitoring Committee for the corresponding grades of fines/lumps



during the sale of about 25 MMT of the existing stock of iron ore. Similarly, the iron ore produced by the beneficiation plants after processing should also not be permitted to be exported outside the country. The Steel Plants and associated industries have repeatedly pleaded before the Hon'ble Supreme Court to increase the above said total ceiling of 30 Million MT on the ground that their total annual requirement of iron ore is much more. The Hon'ble Supreme Court has till date not agreed to increase the above said total ceiling of 30 Million MT of annual production. During the last four years there has been no export of iron ore from Bellary-Hospet sector. In the above background there is practically no possibility of large scale export of iron ore taking place from Bellary-Hospet area in the near future.

#### **OBSERVATIONS AND RECOMMENDATIONS**

38. From the above it may be seen that the Ministry of Railways in the year 1997-1998 sanctioned the project for the construction of the 168.289 kms. long new broad gauge railway line between Hubli (Dharwad District) and Ankola (Uttar Kannada District) in the State of Karnataka. The said railway line connects Hubli station with Ankola station on the existing Konkan railway line (Mangalore to Goa) and will provide the rail link to the ports on the west coast (refer map at Annexure R-1 to this Report). The estimated project cost was Rs. 1153.08 crores (since revised to Rs.2315.384 crores) and which is to be shared on 50 : 50 basis between the Railways and the State of Karnataka. The said railway line is to serve mainly freight traffic.

39. The project was earlier justified on the ground that the potential traffic in future for transportation of iron ore from Bellary-Hospet sector of Karnataka to ports for exports is going to be about 16 million tonnes (MMT) annually whereas the present established capacity is for transportation of only 6MMT of iron ore annually. Pursuant to a series of directions passed by the Hon'ble Supreme Court from May, 2011 onwards the production of iron ore in the Bellary-Hospet sector has come down significantly and the present level of production is not adequate to even meet the requirement of the existing steel and allied industries. Part of the requirement is presently being met by the Steel Industry by procurement from Odisha and other States and also by imports from other countries. During the last four years no export of iron ore has taken place from Bellary-Hospet sector and there is presently no possibility of the same in near future. Therefore in all probability the proposed railway line is not likely to have any iron ore cargo available for transportation to ports for exports.

40. The State of Karnataka has now justified the project stating that it is needed for economic development of backward Uttara Kannada District. The stretch of 300 Kms of coastal belt of Karnataka is not well connected to the hinterland thereby blocking many opportunities for economic development as bulk and cost effective movement of cargo between the ports and hinterland is possible only through rail transportation. According to the State Government the Hubli-Ankola railway line is economically as well as environmentally the most viable rail route to the ports. The present annual movement of cargo

is about 26 MMT (23.8 MMT imports and 2.5 MMT exports) and projected cargo in the Hubli-Ankola corridor, based on the upcoming projects in the hinterland, is more than 100 MMT. The existing road capacity is no match for the projected cargo of more than 100 Million MT. Moreover, the road transportation has limitations and cannot become a viable alternative because of various factors including capacity constraints, pollution and accidents besides being inherently uneconomical.

41. Out of 168.289 kms. of the proposed railway line, 120 kms. would pass through reserve forest. Moreover, 63 kms. of the project would be passing through center of prime forests of Western Ghats in Karnataka. The total land required for the project is 1384.48 ha. out of which 965 ha. is reserve forest land (since revised to 720 ha. and then 667 ha.). The formal proposal seeking approval under Section 2 of Forest (Conservation) Act, 1980 for diversion of 965 ha. of forest land and felling of 2.48 lakh trees for the construction of the said project was submitted by the Principal Chief Conservator, Karnataka Forest Department to the State Government in October, 2003 (refer Annexure R-4 to this Report) and by the State Government to the Ministry of Environment and Forests (MoEF) in November, 2003 (refer Annexure R-5 to this Report). Earlier the Principal Chief Conservator, Karnataka Forest Department in November, 2002 submitted his report to the State Government stating that there appears to be no case or national interest is served by constructing

the said railway line (refer Annexure R-2 to this Report). The Principal Chief Conservator, Karnataka Forest Department while recommending the proposal observed that *"the proposed alignment has been inspected by me on 25.9.2003 and found that the forest and terrain really do not permit a railway line"*. The Government of Karnataka also while forwarding and recommending the proposal to the MoEF observed that *"This new railway line will further fragment the forests and expose fresh areas to anthropogenic pressures. However these appear inevitable given the importance of the line for the State"*.

