

Sub: Proposal for diversion of 123.82 hectares of forest land, in favour of Andhra Pradesh Capital Region Development Authority (APCRDA)for setting up of Science City under Capital City Infrastructure Development Projects in Mothadaka Forest Block, Guntur Division & District of Andhra Pradesh (Online Proposal No. FP/Ap/Others/30247/2017).– regarding.

1. The State Government of Andhra Pradesh vide their letter No. 63/Section-II/2018 dated 11.01.2018 (**Pg. 1-137/c**) submitted a proposal to obtain prior approval of the Central Government, in terms of the Section-2 of the Forest (Conservation) Act, 1980 for diversion of 123.82 hectares of forest land for setting up of Science City under Capital City Infrastructure Development Projects in Mothadaka Forest Block, Guntur Division & District of Andhra Pradesh, in favour of Andhra Pradesh Capital Region Development Authority (APCRDA).
2. The facts related to the proposal as contained in the proposal submitted by the State Government and in the site inspection report submitted by the Regional Office (SEZ) Chennai are given below in the form of fact sheet:

FACT SHEET

1.	Name of the Proposal	Proposal for diversion of 123.82 hectares of forest land for setting up of Science City under Capital City Infrastructure Development Projects in Mothadaka Forest Block, Guntur Division & District of Andhra Pradesh, in favour of Andhra Pradesh Capital Region Development Authority (APCRDA).
2.	Name and nature of the user agency	Andhra Pradesh Capital Region Development Authority (APCRDA).
3.	Nature of the user agency	A State Government undertaking.
4.	Category	Others.
5.	Period of time	99 years.
6.	Location (i) State (ii) District (iii) Compartment No.	Andhra Pradesh. Guntur. Motadaka.
7.	Particulars of Forests: (i) Name of Forest Division and Forest area involved. (ii) Legal status/Sy. No (iii) Maps	Guntur forest Division=123.82 ha. Notified as Reserve Forest under Section 16 of Madras Forest Act (Act-V of 1882) vide notification No. 203 dated 23.04.1894. i. SOI – Pg. 20/c. ii. DGPS Map proposed for CA – Pg. 34/c. iii. 10 km radius map – Not submitted. iv. CA area maps – Pg. 34/c. v. Layout map – Not submitted.
8.	Topography of the area	-
	(i) Geology (ii) Vulnerability to erosion	Not reported. No.
	(i) Vegetation & Density (ii) No. of trees to be felled	0.2 to 0.4 Eco –Class IV The Abstract of the enumeration of trees FRL wise to be felled in the proposed area is placed in the file at (Pg. 74-76/c).
9.	Working plan prescription for the forest land proposed for diversion:	As per working plan prescription the RF is included in Degraded Forest improvement working circle.
10.	Brief note on vulnerability of forest area to erosion:	Area is not vulnerable to erosion in view of existing vegetation cover. The vulnerability for erosion is minimum.
11.	Whether area is significant from wildlife point of view	-
12.	Details of wildlife present in and around the forest land proposed for diversion:	Wild boar.
13.	Whether forms part of National park, Wildlife Sanctuary, Biosphere	

	Reserve, Tiger Reserve, Elephant Corridor, etc. (if so, details of the area and comments of the Chief Wildlife Warden	No.
14.	Whether any RET species of flora and fauna are found in the area. If so details thereof	No.
15.	Approximate distance of the proposed site for diversion from boundary of forest.	0
16.	Whether the forest land proposed for diversion is located within eco-sensitive zone (ESZ) of the Protected Area notified under Wild (Protection) Act, 1972 (Note: In case, ESZ of a Protected Area is not notified, then, 10 kms distance from boundary of the Protected Area should be treated as ESZ):	No.
17.	Whether any national park, wildlife sanctuary, biosphere reserve, Tiger reserve, elephant corridor, wildlife migration corridor etc., is located within 1 Km from boundary of the forest land proposed for diversion:	No.
18.	Whether any protected archaeological/ heritage site/defence establishment or any other important monuments is located in the area.	No.
19.	Whether any work of in violation of the Forest (Conservation) Act, 1980 has been carried out (Yes/No). If yes details of the same including period of work done, action taken on erring officials. Whether work in violation is still in progress.	Nil.
(a)	Details of violation (s)	
(b)	Period of Work done (year)	
(c)	Area of forest land involved in violation (in ha.)	
(d)	Whether work in violation is still in progress (Yes / No)	
20.	Whether the requirement of forest land as proposed by the user agency in col. 2 of Part-I is unavoidable and barest minimum for the project, if no recommended area item-wise with details of alternatives examined.	Yes.
21.	Whether clearance under the Environment (protection) Act, 1986 is required?	Not given.
22.	Status of Wildlife Clearance.	It is reported by the User agency in online application of Part-I under Colum I (i), the Wildlife Clearance has not been required in this project.

