



Plantations raised under
CAMPA - AP
2015-16
**MONITORING &
EVALUATION REPORT**

Prepared by:
INSTITUTE OF FOREST BIODIVERSITY, HYDERABAD





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सत्यमेव जयते

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Over the past few years, Government of India supported member states as they stepped up their efforts to build a better, cleaner and more equitable environment. While it was a challenging period, we saw hope in growing action and global commitment to new ways of improving green cover that tackle the environmental and ecological challenges we face. Keeping Environmental and Climate Change issues in mind, developmental activities combined with environmental stability would be achieved by the combined action of greening of patches of open forestlands and wetlands as a compensation process of developmental activities taken up elsewhere in the country.

Compensatory Afforestation Funds Act, 2016 and Compensatory Afforestation Funds Rules, 2018 facilities implementation of Afforestation activities to compensate damages caused by the developmental activities for increasing the green coverall over the territory of the country. Accordingly, mass planting activities were taken up annually by the forest department in the ecologically available areas to meet the demands of the ecosystem stability. Ultimately, this could be quantified by means of storage of the carbon equivalent as per the international commitments of the country. In that line, we brought the government departments and the NGOs on same platform to save the fragile ecosystems.

As you will read in this report prepared by the Institute of Forest Biodiversity, Hyderabad, you may be able to appreciate the positive change in the green cover in the state of Andhra Pradesh achieved by the forest department by their committed action of greening the ecologically available areas in a technically sound manner. Institute of Forest Biodiversity, Hyderabad has taken up the noble work of evaluation of the greened areas under CAMPA scheme implemented by the Forest Department, AP during the years 2009-10 to 2015-16. They have taken their work seriously and extended their technical knowledge in evaluating the plantations established in different parts of the state. It is clear and evident by reading their report that all the essential parameters were taken into consideration for the evaluation process, both statistically as well as technically to arrive at the conclusions on different plantations. Overall performance is appreciable. It is also clear that the environmental challenges would be tackled with these plantation activities to considerable extent.

(N. PRATEEP KUMAR, IFS)



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महानिदेशक
भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद्
डाकघर न्यूफॉरेस्ट, देहरादून-248006
(आई.एस.ओ. 9001 : 2008 प्रमाणित संस्था)
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(An ISO 9001:2008 Certified Organisation)

MESSAGE

It gives me immense pleasure in writing this message on such a wonderful work carried out on Monitoring and Evaluation of CAMPA (Compensatory Afforestation fund Management and Planning Authority) plantations in Andhra Pradesh by the Institute of Forest Biodiversity, Hyderabad. The CAMPA Scheme in Andhra Pradesh State was introduced in the year 2009. In the context of many essential developmental and compulsive projects such as the construction of dams, mining and establishment of appropriate industrial infrastructures like laying of roads/power generation etc. which requires for diversion of forest lands. The CAMPA scheme meant to promote afforestation and regeneration activities as a way for compensating the forest land diverted for non-forestry purposes.

Monitoring and evaluation is one of the essential components during implementation of any scheme to know achievements of the objects aimed at and to have an accurate knowledge about the output delivered at the ground level.

The Institute of Forest Biodiversity, Hyderabad has signed a Memorandum of Understanding (MoU) with Andhra Pradesh Forest Department for carrying out monitoring and evaluation of different plantations raised under CAMPA for the year 2009-16. The institute collected required information and data with the co-operation of the field staff and officials of A.P. Forest Department. Finally, the reports have been prepared with sincere efforts and valid inputs made by the scientists and officials of the IFB.

In this context, I convey appreciation to all those who extended their cooperation in the preparation of reports and I am hopeful that these reports would be of immense benefits in managing the plantations of A.P. in the times to come.

(Dr. Suresh Gairola, IFS)

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार की एक स्वायत्त परिषद्

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FOREWORD

The Andhra Pradesh Forest Department sanctioned a consultancy project to Institute of Forest Biodiversity, Hyderabad entitled "Monitoring and Evaluation of CAMPA activities carried out during 2013–14 in the state of Andhra Pradesh".

A detailed sampling methodology was designed to select 10% of the plantation area for conducting a detailed survey, monitoring and evaluation exercise such that it represents all the forest circles and plantation models adopted in a given year. In total, the expert team of Institute of Forest Biodiversity identified and monitored the total extent of 5037.21 ha. under CAMPA plantation during the year 2013-14.

A team of researchers was deployed for the task to complete the survey and monitoring of the selected plots. The sample plantation plots that were monitored represents 17 forest divisions in 7 different forest circles of Andhra Pradesh state. This final report constitutes observations and findings of the monitoring and evaluation carried out by the Institute.

In this connection, I acknowledge all those involved in the preparation of the report and I am sure that this report would be of immense help for better management of plantations of Andhra Pradesh in general and the plantations raised under CAMPA in particular in future.



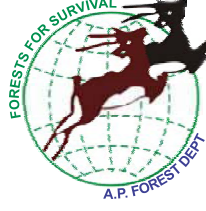
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The main purpose of establishing the Andhra Pradesh State Compensatory Afforestation Fund Management and Planning Authority (CAMPAA) is enhancement of forest and tree cover and conservation and management of wildlife by utilizing funds received towards Compensatory Afforestation (CA), Net Present Value (NPV) etc., in compliance to the conditions stipulated by the Central Government while according approval under Forest (Conservation) Act, 1980 for non-forest uses of the forest lands. In this context, Monitoring and Evaluation plays a vital role and it is one of the essential components during implementation of any scheme which is imperative to know the achievements of the objects aimed at and to have the precise knowledge about the output delivered at the ground level. Andhra Pradesh Forest Department has assigned the Institute of Forest Biodiversity (IFB), Hyderabad, the work of Monitoring and Evaluation of CAMPAA scheme works carried out for the period from 2009-10 to 2015-16 in the state of Andhra Pradesh.