42. As per the guidelines prescribed for implementation of the Forest (Conservation) Act, 1980, the site inspection of the forest area proposed for diversion was carried out by the concerned Regional Office of the MoEF at Bengaluru and thereafter in April, 2004 a detailed Report was submitted by the Chief Conservator of Forest (Central) of the Regional Office to the MoEF. The Chief Conservator of Forest (Central) observed (refer Annexure R-6 to this Report) that the 63 kms. of the proposed railway line would be passing through moist deciduous prime forest of Sahyadri Hills of Western Ghats in the State of Karnataka and would involve felling of about 2.66 lakh trees. The proposed track would badly fragment habitat and essential corridor of elephants in Western Ghats. The area is habitat of rare and endangered endemic flora and fauna and also forms catchment area of major river system of Uttara Kanada District. The ecological cost of the project would be very huge as compared to the

tangible benefits of the project. Though all the concerned officers of the State have recommended the project but all have unanimously expressed the same views that for the prime forests of Western Ghats the project shall play a havoc. The Chief Conservator of Forest (Central) recommended for rejection of the proposal inter alia stating that ".....*this (project) will simply be a tragedy on the prime forest of Western Ghats and of the much talked about biological hot-spot of the country. Vast stretch of prime forest shall be subject of serious soil loss, bio-diversity degradation, adverse impact on hydrological system of major rivers and irreversible effect of fragile ecological system of Western Ghats..... No amount of mitigation shall compensate the huge cost of ecological damage which this project of rail track shall bring to the Western Ghats*".

43. The Forest Advisory Committee (FAC) constituted by the Central Government under Section 3 of the Forest (Conservation) Act, 1980 considered the said project during May, 2004 and recommended for rejection inter alia observing that "*The construction of the proposed new railway track from Hubli to Ankola for transporting mainly iron ore has no much justification. On the other hand, this will simply be a tragedy on the prime forests of Western Ghats and of the biological hot spot of the country. Vast stretch of prime forests shall be subject of serious soil loss, biodiversity degradation, adverse impact on hydrological system of major rivers and irreversible effect on fragile ecosystem of Western Ghats*".....The MoEF , keeping in view the above observations

made by the FAC, rejected the proposal on merit in June, 2004 (refer Annexure R-8 of this Report).

44. The Railways requested the MoEF to reconsider the proposal for diversion of forest land on the ground that with the increase in demand globally for iron ore the speedy construction of the said railway line has become even more essential. Thereafter the proposal was re-examined by the FAC in September, 2004. The FAC reiterated that about 900 ha. falls in very good forest and that large scale felling of trees will be detrimental to the ecology of the Western Ghats – a biodiversity hot spot and asked the railways to critically revise the proposal and to submit a revised proposal for the construction of the railway line from Hubli to Kalaghatgi along with details of other alternatives explored (refer Annexure R-9 to this Report). Thereafter the Ministry of Railways in June, 2005 submitted a revised proposal to the Principal Chief Conservator of Forests, Karnataka Forest Department wherein the requirement of the forest land was reduced from 965 ha. to 720 ha. (refer Annexure R-10 to this Report).

45. In the meanwhile the project works on the non-forest land were started by the railways over a stretch of 40 kms. Between Hubli to Kirawatti. The Principal Chief Conservator of Forest, Karnataka Forest Department in September, 2003 asked the railways to stop forthwith the work on non-forest land on the ground that it was being done in violation of the FC Act guidelines and that since the project

involves diversion of more than 900 ha. of forest land in the Western Ghats, the approval of the MoEF for the diversion of forest land cannot be taken for granted (refer Annexure R-3 to this Report). During the hearing of the present Application before the CEC in September, 2006, the CEC also advised the Ministry of Railways to stop the work being done in the non-forest land. The MoEF was also advised not to issue any permission in the present case till the matter is examined in its totality and a Report is filed by the CEC before this Hon'ble Court (refer Annexure R-11 to this Report). Thereafter the works being undertaken in the non-forest land were stopped by the Ministry of Railways.

