

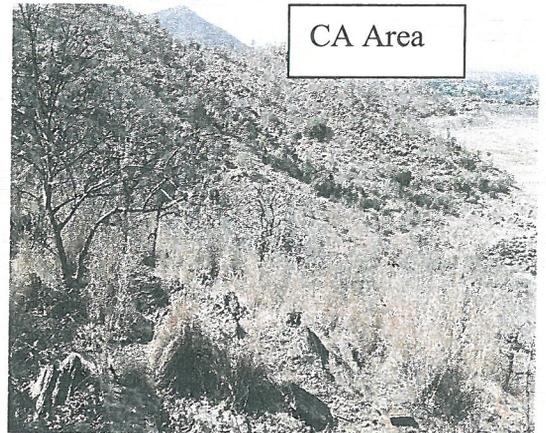
**Scheme for Raising Compensatory
Afforestation in non forest land
admeasuring 900.55 Ha included in
Revenue Sy. No. 1424 in Mittamanupalli and
other surrounding villages of Mydukur
Mandal in the Range limits of Onipenta of
Proddatur (WL) Division of Kadapa District**

Project period from 2017-18 to 2029-30

Project Outlay : Rs. 35.02 Crores

1. Introduction:

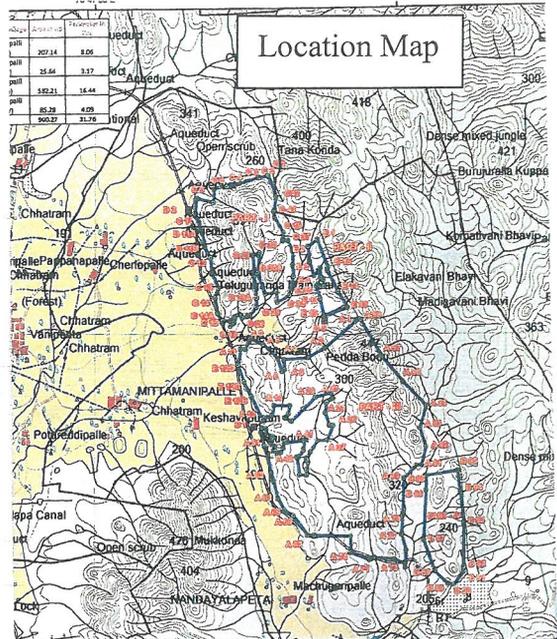
An extent of 900.55 Ha of non forest land was identified and proposed in Sy. No. 1424 of Mittamanupalli of Mydukur Mandal in the jurisdiction of Onipenta Range of Proddatur (WL) Division. These lands are proposed to be handed over by the Tahsildar of Mydukur Mandal in YSR District on behalf of the user agency namely CRDA Vijayawada, in lieu of the Forest area proposed to be diverted in Guntur and Rajahmundry Circles in favour of CRDA. This non-forest land proposed and surveyed is found to be suitable for Compensatory Afforestation as per the suitability certificate issued by the Divisional Forest Officer, WL Division, Proddatur in the prescribed format vide Divisional Forest Officer, WL Division, Proddatur Rc. No. 2260 / 2014 – P8, Dt. 25-04-2016. This land is free from the encumbrances as per the Non Encumbrance Certificate furnished by the concerned Tahsildar and proposed to be mutated in favour of the Andhra Pradesh Forest Department as per the Revenue Department. This land is surveyed using DGPS by M/s RSI, Hyderabad and the raw data and the map generated based on the raw data was authenticated by the I.T. wing of Andhra Pradesh Forest Department. As per the authentication done, the actual extent of the non forest land is 900.55 Ha with a perimeter of 31.76 Kms involving 167 survey stations. Peg marking was done at these stations for taking up the construction of cairns / RCC boundary pillars at a later date at the cost of User Agency.



2. Location :

The non forest land admeasuring 900.55 ha is not a compact block in survey number viz., 1424 (900.55 ha) on a hilly terrain situated just adjacent as well as adjoining to the reserved forest block namely Kancherlamoram Reserve Forest on eastern side notified under section 16 of Madras Forest Act (V) 1882 vide G. O. Ms. No. 180 Dt. 06.04.1893 and

G. O. Ms. No. 593 Dt. 05.12.1900 and U/s 16 of Madras Forest Act (V) 1882. This non forest block is located in the outskirts of Machugaripalli and also by the side of an approach road locally known as Jonnapucheruvu Road and B.Matam Road bounded by survey no.580 in north, Machugaripalli in south, Kancherlamoram RF block in east and Kesapuram, TGP Canal, Mittamanupalli and Cherlopalli in west. This non forest land is surrounded by the other Sy. Nos. viz. 1436, 414, 1454, 1447 and 1497.