It is quite evident that the Institute of Forest Biodiversity has put in lot of efforts and collected the required information and data with the co-operation extended by the field staff and officials of A.P. Forest Department. I am sure that the reports prepared with sincere efforts and valid inputs contributed by the IFB with the assistance rendered by the frontline staff and officers of Forest Department will help implementation of suggestions and resolve field issues from time to time to improve green cover of Andhra Pradesh. In this connection, I acknowledge the sincere efforts put in by all those involved in the preparation of the report and I am sure that this would be contributing a lot for better management of forests of Andhra Pradesh thereby ensuring the improvement of the flora and fauna immensely in the state of Andhra Pradesh.

(Dr. S. S. SREEDHAR, IFS)

PREFACE

With the forest cover of 23% of Geographical area of the country, forests in India comprise of diverse forest types including protected areas like National Parks and Wildlife Sanctuaries. In India, forest meets the livelihood needs of people living in and adjoining forests in about 1,73,000 villages. Forest act as carbon sinks, and regulators of water regime. Many development projects and industrial projects such as the construction of dams, mining and construction of industrial infrastructure for laying of roads / electricity etc. requires diversion of forest land. Compensatory Afforestation Fund Management and Planning Authority (CAMPA) is meant to promote afforestation and regeneration activities as a way of compensating for forest land diverted for non-forest use. The Hon'ble Supreme Court on 10th July 2009 issued orders that there will be a Compensatory Afforestation Fund Management and Planning Authority (CAMPA) as National Advisory Council under the chairmanship of the Union Minister of Environment & Forests for monitoring, technical assistance and evaluation of compensatory afforestation activities and also approved the guidelines for the activities by the state CAMPA. The state CAMPA, Andhra Pradesh was constituted as government authority under the State Forest Department as per the guideline issued by Ministry of Environment & Forests on 02nd July 2009. Its prime task is to regenerate and increase the natural forests and building up the institution engaged in afforestation and related activities in the state.

The short-term objectives of the scheme were regeneration and eco-development of degraded forests, augmentation of fuel wood, fodder and grasses from the regenerated areas, securing people's participation in planning and regeneration to ensure sustainability and equitable distribution of forest produce, promotion of agroforestry, development of common property resources, promotion of fuel saving devices, conservation and improvement of Non-Timber Forest Produce (NTFP), developing water resources, extension of improved technologies related to afforestation, rehabilitation of problem lands and employment generation. The long-term objectives were conservation of natural resources through involvement of people while simultaneously bringing about socio-economic development of the people living in and around the forest areas.

The programme is being implemented in the state of Andhra Pradesh from 2009 onwards and time has come for its evaluation, for improving the performance, and also to judge the suitability and the benefits of the programmes. The programme is continuously monitored and evaluated internally from time to time by the officials of Andhra Pradesh state forest department. The performance of the programme has been assessed from the angles of ecological impact and sustainability, social efficiency and effectiveness. General recommendations for consideration at policy level as well as specific recommendations for improvement of the scheme at implementation level have been given. It is hoped that this would be useful to the planners as well as managers for carrying forward the programme.



(Dr Ratnaker Jauhari, IFS)

Conservator of Forests
IFB, Hyderabad

ACKNOWLEDGMENTS

The success and outcome of this project entitled "Monitoring and Evaluation of CAMPA plantations in Andhra Pradesh" required a lot of guidance and assistance from many people. I felt heartfelt coordination, cooperation, assistance rendered by the all concerned officials of APFD.

I acknowledge my sincere gratitude to Shri N. Prateep Kumar, IFS, Principal Chief Conservator of Forests & HoFF; former PCCF & HoFFs' Shri P. Mallikarjuna Rao, IFS and Dr Md. Ilyas Rizvi, IFS of APFD for sanctioning/providing this consultancy.

I acknowledge gratitude to Dr V. Baskar Ramana Murthy, IFS, PCCF (CAMPA) for encouraging and guiding us on monitoring and evaluation. My due acknowledgments also to APCCF (CAMPA), Dr R. P. Khajuria, IFS and present Dr S. S. Sreedhar, IFS; and Smt. G. Krishna Priya, Dy. CF who has issued guidelines for monitoring and evaluation and providing all logistic support to field officials. Also thanks to, Divisional Forest Officers, Sub Divisional Forest Officers, Forest Range officers, Deputy Range officers, Foresters and Forest Guards of the department who extended their cooperation on field data collection and facilities provided during the field study. Their contributions are gratefully acknowledged for assisting our Technical Team of IFB, Hyderabad in the process of collecting data and providing all the necessary information for field study.

Special thanks go to Dr Ratnaker Jauhari, IFS, who lent his support in the process of monitoring and evaluation of CAMPA plantations and drafting of the final report.

A special thanks to Shri Arulrajan, IFS, Dy. CF who is the Project co-ordinator had put greater effort in gathering field data by visiting all over the Andhra Pradesh Forest divisions and processing, compilation and preparation of the final report.