		However, The DFO, Guntur has also been reported in Part-II the wildlife movement has been seen in the proposed area. Hence, the wild life clearance is required before Stage-II approval.
23.	Compensatory Afforestation	
	(i) Details of non-forest area/degraded forest area identified for CA, its distance from adjoining forest, number of patches, size of each patches.	It is reported that equivalent land has been identified in Guntur Forest Division, Mothadaka Block for compensatory afforestation and Divisional Forest Officer, Guntur has been certified the area for plantation copy of the same is placed in the file at (Pg. 84-121/c) . Copy of the same may kindly be seen at page 34/c .
	(ii) Map showing non-forest/degraded forest area identified for CA and adjoining forest boundaries.	
	(iii) Detailed CA scheme including species to be planted, implementing agency, time schedule, cost structure, etc.	
	(iv) Total financial outlay for CA	Rs. 555.00/- Lakhs (Pg. 6/c)
	(v) Total cost of NPV	Rs. 542.332/- Lakhs (Pg. 124/c)
	(vi) Certificate from the competent authority regarding suitability of the area identified for CA and from management point of view.	Land suitability certificate is given by the Divisional Forest Officer, Guntur copy of the same may kindly be seen at page no-83/c .
24.	Catchment Area Treatment	Not applicable.
25.	Rehabilitation of Oustees	No displacement involves.
26.	R & R plan	Not applicable.
27.	Compliance of Scheduled Tribe and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.	The District Collector, Guntur Government of Andhra Pradesh has issued FRA certificate letter No. 3281/2015-E5 dated 23.4.2016 (Pg. 26/c) for diversion of 123.82 hectares of forest land for setting up of Science City under Capital City Infrastructure Development Projects in Mothadaka Forest Block, Guntur Division & District of Andhra Pradesh, in favour of Andhra Pradesh Capital Region Development Authority (APCRDA). Documentary evidences in support of settlements of rights under the Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 may kindly be seen at Pg. 26-29/c .
28.	Site Inspection Report of the Divisional Forest Officer;	The Site Inspection Report carried out by the Divisional Forest Officer, Guntur, Andhra Pradesh, copy of the same may kindly be seen at (Pg. 77-79/c) .
29.	Cost Benefit Ratio	The Cost benefit analysis report has not been given.
30.	Total Cost of the Project	Rs. 24533/- (Lakhs) (Pg. 11/c)
31.	Employment Potential	Permanent –8000 Temporary- 100000
32.	Recommendation i. DFO ii. CCF iii. Nodal Officer iv SG	Recommended Pg. 129/c Recommended Pg. 132-134/c Recommended Pg. 135/c Recommended Pg. 136/c
33.	District Profile, Guntur	

(i) Total Geographical area of the district	11,39,100 ha. (or) 11,391.88 Square kilometer
(ii) Total Forest area/Divisional Forest area	166143 ha. (or) 1661.43 Square kilometer
(iii) Total area diverted since 1980	1137.605 ha of forest land has been diverted in (29) cases in Guntur division, Guntur District.
(iv) Total CA stipulated since 1980 (Forest land)	
(a) Forest Land	591.945 ha.
(b) Non-forest land	68.382 ha.
i. Progress of Compensatory afforestation as on 22.04.2016	
(a) Forest land	591.945 ha.
(b) Non Forest Land	68.382 ha.