During the course of site inspection the interaction with the villagers of Machugaripalli, Kesapuram, Gangayapalli and Karunagiri and other surrounding villages reveals that, this non forest land was having scrub jungle in the past and serving the needs of fuel wood, small timber, MFP, grazing etc. Over a period, due to severe biotic pressure including repeated fire occurrence, the land was denuded and the soil was badly eroded resulting degradation, deforestation and disappearance of wildlife present. At present, the floristic composition of the non forest land consists of the following species

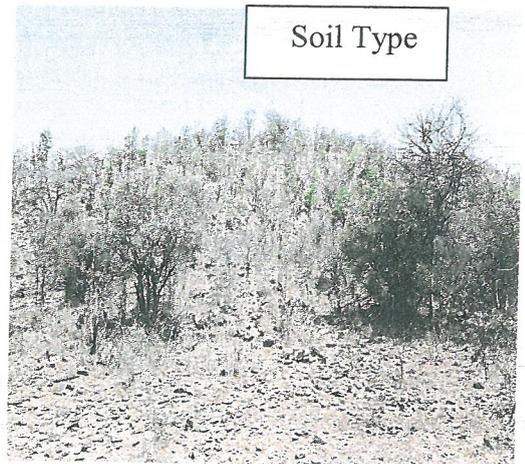
i) Flora

The existing vegetation in the non forest land is as follows.

TREES	<i>Cassia fistula</i> (Rela), <i>Acacia sundra</i> (sundra), <i>Anogeissus latifolia</i> (Yelama), <i>Hardwickia binata</i> (Narepi), <i>Soymida febrifuga</i> (Somi), <i>Azadirachta indica</i> (Neem), <i>Sterculia urens</i> (Thapasi), <i>Strychnus potatorum</i> (Chilla), <i>Mornida tinctoria</i> (Maddi), <i>Webera corymbosa</i> (Kommi)
HERBS	<i>Cissus quadrangularis</i> (Nalleru)
SHRUBS	<i>Zizyphus jujube</i> (Regi), <i>Zizyphus xylopyrus</i> (Gotika), <i>Zizyphus oenoplea</i> (Parika)
GRASSES	<i>Cymbopogon coloratus</i> (Bodha grass), <i>Cymbopogon contortus</i> (Kasi grass)

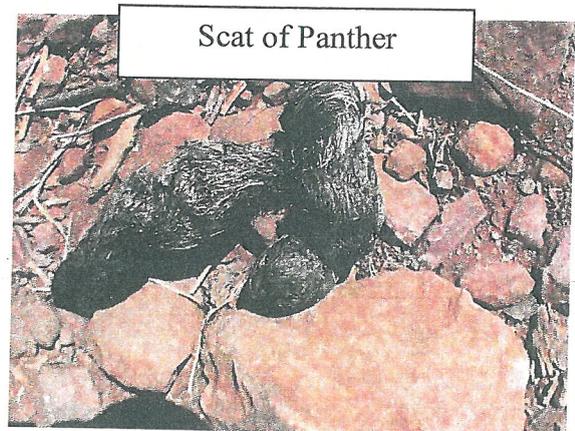
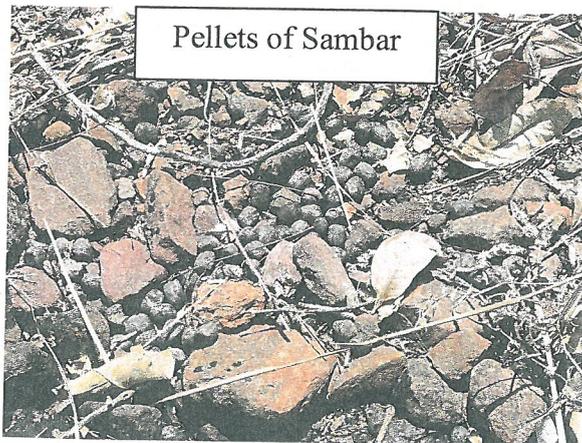
Both topographical and edaphic factors of the soil are as follows.

- i) Soil & Soil profile : Red gravel soil
- ii) Slope : 20-30%
- iii) Rocks : Shale sediment
- iv) Aspect : West
- v) Elevation : 310 mtrs
- vi) Drainage : Good
- vii) Density : 0.2



ii) Fauna

In addition to the above flora, the wildlife present in the area based on the evidences available comprises of Panther, Wild dogs, Sambar, Chowsingha, Sloth bear, Porcupine, Hare, Wild boar etc., and avifauna such as Red Vented bulbul, Blue jay, Myneh, Bablers, Coco, etc., The wild animals including the birds mainly feed on *Zizyphus jujuba*, *Zizyphus xylopyrus*, *Cassia fistula*, *Azadirachta indica*, etc.