I convey my thanks to the Scientists, Dr G. R. S. Reddy, Dr Pravin H. Chawhaan, Dr S. Pattanaik, Dr Abha Rani, Dr Deepa M., Shri M. B. Honnuri, and Shri Pankaj Singh for their valuable contribution on writing this report.

Heartfelt thanks to the Shri A. Kishore, Technical Assistant and Shri D. Siva Satya Prasad, Technician for their utmost patience and diligent efforts in the preparation of final reports.

In addition, I also convey thanks to Shri C. S. Pasla, Local Field Assistant who helped us in the supply of manpower for gathering field data, Technicians, Shri G. Kiran and Shri M. Sagar for collection of field data from different sources, including plantation sites and also to, Shri M. Ganesh, Technical Assistant, Technicians, Shri G. Vinay Goud, Shri M. Yashwanth Reddy and Lower Division Clerks, Shri D. K. Shashank, Ms K. Rupa, Ms N. Archana, Shri V. Bhanu Prakash and Shri A. Rakesh for the compilation of data.

Last but not the least; I would like to thank all the team members of Institute of Forest Biodiversity, Hyderabad for carrying out all the activities of the assignments diligently and giving the report in a final shape. I extend my sincere thanks to FRI, Dehradun and Panjab Forest Department for their support on technical aspects and also other government sources which provided information about official data like FSI, APFD etc.


D. Jayaprasad, IFS
Director
IFB, Hyderabad

ABBREVIATIONS

CAMPA	Compensatory Afforestation Fund Management & Planning Authority
ANR	Aided Natural Regeneration
NTFP	Non-Timber Forest Produce
CPT	Cattle Proof Trench
SMC	Soil and Moisture Conservation
GPS	Global Positioning System
Ha	Hectare
SCI	Selection cum Improvement
CBO	Cut- Break operation
NRG	Natural Regeneration
CA	Compensatory Afforestation
NPV	Net Present Value
INDC	Intended Nationally Determined Contributions
ICT	Information and Communication Technology
NTHS	Non-Timber hardwood Species
TOF	Tree Outside Forest

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CHAPTER-1

INTRODUCTION

The Andhra Pradesh, diverse land that has geographically widely spread from Eastern Coastal region to the Eastern Ghats covering all kind of topographic and climatic conditions to promote edaphic and biotic diversity. Politically, by Reorganization Act, 2014, the erstwhile State of Andhra Pradesh has been bifurcated into two States, Andhra Pradesh & Telangana by June 2014. Andhra Pradesh is the 8th largest state in India having the geographical area of 1,62,760 km², comprising 4.95% land area of the country situated in the south-Eastern part of the country. The State lies between 12°37' N to 19°55' N latitude and 76°45' E to 84°46' E longitude and is bordered by Odisha & Chhattisgarh in the north, Telangana & Karnataka in the west and Tamil Nadu in the south. The Bay of Bengal is on the East to the State. After Gujarat, the State of Andhra Pradesh has the second-longest coastline among the States of India. Physiographically, the State can be divided into Coastal Andhra and the comparatively drier Rayalaseema regions. The major peninsular rivers the Godavari and Krishna along with the Pennar support the state of AP.

Climate and Rainfall

Living and non-living are highly depended on the local climatic conditions existing in the state. Generally, dry and humid climate is widely spread across the state where the precipitation ranging from 1,100 millimetres to 1,250 millimetres, is received mainly by the southwest monsoon from June to September every year. The annual temperature ranges from 15°C to 45°C and the humidity is highly favouring for the growth of multiple organisms.

Geology, Rock and soil:

Geographically, Andhra Pradesh has a special kind of geography where multiple topographic landscapes ranging from Eastern mountain ranges to sandy coast lands on one side and it she possesses the southern Indian driest place to evergreen forests on other sides of the state. The geological formations of the state are:

- (1) The unclassified Archaean crystalline rocks that act as the base for the gift of granting the granite rocks and at the same time the Eastern Ghats are fully filled with granulite suites (khondalites and kodurites),
- (2) The Middle-Upper Proterozoic the Cuddapahs and its equivalents;
- (3) The Mesozoic coal-bearing Gondwana strata,
- (4) Eocene lava flows (the Deccan traps) and
- (5) The semi-consolidated or unconsolidated tertiary and recent rocks.

The petrological diversity combine with multiple weathering factors ends up in providing a variety of fertile soil groups and soil types ranging from Red soil, Black soil, Alluvial soil, Laterite soil and Saline/Alkaline soils distributed all over the state. The growth medium decides the productivity of not only any flora and fauna but also the other economic activities.

Population and Livestock

A number of rivers drains the State namely the might river Godavari, Krishna and living Penna. As per the 2011 census, demographic status is immense where she supports 49.39 million human population that is about 4.08% of the Indian population. The urban & rural population are perfectly ratio by nature itself to maintain the productivity of the primary and other sectors i.e. she has got 29.58% in the rural area mostly into the farming sector and 70.42% in urban to contribute industries and other sectors. The Indigenous population is 5.32% and are widely distributed in natural forest and nearby forested areas. The population density of the State is 308 persons per sq. km, which is lower than the national average. As per the 19th Livestock census, 2012 she has harboured 56.10 million live stock inclusion of present Telangana state.