2003-06  
Illegal work  
carried on

46. The Ministry of Railways have developed a Contingency Plan as per which the project will be taken up in Phases. In the 1st Phase 35 kms. railway line between Hubli and Kalaghatgi will be constructed and commissioned and in the 2nd Phase the railway line upto Devikoppa (41 kms.) will be constructed. The Phase I and Phase II of the project would involve diversion of 5.5 ha. and 1.0 ha. respectively of forest land and which are located on the fringe of forest land and mainly consist of bushes and shrubs. The Ministry of Railway stated that the project is viable even by commissioning in stages (refer affidavit filed before the CEC by the Ministry of Railways at Annexure R-13 to this Report).

47. A formal proposal for diversion of 5.015 ha. of forest land falling in Dharwad Forest Division for construction of Phase I of the project

(from Hubli to Kalaghatgi) has been forwarded by the State Government to the Regional Office of the MoEF in January, 2008. Separately the State submitted the details of 683.62 ha. of forest land falling in North Canara District assessed to be required for the project. The Regional Office of the MoEF in its Report submitted to the MoEF in October, 2008 recommended that the diversion of 5.015 ha. of forest land for construction of railway track between Hubli to Kalaghatgi may be favourably considered and that the proposal for diversion of 683.62 ha. of forest land in North Canara District (Canara Circle) for the construction of balance portion of Hubli-Ankola railway line may be rejected as it is not different from the earlier proposal (refer Annexure R-15 to this Report).

48. In the submissions made before the CEC by the Principal Secretary (Forest), Government of Karnataka, it has been reiterated that the diversion of forest land (for the project) will cause disastrous ecological disturbance in the Western Ghats due to fragmentation of land scape affecting migratory routes of wild animals thus impacting the breeding cycle and population dynamics of the wild animals in the Western Ghats. The cutting of trees will result in loss of valuable endemic species in the region. The construction of Railway line through pristine forests of Western Ghats will promote tremendous anthropogenic pressure on the forests causing rapid degradation of these life supporting systems. Notwithstanding the above the project has at the same time been strongly recommended on the ground that for social and economic development of backward Uttara Kannada



District the project is needed and that it appears inevitable that the Western Ghats has to be pierced through at some point to ensure rail connectivity between coast line and Eastern plains of the State (refer Annexure R-16 to this Report).

49. The Indian Institute of Science, Bengaluru (IIS), engaged by the Government of Karnataka to carry out Environment Impact Assessment (EIA) studies and to prepare Environment Management Plan (EMP) submitted its Technical Report in February, 2012 (refer Annexure R-20 to this Report). The Report by and large validates and confirms the observations made by the PCCF, Karnataka Forest Department, Principal Secretary (Forests), Government of Karnataka, Regional Chief Conservator of Forests, MoEF and also by the Forest Advisory Committee regarding the likely severe adverse ecological impact of the project on the prime natural forests of Western Ghats having rich bio-diversity and supporting a large number of endemic species and with abundance of wildlife by way of bio-diversity degradation, soil erosion, fragmentation of land scape, adverse impact on hydrological system of rivers, loss of endemic species and tremendous anthropogenic pressure leading to rapid degradation of pristine natural and dense forests of Western Ghats.