3. The Ministry has already granted the approval for diversion of 2087.09 ha (Tadapalli: 251.77 ha as this area falls in the proposed capital city and Venkatayapalem RF 1835 ha. for establishment of Armed Forces Training Institute and facilities such as State Police, establishment, Greyhounds., Water Survival Training Facility, Military Station, Central Prison, Railway Academy, CRPF etc. for security reasons) of forest lands (Revised proposal was for 12444.89 ha.) in Krishna and Guntur Divisions & Districts of Andhra Pradesh for establishment of Andhra Pradesh Capital vide this Ministry's letter No. F. No. 8-24/2015-FC dated 20th September, 2017 (F/X).

4. At point 4 of Chapter 2 of the Handbook of Guidelines, it is clearly mentioned that:- (F/Y)

Diversion for non-site specific projects:- A large number of proposals for diversion of forest land for non-site specific projects like industries, construction of residential colonies, institutes, disposal of fly ash, rehabilitation of displaced persons, etc. are received by the Central Government. Attention is drawn to items 1 (iv) and 8 of the Form "A" in which the proposal is to be submitted by the State Government. In these columns, justification for locating the project in the forest area giving details of the alternatives examined and reasons for their rejection has to be furnished. Normally, there should not be any justification for locating non site-specific projects on forest land. Therefore, the State Government should scrutinize the alternatives in more details and must give complete justification establishing its in-escapability for locating the project in forest area".

The motive of the above referred guideline is that the forest is a natural resource and a complete ecosystem in itself and once ecosystem is disturbed and forest land is diverted, the same cannot be restored to its original glory. Therefore the forest land shall be diverted only for those activities which are site-specific whose value is more than the ecosystem services of forest ecosystem and cannot be done elsewhere in the interest of development needs of the society. The development of Industrial corridor on forest land is certainly non site specific and can be developed on non-forest land.

5. The forest land proposed to be diverted has been inspected by Shri D. Sathiyam, Chief Conservator of Forests (Central), Regional office (South Eastern Zone), Chennai. Additional information furnished in the inspection report submitted by the Regional Office (South Eastern Zone), Chennai vide their letter No. 4-APA067/2018-CHN/1681 dated 22nd October, 2018 (Pg. 138-195/c) are as below:-

6. Background:

As per the proposal, the APCRDA seeks diversion of **123.82 Ha** forest land for the establishment of Science City under the Capital City Infrastructure projects. The land use proposed therein is as mentioned in the Table given below. The area proposed for diversion is a hillock with medium to steep slopes and has an elevation of 145 m. The area has Dry Deciduous Scrub Forests of canopy density of 0.2-0.4. Tree species like *Albizia amara*, *Azadirachta indica*, *Grevia rotandifolia*, *Carissa spinarum*, *Acacia latronum*, *Dodonaea viscosa*, *Gyrocarpus jacquini* and *Prosopis juliflora* are recorded in the area. Wild boars are reported to be present in the proposed area. As reported by the DFO, Guntur Division, the area proposed for diversion is included in the

‘Degraded Forest Improvement Working Circle’ as per the working plan prescription and falls in Eco class IV. The APCRDA officials have informed that the area proposed for diversion falls within the re-notified boundaries of the ‘Capital Region’.

Table: The Area statement as reported in the proposal is as follows:

S.No	Land use	Area in Ha
01	Climate Change Theater	6.60
02	Dinosaurs Park	10.95
03	Earth Exploration Hall	9.27
04	Energy park	6.11
05	Fun science	6.72
06	Laser Theatre	8.43
07	Maritime Center	0.95
08	Science of Sports	5.79
09	Space Theater and Digital Planetarium	6.88
10	Virtual reality	10.51
11	Water Pool	1.47
12	Administration	0.85
13	Roads	29.93
14	Common open spaces & Green Areas	16.44
15	Utilities	2.91
Total		123.82

Note: It is reported in the proposal that an area of 41 ha, which is 55% of the area proposed for activities mentioned in SI No 1 to 12 above, will be retained as open spaces in addition to the 16.44 ha of area proposed for common open spaces & green areas.