Classification of Forests in Andhra Pradesh

The State of Andhra Pradesh has gifted with boundless locality factors i.e. climatic, topographic, edaphic and biotic which support the long-living greens of the world i.e. forests. These abiotic factors supports a variety of tropical and sun tropical forests forest groups. The State has a variety of vegetation types with changing varied topography ranging from the hills of Eastern Ghats and Nallamala to the shores of Bay of Bengal, supports a variety of ecosystems.

The forests in the State broadly divided into four major biotic provinces viz Deccan Plateau, Central Plateau, Eastern Highland and the East Coastal Plains. As per the Champion & Seth Classification of Forest Types (1968), the forests in Andhra Pradesh belong to Five Type Groups, which are further categorized into Twenty (20) Forest Types. Eastern Ghats region of the State is home to dense tropical forests, while the vegetation becomes sparse as the Ghats give way to the Deccan Plateau, where shrub vegetation is more common. In general, the forest vegetation of Andhra Pradesh broadly grouped into seven forest types.

- i. Tropical Semi-evergreen
- ii. Tropical Moist Deciduous
- iii. Tropical Dry Deciduous
- iv. Tropical Dry Evergreen
- v. Tropical Thorn

- vi. Scrub and Savanna
- vii. Littoral and Swamp forests

Tropical Semi-evergreen Forests

It is the intermediate type between the Tropical wet evergreen forests and Tropical Moist Deciduous Forests. The dominant trees include both evergreen and moist deciduous trees- the former predominating. The general canopy of trees is less dense, as compared with evergreen forests of Western Ghats. This type occurs in small pockets in valleys near the banks of streams and hills at above 800m where the climatic conditions are favourable with plenty of humus and moisture in the soil distributed in Visakhapatnam district, Borra Blocks in Vijayanagaram district, Tekkali and Pathapatnam of Srikakulam district.

Tropical Moist Deciduous forests

Deciduous trees of the somewhat irregular top storey typically dominate it. Evergreen trees predominantly occupy lower storey. This type occurs in a region with a rainfall of 1,000 mm and above at an altitude of 600m. This type of forests can be subdivided into three categories

- a) North Indian tropical moist deciduous forests (sal forests)
- b) South Indian tropical moist deciduous forests and
- c) Southern tropical moist deciduous riverine forests. Bamboos, canes, and epiphytes are restricted to certain localities.

Tropical Dry Deciduous Forests

The number of species is less as compared to evergreen, semi-evergreen and moist deciduous forests. Canes and palms are absent. Epiphytes and ferns are inconspicuous. Climbers are comparatively few and not luxuriant. Herbaceous vegetation is more. Rainfall ranges between 800 mm to 1300 mm. This type can be subdivided into three categories, i.e. Southern dry mixed deciduous forests, Dry teak bearing forest and Dry red sanders-bearing forest. Southern dry mixed deciduous forests occur over the plateau regions of the Andhra Pradesh.

Tropical Dry Evergreen Forests

Trees are evergreen with short boles and spreading crown. This type occurs in the Coromandel plains of Andhra Pradesh, mainly in Sriharikota of Nellore, Guttikonda reserved forest of Guntur, Kondapalli of Krishna and Mamandur valley of Chittoor. The rainfall regime is erratically received from the early part of S-W monsoon and depressions and cyclones formed during Northeast monsoon period.

Tropical Thorn Forests

An open, low forest of low rainfall areas, in which thorny, hard wooded species predominate and found in parts of Anantapur,

Cuddapah, Kurnool, and Guntur usually confined to the base of the hills, bordering villages and along the much disturbed and degraded dry deciduous forests.

Scrub and Savanna

Scrub: Scrub is generally confined to the foothills, fences and along the fringes of degraded forests. It is determined by factors like edaphic conditions, climate and biotic pressure in forests. It occupies mainly the drier parts of Andhra Pradesh, especially in districts of Anantapur, Chittoor, Cuddapah, Prakasham, Kurnool, Guntur, Nellore and Srikakulam. The vegetation presents a very open appearance and distinctly covered by widely spaced small trees or bushy shrubs. In this type, there are two categories, viz. (a) the permanent vegetation occurring throughout the year and (b) the temporary vegetation consisting of the annuals growing mainly during the short rainy season. Corresponding to this, the area represents two distinct seasonal variations.

1. The permanent xerophytic vegetation consisting of trees and shrubs, which flower in the summer and winter seasons, when the soil is devoid of the ground cover.
2. In the rainy season, the vegetation is at its best and the soil which is otherwise bare between the trees and shrubs is covered by a vivid-green carpet of temporary vegetation. The flowers and fruits in a short time and disappear soon after the surface layer of soil dries up as winter sets in.

Savannah

Depending on the mode of degradation, fire or grazing, the forest shows deterioration; savanna (savannah) type forms where fires are frequent and stimulates grass growth. The heavy browsing leads to scrub and thicket type of degradation where the palatable species disappear leaving only thorny species as the grasses are eliminated.