In order to develop or transform the non forest land into forest land according to the normal standards of a 'Forests' the reasons analyzed above for the denudation and degradation of the land and decline of wildlife are taken into consideration and the following developmental measures are proposed to be taken up as part of Compensatory Afforestation based on the field data annexed. The financial allocations are also shown as against each item for the entire project period.

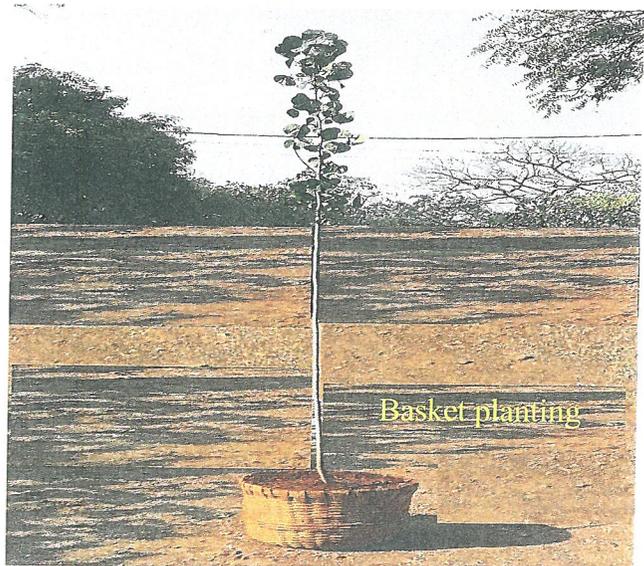
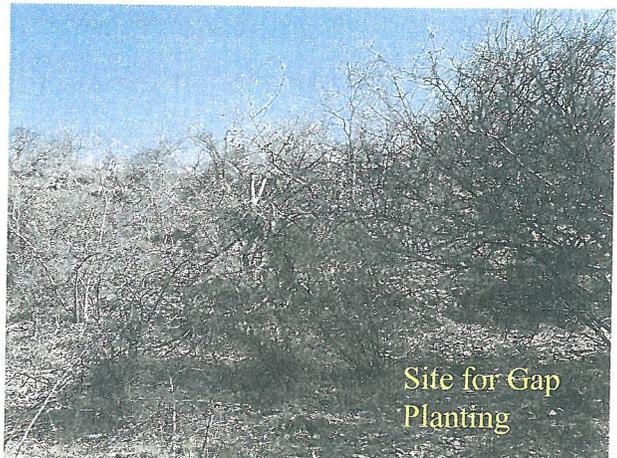
In order to improve the non forest land, it is proposed to take up improvement works for the betterment of existing natural growth and adopt necessary measures for artificial regeneration.

I) Afforestation measures :

A) ARTIFICIAL REGENERATION :

I) Gap Planting :

After observing the field conditions, it is proposed to plant on an average 20 tall plants per hectare, raised in 14"x20" size bags and having more than 2 mts height in one meter cube pits. It is also proposed to dig staggered trenches wherever possible and digging of 3 nos. of 0.45 cube pits in the staggered trenches. Planting will be taken up after refilling the pits with imported fertile soil as the area is degraded over a period of time and moreover the soil percentage is also less. Because of low rain fall of the area and poor water holding capacity of the soil, a provision is made to water the seedlings planted through pot watering or any other appropriate method initially for a period of three years or till they are established fully. Planting will be taken up in staggered trenches as explained above or any other appropriate alternate technique viz., basket plants. In addition to the planting activity, it is also proposed to take up the seed dibbling on the mounds of the staggered trenches and also in the bushes wherever possible with good quality seeds having better germination capacity to improve the growing stock. The seed rate proposed to be adopted



is around 10 Kgs of native species per hectare. The plantations raised as indicated above will be maintained for 10 years with a total financial outlay of Rs. 202.860 lakhs as shown below.

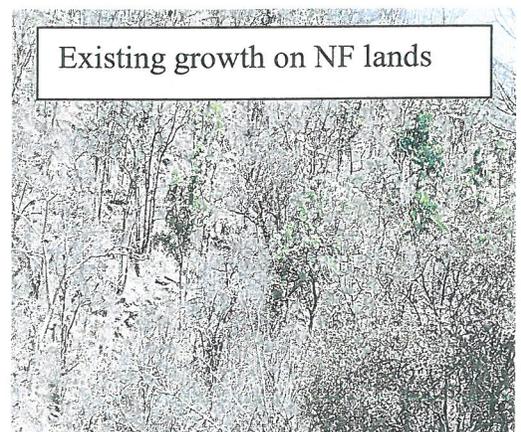
Sl. No.	Name of the component / Sub component	Physical	Average unit rate (Rs. In lakhs)	Financial (Rs. In lakhs)
1	Planting (20 plants per hectare)	100 Ha	2.028	202.860

(a) As per the guide lines of National afforestation programme funded by NAEB, MOEF, GOI there is provision for adopting 25% of the planting cost additionally over the unit cost when the treatment of problem lands is involved and also applicable when improved technology is used. Since the non-forest lands proposed for afforestation are the most problematic lands, it is proposed to adopt the similar provision.