50. The Report states that the proposed line passes through evergreen, semi-evergreen, moist deciduous and dry deciduous forests. About 1.95 lakh naturally grown trees will be required to be felled. Part of the project area is located in the buffer region of Anshi

Dandeli Tiger Reserve. The Western Ghats through which the railway line passes between Yellapur to Sunksal (60 KM) is a very rugged terrain of steep rising hills and valleys with altitude ranging from 150 to 450 amsl and having evergreen to semi-evergreen dense forest. A number of endemic tree species are found in the area. Unplanned development in the region will diminish the biodiversity and most importantly the endemic and endangered species, hydrology and ecology of the region. The destruction of forest and cutting down of trees will alter the species composition of the region and alter the overall ecological and hydrological regimes of the existing biomes. 43 families, 106 genera and 134 species of trees and 58 families, 128 genera and 146 species of shrubs are found in the region of the proposed rail alignment. In the evergreen and semi-evergreen forests of the Western Ghats the number of trees of above 30 cms girth is as high as 598 per ha. Many wild and cultivated species of medicinal plants are found in the area. The area is rich in wildlife with the presence of 29 species of mammals including tiger, 256 species of birds, 8 species of reptiles and 50 species of butterflies. Most of the mammals figure in the IUCN Red List signifying their high conservation status. A large number of birds are found in area including Hornbills (a Schedule I bird). 33 species of amphibians are found in Beethi river basin of which 55% are endemic to Western Ghats. The proposed line passes through the belt of Kalaghatgi range and which is the traditional elephant corridor. The herd of elephants moves from Dandeli Wildlife Sanctuary through this

area before reaching Hanagal. The construction of the railway track will fragment the existing movement path of the elephants and will also pose a threat of train hits on elephants, elephants wandering in the nearby agricultural and horticultural lands leading to crop destruction, damage to houses, injuring people, etc.

51. The extraordinary ecological and economic importance and value of the forest land involved in the proposed project is perhaps most effectively brought out by the assessment of the Total Economic Value (TEV) done during EIA by the IIS, Bangalore. As stated in the Technical Report these forests provide a very large number of provisioning, regulating, supporting and information services. The Total Economic Value (TEV) of these services provided by the forest land involved in the proposed project has been assessed to be Rs. 40.859 lakh per ha. per year and for the 727 ha. of forest land involved to be Rs. 29,704 lakhs/year. Based on the above valuation and applying a discount rate of 4% the annuity (Net Present Value) of the forest land involved in the present case comes to Rs. 10.215 crores per ha. and for 727 ha. of forest land involved it works out to Rs. 7426.09 crores. It is relevant to mention that the Hon'ble Supreme Court by order dated 28<sup>th</sup> March, 2008 has prescribed the rates of the Net Present Value (NPV), to be paid by the user agencies at the time of the grant of the approvals under the Forest (Conservation) Act, for the forest lands falling in various Eco-Classes and density Sub-Classes. For this purpose the monetary value of the goods and services (Total Economic Value) annually provided by the

forests were assessed and thereafter, by applying the discount rate of 4%, the NPV for each Eco-class/Sub-class were calculated. The rates of the NPV so arrived at (and prescribed by the Hon'ble Court) vary between Rs. 4.38 lakh per ha. (for the open forests falling in Eco-Value Class IV) to Rs. 10.43 lakh (for very dense forests falling in Eco-Value Class I). On the other hand based on the Total Economic Value (TEV) of the forest land involved in the present project, as assessed by the IIS, Bangalore, the value of the NPV comes to Rs. 10.215 crores per ha. and for the 727 ha. forest land involved comes to Rs. 7426.09 crores. These figures most effectively demonstrate the extraordinarily high ecological and economic value of the forest lands involved in the project.

A copy of the relevant Chapter of the Technical Report of the IIS, Bangalore captioned "Valuation of Forest Eco-system Goods and Services" is enclosed at ANNEXURE-R-23 to this Report.

52. A number of mitigative measures have been proposed in the Environment Management Plan (EMP) prepared by the IIS. These include Compensatory Afforestation, setting up of nurseries, fencing of forest land, afforestation of degraded areas, joint patrolling, imposing speed limits in vulnerable stretches, involvement of affected persons in the eco-system restoration works, undertaking mitigative measures during construction phase, constitution of an Independent Waste Management Cell and construction of post Project Monitoring Task Force. The estimated expenditure in this regard is Rs. 450

crores. It is relevant to mention that the proposed mitigative measures are otherwise also generally prescribed while approving diversion of forest lands under the Forest (Conservation) Act, 1980.

53. The Report of the IIS has suggested reduction of i) track line by 3.85 kms., ii) of forest land by 60 ha., iii) of tunnels by 4 and iv) of trees to be felled by 0.37 lakh. All these suggestions have been accepted by the project authorities.