Littoral Forests

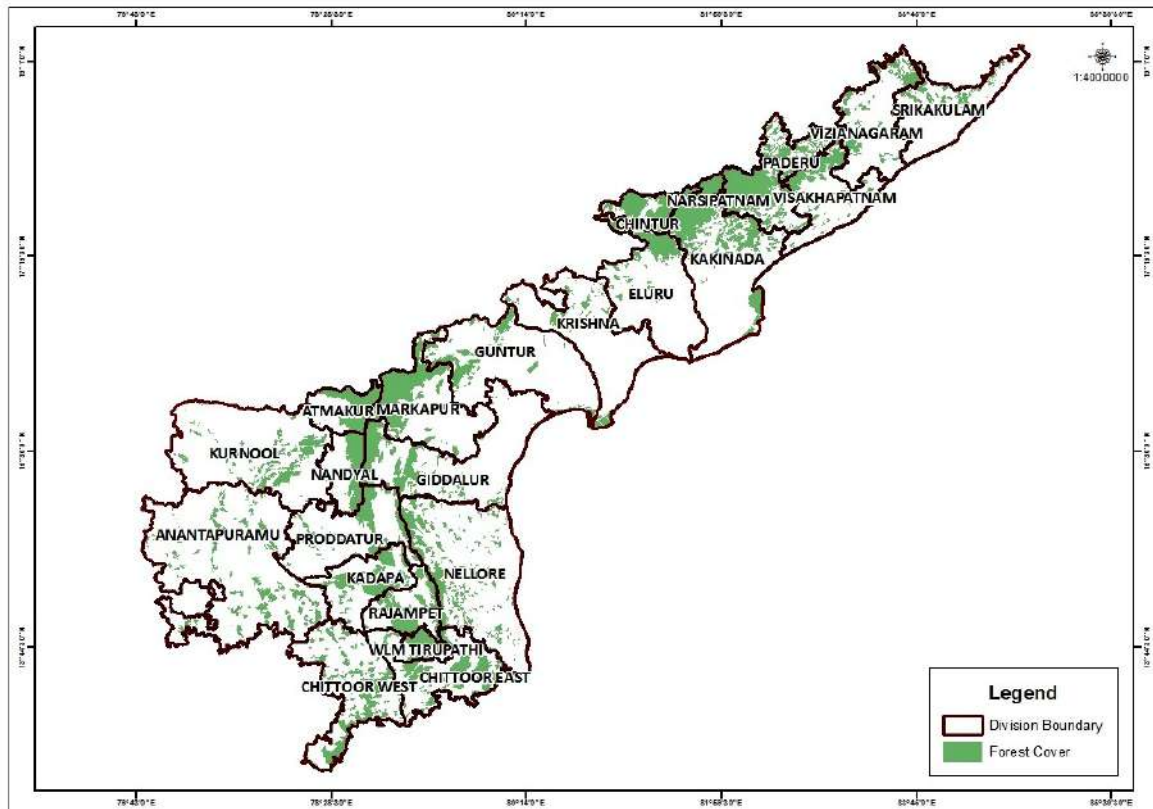
Found as a narrow belt on sandy beaches above high-water level. Littoral forests are open formations of tall, sturdy trees with limited undergrowth. They are capable of withstanding the fury of monsoons and cyclones and act as windbreaks protecting the shores.

Tidal swamp forests

The vegetation of tidal swamp forests is popularly known as Mangroves. As dense formations well adapted to salinity, tidal fluctuations and marshy soil, Mangrove Forest's interphase between land and marine ecosystems.

*Source: Forest Types of Andhra Pradesh (Dr Chintala Sudhakar Reddy, NRSC, Hyderabad)

FOREST COVER DISTRIBUTION IN ANDHRA PRADESH



*Source: Forest Types of Andhra Pradesh (Dr Chintala Sudhakar Reddy, NRSC, Hyderabad)

Table 1. Land use pattern of the Andhra Pradesh

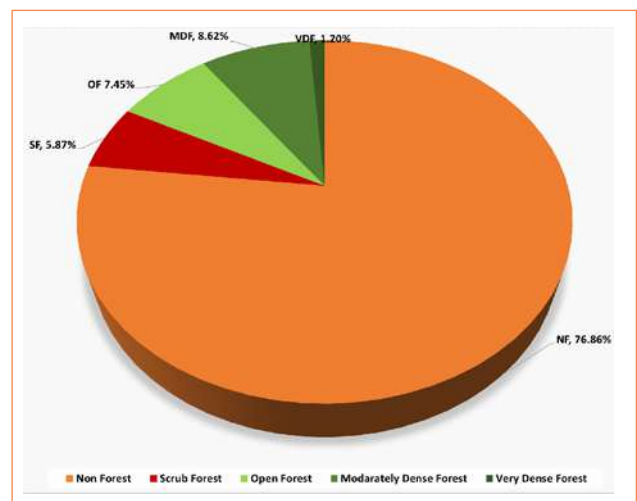
Land use Types	Area (in 000' Ha)	Percentage
Total Geographical Area	16,020	
Reporting Area for Land Utilization	16,020	100.00
Forests	3,493	21.80
Not available for Land Cultivation	3,436	21.45
Permanent Pastures and other Grazing lands	212	1.32
Land Under misc. tree Crops & Grooves	160	1.00
Culturable Waste Land	392	2.45
Fallow Land other than Current Fallows	792	4.94
Current Fallows	1,087	6.79
Net Area Sown	6,448	40.25

*Source: State of Forest Report 2017

Forest Cover

The forest cover in the state is 28,147 sq. km. which is 17.27% of the state's geographical area. In terms of forest canopy density classes, the state has 1957 sq. km. under Very Dense Forest, 14,051 Sq. km under moderately dense forest and 12,139 Sq. Km as Open Forest.