B) NATURAL REGENERATION :

i) Tending operations for improvement of existing Natural Growth :

Tending and silvicultural operations such as pruning, singling, soil working, weeding, climber cutting, removal of parasitic plants, removal of obnoxious weeds, application of FYM / Vermi compost etc are required to be taken up for improving the existing natural growth. Hence such tending operations are proposed over an area of 500 ha with a total financial outlay of Rs. 167.89 lakhs by adopting an average unit cost of Rs. 0.275 lakhs per hectare as per the current FSR.



C) PROTECTION & CONSERVATION MEASURES :

i) Legal Protection

As soon as the non forest land is mutated in favour of the AP Forest Department necessary proposals will be submitted to the Government

for declaring the entire area of 900.55 ha initially as 'Protected Forests' under section 24 of AP Forest Act 1967 and subsequently as 'Reserved Forests' under section 15 of AP Forest Act 1967 to provide legal protection to the land.

ii) Protection from **Biotic Interference**.

The main threat to the non forest land proposed for CA is from the villagers of surrounding villages and their cattle. In order to protect the land from the villagers, there is an absolute need to prevent the entry of villagers and graziers into the land by erecting a suitable fence all around and also demarcating the boundary with boundary pillars to prevent encroachments. Similarly there is also an absolute need for protecting the land from fire as it is a matter of serious concern for the forest development.

In the light of it the following measures are proposed to be taken for offering a full protection to the land.

a) **Protection of Soil from erosion & Conservation of moisture :**

In this land there are about 56 streams and continuous contour trenches are existing. It is proposed to take up additionally peripheral trenches (WAT) over a length of 10.2 Kms and protection wall over a length of 10 Kms.

It is also proposed to erect chain link fencing all along the border besides digging of WAT.



b) **Water Harvesting :**

As the water is life for plants as well as animals it is proposed to conserve the available moisture by all possible means. Based on the average rainfall of this area (600 mm) it is estimated that a quantum of 21.6 lakh cubic meters of water will be available for harvesting in the entire area of 900.55 ha. To conserve this moisture / precipitation it is proposed to take up construction of MPT & Percolation Tanks (5 Nos), 15 Nos. Check Dams, Dug out ponds (10 Nos), 200 Nos. Rock fill dams (2400 cum) and 70 Nos gully

sunken pits with a total financial outlay of Rs. 501.414 lakhs as per the details shown in the table given below, duly keeping in view the circular instructions issued by the Prl. Chief Conservator of Forests, Andhra Pradesh, Hyderabad vide Circular No. 5 / 2002 / PMU – I / 3, Dated : 23-08-2002 and Circular No. 5-A / 2002 / PMU – I / 3, Dated : 18-09-2002.

Sl. No.	Name of the component / Sub component	Physical	Average unit rate (Rs. In lakhs)	Financial (Rs. In lakhs)
1	Peripheral Trench / WAT of size (3 + 1.5) / 2 x 3 Mts	10.2	20.207	206.114
2	Construction of Protection Wall for fencing (Rmts)	10000	0.009	94.500
3	Percolation Tanks / MPTs	5	3.000	16.260
4	Cement Check Dams	15	8.000	132.400
5	Digging of Dugout ponds	10	0.500	5.250
6	Construction of RFDs	200	0.150	34.808
7	Creation of sunken gully pits	70	0.107	8.025
8	Maintenance of sunken gully pits	70	0.050	4.060
	Total :-			501.414

c) Protection from Fires :

Since this non forest land situated just adjoining the cluster of villages, naturally it will have severe threat of fire occurrence either intentionally or accidentally. Especially during summer the fire occurrences will be more predominant as the temperature raises beyond 45⁰ C coupled with hot winds. The dry and hot seasons spread over 6 months from January to June and especially during this period fire causes enormous damage. Hence fire protection measures are very much essential. As a part of this it is proposed to construct fire walls apart from creation and maintenance of fire lines wherever required to control the ground fires. For preventing fires it is proposed to engage skilled fire watchers who are to be equipped with fire

extinguishing balls in required number especially during the peak summer season along with other equipment. The abstract on the financial outlay is furnished hereunder.