54. To recapitulate, the proposed Hubli-Ankola railway line passes through very dense and biodiversity rich semi-evergreen and evergreen forests of ecologically sensitive Western Ghats – one of the identified mega biodiversity hot spots in the world, having a large number of plant species including a number of endemic and endangered species and with abundance of wildlife such as tigers and leopards. The proposed alignment passes through the elephant corridor. The proposal for diversion of 965 ha. for the project was rejected by the MoEF on merit after the Forest Advisory Committee recommended against the same on account of its adverse impact on the prime forests of Western Ghats because of soil erosion, biodiversity degradation, adverse impact on hydrological system and irreversible effect on fragile ecosystem of Western Ghats. The observations made in the Reports of the Principal Chief Conservator of Forests, Karnataka Forest Department, Principal Secretary (Forests), Government of Karnataka and the Regional Chief Conservator of Forests lucidly bring out the ecological importance of

the forest area involved and the likely adverse impact of the project on the forests, environment and wildlife and which have been validated by the EIA studies carried out by the Indian Institute of Science, Bengaluru. The Total Economic Value (TEV) of the forests has been assessed to be Rs. 40.859 lakhs/ha/yr. and for 727 ha. to be Rs. 297.04 crores / year. Based on the above the value of the NPV comes to be Rs. 10.215 crores / ha. And Rs. 7246.09 crores for 727 ha. of lands involved. These figures strongly indicate the very high ecological value of the forests involved. A revised proposal seeking diversion of 720 ha. of forest land has been submitted to the Project authorities. The project was earlier justified on the ground of potential for transportation of iron ore for exports and which is no more relevant. Now the project is being justified on various other grounds such as connectivity of the coastal area to the hinterland, projected cargo for imports and advantages of transportation through rail vis-à-vis by road.

55. The CEC is of the considered view that the project would cause huge and irreparable damage to the forests, wildlife and biodiversity of the Western Ghats and which would far outweigh the actual tangible benefits of the project. The reduction in the extent of the forest land now sought for diversion for the project does not make any material difference. The adverse impact of the project on forests, wildlife habitat and bio-diversity is not likely to remain confined to only the forest area diverted for the project but to a much larger area around the project site because of fragmentation of habitat,

encroachments, illegal felling, diversion of forest land for housing, infrastructure development and other projects. No amount of mitigative measures would be adequate to contain the severe adverse impact of the project on the biodiversity rich dense forest of Western Ghats and ecology within reasonable limits. Therefore, the proposal for diversion of forest land, rejected on merit by the MoEF under the Forest (Conservation) Act, 1980 on ecological and environmental considerations should not now be reviewed or approved.

56. In the above background, the CEC is of the view that it may be appropriate that this Hon'ble Court may consider directing the MoEF not to reconsider / approve the proposal for the diversion of 965 ha. of forest land (subsequently revised to 720 ha. and then to 667 ha.) falling in Dharwad, Yellapur and Karwar Forest Divisions in the State of Karnataka for construction of the new Hubli-Ankola Broad Gauge railway line and which was earlier rejected on merit by the MoEF on 10/11.6.2004. However considering that (a) the track between Hubli-Kalaghatgi in Dharwad Forest Division involves diversion of 5.015 ha. of forest land lying on the fringe of the forest and that as per the Contingent Plan prepared by the railways the project is viable even by commissioning in stages and that the proposal sent by the State Government to the MoEF seeking approval under the Forest (Conservation) Act, 1980 for the diversion of the said forest land has been recommended by the Regional Office of the MoEF the CEC is also of the view that the MoEF may be granted liberty to take a

decision on merit on the said proposal provided the Ministry of Railways confirms that the construction of the above said portion of the railway line is commercially viable even if the diversion of the forest land for the balance portion of the Hubli-Ankola railway line is not permitted.

This Hon'ble Court may please consider the above Report and may please pass appropriate orders in the matter.

  
(M. K. Jiwrajka)  
Member Secretary

**Dated: 3<sup>rd</sup> August, 2015.**