7. Concept plan furnished in the proposal:



8. Observations on the proposal documents:

- 8.1 Going by the activities proposed in the proposal, the project is non-site specific; however, as per the justification provided by the APCRDA in the proposal, the project site has been selected after examination of alternatives.
- 8.2 The User Agency has provided breakup of the forest area proposed for diversion in a broad thematic manner and indicated the overall quantum of open spaces and green areas in percentage terms. However, the proposal does not have finer details/break-up of the intended final certified land use and it is silent on the quantum of hill cutting involved in its execution. For example, an area of 10.51 ha area is proposed for 'virtual Reality' but no further details on sub-components have been provided.
- 8.3 During discussions with the User Agency, it emerged that the land use planning process for the proposed area has not been completed/frozen yet and the sub component wise details, etc will be finalised only in future, which means the requirements indicated in the current proposal may change.

9 Observations made during site visit:

- 9.1 The forest area of 123.82 ha proposed for diversion in Mothadaka RF under Guntur Range and Guntur Division, is a hillock of huge rocks and has sparsely distributed scrubs with a canopy density of 0.1-0.2. The hillock has medium slopes with rocky portions. The area proposed for diversion is easily accessible by road and it is surrounded by revenue/agricultural lands and human habitations. Mothadaka RF is one of the series of hillocks that lie in 'south to North' direction in this area. It has Nidumukkala RF on its south and Karlapudi RF on its north, both of them have been proposed for diversion separately. The proposed diversion area has a maximum elevation of around 734 ft MSL, as per google earth.
- 9.2 As per the layout plan furnished by the user agency, a main road is proposed at the middle of the longitudinal axis of the hillock through its top, besides a network of roads. It appears that some project components including roads have been proposed without considering the relief/slope of the hillock. The User Agency may need to clarify on this.
- 9.3 As per the layout, most of the project components including roads are falling on rocky areas which would require huge hill cutting. The User Agency has not provided any information on the actual area which requires hill cutting/quarrying and the quantum of materials expected to be extracted. The provisions of the Mines and Minerals (Development and Regulation) amendment Act, 2015, or Rules framed there under will have to be adhered to by the User Agency in respect of the mining/quarrying component.

10 Suggestions/Recommendations:

- 10.1 The proposal is non-site specific and involves construction of lot of infrastructures including a network of roads on a hillock, which is expected to require huge hill cutting. The proposal does not have finer details/break-up of the intended final certified land use and it is silent on the quantum of hill cutting involved in its execution. It is learnt from the User Agency that as per the project design, various project components will have to be executed by different agencies / departments. This will amount to transfer / sublet the diverted forest area, for which prior approval of the GoI is required in each case. Hence, **consideration of this proposal may require making enabling modifications in the existing FC guidelines in the first place if deemed fit**, which needs to be decided by the competent authority.
- 10.2 **If the proposal is taken up for further consideration**, since the forest area required for the project does not appear to be the barest minimum the User Agency may be directed to rationalize the actual area required by leaving out the rocky areas requiring huge hill cutting and also the areas proposed for residential accommodations, hostels and commercial buildings. The infrastructures for residential, commercial buildings, hostels, dormitories, etc, if any, shall be shifted to outside the forest area and the layout plan needs to be changed accordingly.

- 10.2.1** The State Government may be asked to submit a revised lay out plan on a digital elevation platform depicting all component land uses and open/green spaces along with a detailed report on the quantum of stone materials to be extracted for execution of the project; The provisions of the Mines and Minerals (Development and Regulation) amendment Act, 2015, or Rules framed there under will have to be adhered to by the User Agency in respect of the mining/quarrying component.
- 10.2.2** For each of the thematic zones proposed, the final certified land use indicating further breakup of the forest land required, sub-component wise and clearly depicting the area to be kept as open space and green areas under each component may be sought for from the State Government, unless the requirement is relaxed by the competent authority.
- 10.2.3** Subject to satisfactory compliance by the User Agency to the above conditions, the proposal may be considered thereafter by the FAC for appropriate decision.
- 10.3** In the event of the project being given approval by the GoI, the following conditions, among others, may be stipulated, if deemed fit;
- the User Agency shall submit an under taking not to use the area earmarked for the open & Green spaces for any other purpose;
 - Chain link fencing or Wall along the boundary of the forest area proposed for diversion shall be constructed at the project cost to prevent encroachment;
 - The hill slopes shall be protected by the User Agency from erosion by undertaking structural as well as planting interventions wherever required.
 - The User Agency shall arrange to meet the energy requirement of the project components by promoting Solar Energy and other green energy sources to the maximum extent possible.
 - The User Agency shall not alter the natural course of streams in the proposed area and shall undertake to strengthen its banks both structurally and by planting trees.
 - The State Government shall form a monitoring committee headed by an officer of sufficient seniority in the Forest Department along with a representative from the concerned Regional Office of the MoEF&CC, etc.