Sl. No.	Name of the component / Sub component	Physical	Average unit rate (Rs. In lakhs)	Financial (Rs. In lakhs)
1	Construction of fire stone wall	7 KM	10.562	78.158
2	Purchase of Fire fighting equipments	50	0.250	13.525
3	Establishment of Fire Base Camp	1	10.000	10.000
4	Fire protection watchers	30	0.660	48.555
5	Purchase of tents for camping in fire prone areas	10	0.500	5.250
6	Creation fire line to a width of 9 Mts	45	0.271	12.601
7	Maintanance of fire line to a width of 9 Mts	70	0.072	6.831
	Total :-			174.920

d) Protection from Encroachers :

In addition to the legal protection, there should be a permanent demarcation by way of providing fence and also constructing RCC boundary pillars to act as physical barriers to offer protection from illegal encroachments and tress pass. Hence it is proposed to construct 1750 boundary pillars @ one for every 20 mts with the financial outlay of Rs. 215.885 lakhs.

In addition to it, the details of the fencing cost are as shown below.

Sl. No.	Name of the component / Sub component	Physical	Average unit rate (Rs. In lakhs)	Financial (Rs. In lakhs)
1	Chain link fencing against grazing by outside cattle. (Rmt)	10000	0.008	80.000

e) Protection and Conservation of Wildlife :

The non forest land proposed for compensatory afforestation is situated in the existing Tiger corridor between Seshachalam and Nallamalai tracts. As already mentioned above the wildlife present in the non forest land includes Panther, Wild dogs, Sambar, Chowsingha, Sloth bear, Porcupine, Hare, Wild boar etc. In order to protect and conserve them, it is proposed to take up the necessary protection and conservation measures such as planting fruit bearing plants like *Syzygium cumini*, *Ficus species*, providing salt licks, water holes, saucer pits, creation of water source, engaging wildlife protection watchers from the local youth etc. with a total financial outlay of Rs. 172.218 lakhs. The component wise break up is shown below.

Sl. No.	Name of the component / Sub component	Physical	Average unit rate (Rs. In lakhs)	Financial (Rs. In lakhs)
1	Creation and Maint., of water holes / saucer pits	20	0.110	2.200
2	Providing saltlicks	1000	0.005	7.969
3	Wild Life Trackers	6	0.685	100.788
4	Seed dibbling / seed broadcasting of seeds of species useful to wildlife	800	0.066	61.261
	Total :-			172.218

f) Protection and Management of the Non Forest land :

As repeatedly emphasized, ensuring full protection of non forest land is of prime importance and it requires sufficient man power to achieve it. As the area of non forest land is mostly with hilly terrain many locations are not easily accessible and approachable. Unless they are made approachable they cannot be managed scientifically. Hence to make them approachable it is proposed to lay approach roads at appropriate locations. In order to create a separate and dedicated work force for offering protection, it is proposed to employ the local youth to establish required number of base camps and check posts at strategic locations after equipping them fully.

In view of the above, it is proposed to form an approach road over a length of 5 Km in plain area and 2.5 Km in hilly area with a provision for their maintenance in the subsequent years.

It is proposed to take up construction of afforestation monitoring office at Onipenta for effective monitoring.

It is proposed to engage Technical and Non Technical staff including Data Entry Operators to support the office functioning besides requirement of separate afforestation staff with residential facilities. In the field, construction and maintenance of Base camp shelters, construction of watch towers and inspection huts for the field staff is very much essential to safe guard the activities of the compensatory afforestation. Amenities like Digging of bore wells cum solar powered motor pumps, Tents, including infrastructure facilities are also essential. Hence proposed.

In order to garner the support of surrounding villagers who happened to use the land till now, it is very much essential to propose entry point activities to win the hearts of the people and also to bring awareness of the environment in the minds of the people. Thus we can minimize the man-animal conflict in the vicinity of the proposed CA land.

For mobility of the staff in order to manage the forests in a better way and boost up their energies and to save time it is proposed to provide vehicles with POL and maintenance facilities in the project period.

The financial outlay of the various components for the protection and management of the land is furnished hereunder.

