<u>Field inspection notes of the District Forest Officer, Yadadri Bhuvanagiri on diversion of Reserve Forest areas in favour of Chief Engineer, Kaleshwaram Project, Hyderabad in Yadadri Bhuvanagiri District of Telangana State</u>

Gandhamalla Storage Reservoir:

Inspected the proposed forest area of Veerareddipalli Block I for formation of Gandhamalla Storage Reservoir on 20.02.2017. Perambulated thoroughly along with field staff and Engineers of the user agency. The existing forest is Tropical dry deciduous Forest of 0.40 density. The area proposed to be diverted is demarcated on the ground. The terrain is undulating to gently rolling. The soils are gravelly mixed with fair size boulders with rocky out crops. The vegetation is mostly of scrub forest with species like Chloroxylon switenia (Billudu), Albizzia amara (Narlinga), Randia dumetoram (Manga). Azadirachta indica (Neem) & Butea monosperma (Moduga) but adopted to scrub based on edaphic and climatic factors. Since, the area proposed is for storage reservoir only, the soil erosion is negligible. At FRL, the submergence will be foot hills of the hillocks. Though practically diversion takes place for the submergence, positive impact also can be seen because of most of the species existing will survive in the water as moist regime increases the density of vegetation. Few species like Annona squamosa (seethaphal) and others does not tolerate water storage may die.

The major fauna present in the areas proposed for diversion Lepus nigricollis (Hare). Vulpes vulpes (Fox), Sus scrofa (Wild pig), Pavo cristatus (Pea fowl). Macaca mulatta (Monkeys), Varanus spp (monitor lizard), etc.,

The area has 14 Ha old Eucalyptus and 10 Ha of Kanuga plantations taken up in year and years respectively. The Eucalyptus plantation has scattered survival with 723 Nos of trees and kanuga plantation with good survival but is completely of stunted growth of 1.2 mts height. Extraction is not recommended as there will be not much negative impact on the existing vegetation because of submergence, and it is not economical also. If extracted, the area will be more prone for erosion. Therefore in lieu of submerged plantations it is proposed to raise 48Ha plantation in the degraded forest area.

There is a possibility of converting gaps existing in the foreshore area of the project which falls in diverted forest area into dense vegetation by planting water tolerant species like Acacia nilotica, Terminali Arjuna. Extraction is not recommended as there will be no much negative impact on the existing vegetation because of submergence, and it is also not economical also.

Canals:

Inspected the proposed forest areas of Vasalamarri Block I, Vasalamarri Block-III, Srinivasapuram and Narsapur Forest Blocks proposed for excavation of gravity canal on 21.02.2017 along with field staff and Engineers of the user agency. The existing forest is Tropical dry deciduous Forest of 0.40 density. The area proposed to be diverted is demarcated on the ground. The terrain is undulating to gently rolling. The soils are gravelly mixed with fair size boulders with rocky out crops. The vegetation is mostly of scrub forest with species like Chloroxylon switenia (Billudu), Albizzia amara (Narlinga), Azadirachta indica (Neem) & Butea monosperma (Moduga), Eucalyptus, Wrightia tinctoria, Tectona grandis, Annona squamosa etc., but adopted to scrub based on edaphic and climatic factors. Since, the area proposed is for canal only, the soil erosion is negligible.

The major fauna present in the areas proposed for diversion Lepus nigricollis (Hare), Vulpes vulpes (Fox), Sus scrofa (Wild pig), Pavo cristatus (Pea fowl), Macaca mulatta (Monkeys), Varanus spp (monitor lizard), etc.,

The details of Forest block wise areas and the entry and exit points of canals are as here under.

Sl.	Name of the	Area	Station	Entry point	Station	Exit point
No	Forest Block	proposed for	No.		No.	
		diversion in (Ha)				
1	Vasalamarri-I	1.5869	114	78.80440	120	78.80407
				17.70192		17.70004
			118	78.80387	116	78.80460
				17.70183		17.70009
2	Vasalamarri-III	3.6455	136	78.78695	122	78.79231
				17.65578		17.65637
			135	78.78761	129	78.79235
				17.65589		17.65691
3	Srinivaspur	3.7643	103	78.79320	112	78.79776
				17.71049		17.70660
			93	78.79345	111	78.79760
				17.71094		17.70678
4	Narsapur	3.7814	92	78.86941	25	78.85336
				17.75438		17.74976
			71	78.86904	18	78.85349
				17.75420		17.75001

The submergence area is surveyed with 30 sample plots and the enumeration is taken up for trees below 30 cms girth growing stock up to FRL (510 mts). The separate lists are prepared for (-) 2 mts of FRL (508 mts) and also for (-) 4 mts of FRL (506 mts).

The submergence of forest area at

FRL (510 mts) 96.7957 Ha

FRL (508 mts) 62. 49 Ha

FRL (506 mts) 48.33 Ha

Sl.No	Reserve Forest	Compt	Area in Ha	Purpose	Length/ Capacity	No. of sample plots
1	2	3	4	5	6	7
1	Srinivaspur	246	3.7643	Package 14 distributory canal	603x40 mts	Total enumer ation done
2	Vasalamarry I & III	243 & 245 1.5869 + 3.6455	5.2324	-do-	888x40 mts	-do-
3	Narsapur	249	3.7814	Package 15 distributory canal	1759x20mts	-do-
4	Veerareddypally I	248	96.7957	G.Mallandha Reservoir	9.86 TMC	30

There are no rare/endangered/ unique species of flora and fauna in the area proposed for diversion. There is no protected archaeological heritage site/defense establishment or any other important monument is located in the area. The area does not form part of National park, Wildlife sanctuary, Bio sphere reserve, Tiger Reserve, Elephant corridor, etc.

The area required by the user agency is unavoidable and barest minimum for the project. No work in violation of Forest Conservation Act taken place. If the proposed forests lands diverted, the impact on the adjoining reserve forest is negligible.

District Forest Officer Yadadri Bhuvanagiri Dist. District Forest Officer Yadadri Bhongir.