11. SITE INSPECTION REPORT (SIR) ON THE NON-FOREST LANDS IDENTIFIED FOR COMPENSATORY AFFORESTATION (CA)

- i.** In lieu of the 3306.55 ha of forest lands proposed for diversion under the 8 proposals submitted by the APCRDA, Compensatory Afforestation over a non-forest area of 3520.58 ha (in 6 patches in 2 districts) has been proposed. The details are as follows:

Sl.No	District	Village	Survey No	Area in ha	Remarks
1.	Kadapa	Joukulpalli	260	1007.74	To be inspected
2.		Atloor	426, 754, 420, 58	1595.23	To be inspected
3.		Kotapadu	613	186	To be inspected
4.		Kudumaluru	401	211	To be inspected
5.	Prakasam	Magatur	118	470.04	Inspected
6.		Pothalpadu	1	50.57	inspected
Total				3520.58	

Out of the above, the undersigned has visited random points on the following 2 identified CA sites along with the State Forest Department Officials and representatives from the User Agency on 19.09.2018.

The observations on the two non-forest lands proposed for Compensatory Afforestation (CA) which were inspected by the undersigned, are as follows:

12. Observations on Site No 1: 50.57 ha non-forest area in Sy No 1 in Pothalapadu (Village), Tarlupadu (Mandal), Markapur (Range), Markapur (WL) Division.

The Non Forest area of **50.57 ha** is an isolated patch and not located adjacent to any Reserve Forests. The area has sandy loam soil which is full of stones and gravel. Access to the identified land is through other non-forest lands and parts of the identified CA land has been put to various uses by the local people including laying of water pipes, electric lines and for digging bore wells; this indicates the pressure of encroachment. As reported, huge biotic pressure has completely denuded the area to be a barren land now. Securing this isolated patch from possible encroachment and ensuring success of plantation will be difficult and costly. As such, **from a management point of view, the area may not be suitable for taking up compensatory afforestation.** Hence, the User Agency may be directed to find any other suitable non-forest land.

12.1. Google image & Photograph of the 50.57 ha non-forest area:



13. Observations on Site No 2: 470.04 Ha in Sy No 118 of Magatur Village, Arthaveedu Mandal in Nagulavaram section of Markapur Range.

The identified Non-Forest area of **470.04 ha** is of hilly terrain and situated adjacent to the Thurupukonda RF and Penusila RF on the Eastern side, Muthukur Beat on the northern side and Sri Peninsula Wildlife Sanctuary (Somasila back waters) on the western & Southern side. The soil type is reported to be red soil with stones and boulders.

This CA land is proposed as a compensatory Afforestation site in lieu of the 3 diversion proposals by APCRDA, i.e, 123.82 ha for 'science city; 118.30 ha for 'Éco-tourism Village' and another 227.92 ha for 'Biodiversity Park'.

On account of the site's advantage of being adjacent to the RF as well as a Protected Area, **this non-forest area is recommended** for undertaking compensatory afforestation, subject to the following conditions;

- a) Wherever required, soil shall be imported from outside for plantation purposes.
- b) CA area shall be fenced wherever required to prevent encroachment.
- c) Awareness Camps shall be organized among the public of the nearby villages regarding conversion of revenue land in to a forest area and on applicability the Forest (Conservation) Act, 1980.
- d) Concerned Circle Head shall monitor implementation of the CA and furnish detailed monitoring report to the Regional Office every year.

13.1. Google Image & Photograph of the 470.04 ha non-forest area:



- 14.** In view of above, the facts related to the proposal may be placed before FAC in its next meeting scheduled to be held on 15th November, 2018 for their examination and appropriate recommendation.