Sl. No.	Name of the component / Sub component	Physical	Average unit rate (Rs. In lakhs)	Financial (Rs. In lakhs)
1	Data Entry operators	1	1.500	36.784
2	Technical Assistant	1	1.560	38.255
3	Non Technical Assistant	2	1.440	70.625
4	Construction of afforestation monitoring office at Onipenta	1	50.000	50.000
5	Maintenance of afforestation monitoring office at Onipenta	1	1.000	12.000

Sl. No.	Name of the component / Sub component	Physical	Average unit rate (Rs. In lakhs)	Financial (Rs. In lakhs)
6	Construction of base camp shelter for protection watchers	1	8.000	8.000
7	Maintenance of base camp shelter for protection watchers	1	1.000	47.045
8	Engaging of Watchers for Base camp 5 Nos for each	1	11.000	269.750
9	Amenities to the Base camp protection watchers	1	1.000	24.523
10	Construction of Check post	1	10.000	10.000
11	Engaging of Protection Watchers for Check posts @ 2 Nos. per check post	1	2.640	64.740
12	Purchase of VHF Sets for base camps	1	5.000	5.000
13	Purchase of wireless hand sets	5	0.150	0.750
14	Construction of Watch Towers	1	20.000	20.000
15	Construction of inspection hut for monitoring afforestation activities	1	3.000	3.000
16	Maintenance of inspection hut for monitoring afforestation activities	1	0.500	11.761
17	Borewell cum Solar powered motor pumps	1	10.000	10.000
18	Purchase of Tractor with Tanker	1	20.000	20.000
19	Engaging Drivers for Tractor	1	1.320	32.370
20	POL and Maint. Charges of Tractor	1	1.800	44.141
21	Engaging Drivers for Mobility Vehicles	1	1.440	35.313
22	Purchase and Fixing of Camera traps	10	0.500	5.000
23	Purchase of Digital Cameras	2	1.000	2.000

Sl. No.	Name of the component / Sub component	Physical	Average unit rate (Rs. In lakhs)	Financial (Rs. In lakhs)
24	Purchase of GPS	5	0.200	1.000
25	Purchase of Binoculars / Telescopes for fire monitoring	5	0.200	1.000
26	Approach Roads formation and maintenance	7.5	25.000	196.250
27	Construction of Residential Quarter for Assistant Conservator of Forests	1	20.00	20.00
	Total :-			1039.308

D) METHOD OF EXECUTION :

A control map and treatment map showing all the proposed works as per the site specific requirement will be prepared before their actual execution. In addition to the technical specifications mentioned above for natural and artificial regenerations, while taking up the planting on slopes with suitable species the guidelines issued by the Prl. Chief Conservator of Forests, AP, Hyderabad in Circular No. 6-C / 2006 communicated in reference number 4775 / 2003 / F5, Dt. 25-04-2006 will be scrupulously followed. As per the experience gained over a period unless the peoples participation is ensured in the proposed afforestation works, they may not be successful. Hence to ensure the required cooperation and whole hearted participation from the villagers of the surrounding villages, it is proposed to involve them by forming either a VSS or EDC if not already existing duly following the existing guidelines under the concept of Community Forest Management. For the proposed works which are of high technicality will be executed through tender system. All the compensatory afforestation works proposed to be taken up in the non forest land will be taken up under the direct technical supervision of the Forest Departmental staff specially deputed for this job by providing 30% of his / her total monthly emoluments as an incentive as the work involved is difficult and more strenuous. As the territorial staff are already burdened with the protection of Red sander forests in their

jurisdiction it is proposed to create new posts at all cadres starting from Asst. Beat Officer to Asst. Conservator of Forests to handle the projects related to CA in the district including the present one.

E) AWARENESS CREATION :

The objective of creating environmental awareness among villagers is to motivate the villagers to practice conservation techniques and environment-friendly activities by honing their skill & knowledge and understanding the importance of preserving the natural resources in which they live. And also environmental education for students will enhance the basic knowledge of students increasing their awareness and importance of caring the environment in general and of the natural resources in which they live. For this we need entry point activities like digging of bore wells, LPG gas stove distribution, distribution of fodders seeds, Well repairs, Grain banks, Farm bunds, Cattle vaccination, Solar lamps distribution, Rural infrastructures, School infrastructure etc.

Sl. No.	Name of the component / Sub component	Physical	Financial (Rs. In lakhs)
1	Awareness creation	LS	200.388

F) MONITORING & EVALUATION :

A separate monitoring cell is proposed to be created at Range / Division level with required infrastructure for having constant monitoring and evaluation which helps in successful implementation of the project. The manual of guidelines and accounting procedure on works related to CAMPA will be strictly followed. The prescribed monitoring formats already in vogue will be followed for the purpose of effective monitoring. The financial outlay indicated for monitoring and evaluation is Rs. 77.967 lakhs (3% of the Project cost)

G) Capacity Building of the Stake Holders :

Trainings are required for any project to be successful. Without training it may not be possible to achieve the project objectives. Hence it is required to impart necessary training to all the stake holders including protection watchers, base camp watchers, plantation watchers, forest staff, VSS / EDC members in the field of extinguishing fire, handing of fire-fighting equipment, animal tracking, plantation techniques, water harvesting technology and other related fields. Apart from the trainings exposure visits including study tours also need to be organized for all the stake holders as 'Seeing is believing'. A 5% of the project total outlay is earmarked for this component which comes to Rs. 129.735 lakhs.