Figure – 2 Types of Forests in Andhra Pradesh



The State has a variety of vegetation types rich in flora and fauna. The forests in the State can broadly be divided into four major biotic provinces viz Deccan Plateau, Central Plateau, Eastern Highland and the East Coastal Plains. As per the Champion & Seth Classification of Forest Types (1968), the forests in Andhra Pradesh belong to five Type Groups, which are further categorized

into 20 Forest Types. Eastern Ghats region of the State is home to dense tropical forests, while the vegetation becomes sparse as the Ghats give way to the Deccan Plateau, where shrub vegetation is more common.

Recent years due to evergreen growth of population both human and cattle, the demand for tangible and intangible demands are higher from forests and the carrying capacity of the forest ecosystem is inadequate. These required new ways to meet our demands improved either efficiency or improvement of resources available.

About CAMPA

CAMPA was proposed by the Ministry of Environment, Forests and Climate Change, Government of India, for enhancing forest and tree cover and conservation and management of wildlife by utilizing funds received towards Compensatory Afforestation (CA), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

The major objectives of the State CAMPA include conservation, protection, regeneration and management of existing natural forests. The Management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas and compensatory afforestation are also part of CAMPA objectives. The other major objective is to generate wood and non-timber forest products along with climate regulation, flood moderation, carbon sequestration, the health of soils, air and water regimes. It also aims to provide other supporting services in connection with ecosystem services, biodiversity services including training and capacity building to strengthen the research activities.

Specific components in CAMPA

Forests are a natural resource, which caters to mandates of ecological services, need to be preserved. However, because of essential developmental activities and certain compulsive industrial requirements, forests are regularly diverted for

“non-forest purposes”. As per the Forest (Conservation) Act of 1980, the non-forest land, equal to the size of the forest being “diverted”, should be afforested. Government has introduced many schemes to compensate for the loss incurred by developmental activities, out of the various schemes under the CAMPA; the two important components are;

1. Compensatory Afforestation (CA)
2. Net Productive Value (NPV)

Compensatory Afforestation (CA)

Compensatory Afforestation (CA) refers to afforestation and regeneration activities carried out as a way of compensating for forest land diverted to non-forest purposes. CA is one of the most important conditions stipulated by the Central Government while approving proposals for de-reservation or diversion of forest land for non-forest use.

Net Productive Value (NPV)

To compensate for the loss caused by the diversion of the forests to non-forest purposes, as per the law Net Present Value (NPV) of the diverted forest is calculated for 50 years and recovered from the user agent that is “diverting” the forests. Though the user agencies which are often private parties are not supposed to conduct the afforestation works instead state governments take the works related to growth and maintenance of plantations. The expert committees calculate the NPV for every patch of forest and the mentioned expenditure on land purchase and creating new forest to be borne by the users.

CAMPA in Andhra Pradesh

As per the Ministry of Environment, Forests and Climate Change, Government of India orders about State CAMPA has been initiated on 11th September 2009 in Andhra Pradesh state. The main purpose of A.P. State CAMPA is to enhance forest and tree cover and conservation and management of wildlife by utilizing funds received towards Compensatory Afforestation (CA), and improving Net Present Value (NPV) of forests.

CHAPTER-2

STUDY SITES AND EVALUATION PROCESS

Study Sites

Andhra Pradesh state has been implementing plantation, soil, & moisture conservation activities since long. The specific report is for the establishment of plantations and allied activities under CAMPA scheme implemented over 7 circles, 18 divisions & 67 ranges during the year 2015-16. An extent of 4095.5 ha plantation raised under Compensatory Afforestation (CA) & Net Present Value (NPV) at different locations, where locality factors are dissimilar by using mostly indigenous ecologically important tree species. As per the state forest department, plantations established were homogenized as per the locality factors viz., Climatic, Edaphic, Topographic & Biotic factors. Further, homogenizing of plantations were done at the division level to determine sampling intensity and fixating sample points by following statistical randomization process (the accepted statistical method by the committee of experts from IFB, Hyderabad) for acquiring results of activities taken up in terms of measurable indicators like field data on the growth of plantation and allied benefits achieved by the society/ ecosystem. The total area homogenised covering >10% of the area allowing proper sampling intensity. Data collected is represented in the table given below.

S. No.	Circle	Division	No. of sites	Total area of plantations (ha)		No. of studied sites
				CA	NPV	
1	Ananthapur	Ananthapur	38	307.134	160	11
2		Chittoor West	31	-	400	7
3	Kurnool	Kurnool	5	100	30.43	5
4		Kadapa	13	170	5.4	13
5		Proddutur	8	166.03	-	3
6		Nandyal	4	-	50	4
7	WLM Tirupathi	Rajampet	9	-	140	9
8		Chittoor East	25	115	300	25
9	Visakhapatnam	Narsipatnam	11	20	112	11
10	Rajahmundry	Kakinada	10	76.76	52.24	10
11		Eluru	16	45	180	16
12		Krishna	20	110	125	20
13		Chintoor	4	-	57	4
14	FTPT Srisailam	Atmakur	2	112	-	2
15		Markapur	6	116	-	6
16	Guntur	Guntur	22	84.6+ 17 km	166	22
17		Giddalur	8	-	175	8
18		Nellore	38	-	700	19
		Total	270	1038.354	3037.24	195

Monitoring and Evaluation process (Methodology)

Monitoring & Evaluation work is a continuous process where the works carried and other supplement works carried are to be critically examined through quantifying the measurable indicators. Under CAMPA schemes, the same study was carried out by selecting samples in the plantations raised from 18 forest divisions. The accepted statistical method used was Systematic Multistage Random Sampling (SMRS) Technique. The size of plots for data collection was fixed as 0.1 ha (Standard size for inventory of forests/plantations and standardised by species-area curve method) which has spread over all plantation. Based on SMRS Strategy the selected plantations were traversed and verified along with the GPS locations. About 72 per cent of the total plantations came under the selected list for data collection and monitoring purpose. Based on the homogeneity of the plantation sites and locality factors, each plantation areas were approached by using gradient in probability proportional to size.

Number of sampled plantations has been decided as per the following formula

$$N = (t_2 \times CV/r)^2$$

t_2 = value of statistic at a 5% level of significance (95% probability level, which is nearly equal to 2)

CV = coefficient of variation = $\frac{SD \times 100}{Mean}$

r = permissible error (Generally, 5% to 20% to be decided by the authorities)

In the present case, the value of r has been taken as 10%. As per the Forest Survey of India, survival percentage of any plantation is primarily considered as one of the dominant criteria for understanding the success of any plantation work within India (FSI, 2006). It has been worked out that a considerable number of sampled plantations from each division were taken to make the permissible error below 10%, the whole population (plantation area) of the state that is included in case of year of plantation and the total area covered. Then CV is expected to rise to the level of double of the division level and according to the sample size would be 4 times that required for the division, which consequently worked out. These sampled plantations are distributed proportionally in systematic multi-stage random sampling method to each division and covers each year of CAMPA plantation.

Allotment of sampled plantations has been shown as follows: The total number of sampled plantations (sites) to be monitored, which is 20% of the population for $\pm 10\%$ at 80% probability level, were randomly selected as follows: Within the plantation patches, plots of 0.10 ha with a size of 31.62m x 31.62m were laid in a rectangular shape.

- The sampled plantations were allocated proportionately to each division for the year of planting so that plantations of all categories were included.
- The selected plantations were examined for area accuracy with the help of GPS by way of traversing method around the boundary of the plantation, or by taking a square shape plot as per field convenience to assess the growth parameter as per standardized format.
- Randomization of plantations was done based on the locality factors keeping the division as a basic unit.
- Smaller plantations with five hector or less area were selected for sampling process with ten sample plots each consisting of 0.01 hectors.
- Plantations area ranging from five to ten hectors were provided at least 15 -20-sample plots of 0.01 hectors area in designated places as per the sampling techniques of the statistics. The selection of the 2nd patch was systematically randomized to avoid bias.
- At least 30 sample plots were laid down at designated places where the plantation areas were bigger than sixteen hectors at a stretch up to fifty hectors. The selection of a site for sampling was done through systematic randomisation to avoid bias.
- For those plantations area greater than 51 hectors, 90 plots were laid out at designated places by systematic random sampling procedure as explained above.

These methods of allocation of sampled plantations for each plantation site mostly depended on the homogeneity of plantation areas and usage of tree species either as a monoculture or as mixed-species bearing ones.

Indicators for Monitoring and Evaluation

For the Monitoring and Evaluation of the plantations under the project, an indicator framework was developed in consultation with the AP state forest department. These indicators were simple, measurable yardsticks for assessing the plantations in terms of their effectiveness and relevance. Besides, these indicators were finalized following the needs for output, outcome impacts of the scheme in the plantation sites concerning biodiversity conservation. By using these indicators, the information about various parameters such as plantation scheme, species selection, plantation methodology, the health of plantations, survival percentage were generated during the field sampling in the sampled plantation area.

Collection of field data

The parameters used for assessing plantations were clustered into various categories like qualitative, quantitative and socio-

economic parameters, ecosystem service parameters and their sub-parameters to quantify the qualitative outcome of the plantation and allied activities taken up for this respective year. GPS location of the plantations and their legal status along with nature (Monoculture/Mixed plantation) of plantations were obtained from the existing records and plantation manual by through examined. Site quality and other parameters were taken into consideration on selection for a choice of species for the locality factors of that particular environment. Later, their performances like suitability, adaptability, survival percentage, methods adopted for planting etc., was thoroughly studied at the plantation sites and incorporated in the report. Phonological characters (height, diameter, etc.) of the tree crops were examined and their data assessed. Area of plantation and silviculture practices (Cultural & Tending Operations executed) examined by field officers that generally attribute along with the examination of plantation journal and its analysis. Specifically, Tending operations like Thinning, Pruning, Climber cutting, Singling etc., were taken for analysis. Cultural Operations like weeding, cleaning, trenching, etc. was witnessed by inspection of plantation journals and field examination.

Protection works like fencing, terracing, trenching, etc were also examined and their effectiveness was studied. The health of the plantations, maintenance records, updating and up-keeping of them over a period of time by the authorities were appraised as a part of the performance of the plantations. The flow of funds and their effective utilization and efficient management were also examined through primary and secondary data. Fund availability for future maintenance was also discussed with field authorities. The socio-economic dependency of the society along with the Ecosystem services was among other parameters for evaluation, which was analysed to study the effectiveness of the plantation works inside and outside forest areas. Multiple parameters were fixed to study the support of plantations activities that are enhancing the life and livelihood of local communities.