H) OVERHEAD COSTS :

For successful implementation of the project 10% of the total project cost is earmarked for meeting the office expenditure and other contingent expenditure related to Electrical bills, communication charges, traveling expenses or any other expenditure required to be incurred for running the day to day administration either at Range level or Division level.

Sl. No.	Name of the component / Sub component	Physical	Financial (Rs. In lakhs)
1	Over heads (10%)	LS	539.415

Total cost of the Project is **Rs. 3502.00 lakhs** for a period of 13 years and per hectare cost is Rs. 3.88 lakh.

B. Swami Vivekananda
08/05/2016
(B. SWAMI VIVEKANANDA)
Forest Range Officer
Onipenta

R.D. Venkateswar
08.05.2016
(R.D.VENKATESWAR)
Sub-Divisional Forest Officer
Badvel

Counter signed

S. Ravi Shankar
08/05/2016
(S. RAVI SHANKAR)
Divisional Forest Officer
Proddatur WL Division

Sl. No	Name of the work	Unit	Unit Rate	2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		2027-28		2028-29		2029-30		Total	
				Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
d	Protection from encroachers																														
1	Construction of Boundary Pillars	Nos	0.105	400	42,000	400	46,200	400	50,820	550	76,865	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1750	215,885
2	Chain link fencing against grazing by outside cattle	Rmt	0.008	10000	80,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	80,000	
	Sub Total :				122,000		46,200		50,820		76,865		0		0		0		295,885												
e	Protection and Conservation of Wild Life																														
1	Creation and Maint. of water holes / saucer pits.	Nos	0.110	20	2,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	2,200	
2	Providing satellites	Nos	0.005	100	0,500	100	0,550	100	0,605	100	0,666	100	0,732	100	0,805	100	0,886	100	0,974	100	1,072	100	1,179	0	0	0	0	0	1000	7,969	
3	Wild Life Protection Watchers	Nos	0.685	6	4,110	6	4,521	6	4,973	6	5,470	6	6,017	6	6,619	6	7,281	6	8,009	6	8,810	6	9,691	6	10,660	6	11,726	6	12,899	6	100,788
4	Seed dibbling / seed broadcasting of seeds of species useful to	Ha	0.066	200	13,200	200	14,520	200	15,972	200	17,569	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61,261	
	Sub Total :				20,010		49,591		21,550		23,705		6,750		7,424		8,167		8,984		9,882		10,870		10,660		11,726		12,899		172,218
f	Protection and Management of the Non-Forest Land																														
1	Data Entry operators	Nos	1,500	1	1,500	1	1,650	1	1,815	1	1,997	1	2,196	1	2,416	1	2,657	1	2,923	1	3,215	1	3,537	1	3,891	1	4,280	1	4,708	1	36,784
2	Technical Assistant	Nos	1,560	1	1,560	1	1,716	1	1,888	1	2,076	1	2,284	1	2,512	1	2,764	1	3,040	1	3,344	1	3,678	1	4,046	1	4,451	1	4,896	1	38,255
3	Non Technical Assistant	Nos	1,440	2	2,880	2	3,168	2	3,485	2	3,833	2	4,217	2	4,638	2	5,102	2	5,612	2	6,174	2	6,791	2	7,470	2	8,217	2	9,039	2	70,625
4	Construction of afforestation monitoring office at Onipenta	Nos	50,000	1	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	50,000
5	Maintenance of afforestation monitoring office at Onipenta	Nos	1,000	0	0	1	1,000	1	1,000	1	1,000	1	1,000	1	1,000	1	1,000	1	1,000	1	1,000	1	1,000	1	1,000	1	1,000	1	1,000	1	12,000
6	Construction of base camp shelter for protection watchers	Nos	8,000	1	8,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8,000
7	Maintenance of base camp shelter for protection watchers	Nos	1,000	0	0	2	2,200	2	2,420	2	2,662	2	2,928	2	3,221	2	3,543	2	3,897	2	4,287	2	4,716	2	5,187	2	5,706	2	6,277	2	47,045
8	Engaging of Watchers for Base camp 5 Nos for each	Nos	11,000	1	11,000	1	12,100	1	13,310	1	14,641	1	16,105	1	17,716	1	19,487	1	21,436	1	23,579	1	25,937	1	28,531	1	31,384	1	34,523	1	269,750
9	Amenities to the Base camp protection watchers	Nos	1,000	1	1,000	1	1,400	1	1,210	1	1,331	1	1,464	1	1,611	1	1,772	1	1,949	1	2,144	1	2,358	1	2,594	1	2,853	1	3,138	1	24,523
10	Construction of Check post	Nos	10,000	1	10,000																								1	10,000	
11	Engaging of Protection Watchers for Check posts @ 2 Nos. per check post.	Nos	2,640	1	2,640	1	2,904	1	3,194	1	3,514	1	3,865	1	4,252	1	4,677	1	5,145	1	5,659	1	6,225	1	6,847	1	7,532	1	8,285	2	64,740
12	Purchase of VHF Sets for base camps	Nos	5,000	1	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5,000
13	Purchase of wireless hand sets	Nos	0,150	5	0,750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0,750	
14	Construction of Watch Towers	Nos	20,000	1	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	20,000
15	Construction of inspection hut for monitoring afforestation activities	Nos	3,000	1	3,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3,000
16	Maintenance of inspection hut for monitoring afforestation activities	Nos	0,500	0	0	1	0,550	1	0,605	1	0,666	1	0,732	1	0,805	1	0,886	1	0,974	1	1,072	1	1,179	1	1,297	1	1,427	1	1,569	1	11,761

Sl. No	Name of the work	Unit	Unit Rate	2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		2027-28		2028-29		2029-30		Total		
				Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	
1	Borewell cum Solar powered motor pumps	Nos	10,000	1	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	10,000	
17	Purchase of Tractor with Tranker	Nos	20,000	1	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	20,000
18	Enganging Drivers for Tractor	Nos	1,320	1	1,320	1	1,452	1	1,597	1	1,757	1	1,933	1	2,126	1	2,338	1	2,572	1	2,830	1	3,112	1	3,424	1	3,766	1	4,143	1	32,370	
19	POL and Maint. Charges of Tractor	Nos	1,800	1	1,800	1	1,980	1	2,178	1	2,396	1	2,635	1	2,899	1	3,189	1	3,508	1	3,858	1	4,244	1	4,669	1	5,136	1	5,649	1	44,141	
20	Enganging Drivers for Mobility Vehicles	Nos	1,440	1	1,440	1	1,584	1	1,742	1	1,917	1	2,108	1	2,319	1	2,551	1	2,806	1	3,087	1	3,395	1	3,735	1	4,108	1	4,519	1	35,313	
21	Purchase and Fixing of Camera traps	Nos	0.500	10	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	5,000	
22	Purchase of Digital Cameras	Nos	1,000	2	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2,000	
23	Purchase of GPS	Nos	0.200	5	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1,000	
24	Purchase of Binoculars / Telescopes for fire monitoring	Nos	0.200	5	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1,000	
25	Formation of Approach Road and Maintenance	Km	25,000	4	100,000	3.5	96,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.5	196,250	
26	Construction of Assistant Conservation of Forest Quarter	No	20,000	1	20,000																								1	20,000		
Sub Total :					280,890		1,27,654		34,444		37,789		41,468		45,514		49,966		54,863		60,249		66,174		72,691		79,860		87,746		1,039,308	
TOTAL :					828,817		428,017		237,419		206,029		107,109		67,670		72,962		80,713		89,029		98,072		106,512		115,566		116,759		2,654,985	
E	Awareness Creation (10%)				78,650		38,590		19,550		16,031		6,489		2,555		3,084		3,859		4,691		5,595		6,439		7,347		7,518		200,368	
F	Monitoring & Evaluation (3%)				24,559		12,841		7,123		6,181		3,213		2,030		2,189		2,421		2,671		2,942		3,195		3,468		4,835		77,967	
G	Capacity building of the stake holders				41,431		21,401		11,871		10,301		5,355		3,383		3,648		4,036		4,451		4,904		5,326		5,779		7,848		129,735	
H	Over Heads (10%)				86,002		62,970		42,963		35,974		25,148		26,618		28,674		31,129		33,808		36,745		39,623		43,190		46,351		539,415	
TOTAL					230,941		135,801		81,507		68,487		40,216		34,587		37,585		41,445		45,621		50,186		54,783		59,784		66,582		847,505	
GRAND TOTAL :					1,059,559		563,818		318,926		274,517		147,325		102,256		110,557		122,166		134,651		148,258		161,295		175,369		183,311		3,602,000	

B. Swami Vivekananda
 (B. Swami Vivekananda)
 Forest Range Officer
 Onipenta

R. D. Venkateswar
 (R.D. Venkateswar)
 Sub Divisional Forest Officer
 Badvel

S. Ravi Shankar
 (S. Ravi Shankar)
 Divisional Forest Officer
 Proddatur WL Division

Countersigned