Ultimately, the entire plantation works and allied parameters were studied by analysing the survival percentage of the plantations. Based on the above details the continuity of plantation activities in the respective areas based on the departmental authorities as well as the dependent communities was discussed which forms part of parameters for the study. Based on the above-fixed Criteria & Indicators, analyses were carried out for the continuity of plantations around the areas in future, if agreed and were also placed as a part of the study. In addition to the above, the indirect effects of the plantations were also analysed like ecological aspects, soil and water conservation activities etc. along with ecosystem services for studying the impact on socio-economic improvement of the local community. A multi-disciplinary team collected the data for the monitoring and evaluation of the plantation as per standardized formats created by the committee of experts from the IFB, Hyderabad. The collected data were compiled, tabulated and then analysed for the preparation of the final report after a series of discussion over each stage.

CHAPTER-3

PERFORMANCE ASSESSMENT

Relevance

The CAMPA aims to improve the ecological balance by reducing carbon footprints and increase the green cover in the country. It could be possible through plantation activities inside forest-opened patches and establishment of tree plantation outside the forest boundaries with the help of the local government. Other than that, plantation and allied activities are critically important for the restoration of degraded /waste-lands, biodiversity conservation process which is otherwise also a source of employment for forest-dependent communities living in and around the forest fringe areas. The CAMPA scheme is a relevant activity for the AP forest department to achieve these targets. The majority of the plantations were carved out from degraded forest areas and some of the problem soil /salinity affected lands, which were primarily owned by the government and public institutions.

Under the CAMPA scheme, plantation activities were carried out both in degraded forests and non-forest areas for restoration of forest cover. During the year 2015-16, the total plantations raised was about 4095.514 ha in total in which CA is of 1038.354 ha and NPV is of about 3037.24 ha distributed in about 67 ranges. The sampling study was taken up for the entire plantation areas by covering a sampled area of 417.2 ha as representation samples as per the statistical norms. Majority of the plantations work was undertaken on the government land /degraded forests under the CAMPA scheme. The effort made by the state forest department to achieve the target of meeting, the National Forest Policy-1988 guidelines of, ecological balance and environmental stability.

Effectiveness

The report of the project was technically prepared by executing novel scientific analysis using all measurable parameters to realise the stated objective. It brought out a technically sound report based on the criteria fixed and the indicators observed for evaluation. The report would provide primary data collected during the field surveys in all selected sites distributed in different forest divisions for the year 2015-16, where plantation activities were carried out under the CAMPA scheme.

The average extent of the area taken for the planting work for each division during the year 2015-16 was about 227.53 ha. Nellore Forest Division has lead by having a maximum cover of plantations of about 700 ha and at the same time Chintoor Forest Division, have taken a minimum plantation area of about 57 ha during the same period as per the target fixed based on the availability of the site for plantation activity. Site selection and choice of species were rated moderate to high as per the survival percentage recorded survey data. These plantations were categorised generally as mixed plantations (more than one species) in nature and in other places some monoculture were witnessed.

Field trials revealed the marks of work executed on soil and water conservation activities prior/ during the planting work. Status of plantation health was moderately fair due to less biotic interference by witnessing neither heavy grazing nor heavy infestation of pest and diseases. The study also indicated that the plantation journals/ records were maintained well in most of the ranges and updated periodically, whereas in some ranges they were not. The present monitoring study indicated that the flow of funds at the initial stage of the project was good and later during the establishment of the plantations; the fund flow appears to be

S.No	Botanical Name	Common Name	Local Name
1	<i>Acacia chundra</i> (Roxb. ex Rottler) Maslin	Red cutch	Sandra
2	<i>Acrocarpus fraxinifolius</i> Arn.	Red Cedar	Acrocarpus
3	<i>Albizia lebbbeck</i> (L.) Benth.	Lebbbeck tree	Dirshanam
4	<i>Albizia odoratissima</i> (L.f.) Benth.	Ceylon	Rosewood Chinduga
5	<i>Alstonia scholaris</i> (L.) R.Br.	Devil tree	Saptarni/ Edakula pala
6	<i>Annona squamosa</i> L.	Custard Apple	Seethaphal
7	<i>Anthocephalus cadamba</i> (Roxb.) Bosser	burflower - tree	Kadambam
8	<i>Azadirachta indica</i> A. Juss.	Neem	Vepa
9	<i>Bambusa arundinacea</i> (Retz.) Willd.	Bamboo	Veduru
10	<i>Bauhinia racemose</i> Lam.	Are	Are
11	<i>Cassine glauca</i> (Rottz.) Kuntze	Bhutankush	Bhutan kusuma
12	<i>Chloroxylon swietenia</i> (Roxb.) DC.	Satin	Billudu
13	<i>Dalbergia latifolia</i> Roxb.	Rosewood	Jitregi
14	<i>Dolichandrone crispera</i> (Buch. -Ham ex Roxb.) Seem.	Trumpet Flower	Oddi
15	<i>Eucalyptus tereticornis</i> Sm.	Grey Gum	Neelagiri
16	<i>Feronia elephantum</i> L.	Elephant-Apple	Velaga

S.No	Botanical Name	Common Name	Local Name
17	<i>Ficus benghalensis</i> L.	Banyan Tree	Marri
18	<i>Ficus mollis</i> L.	Juvvi	Juvvi
19	<i>Ficus religiosa</i> L.	Bhodi	Raavi
20	<i>Hardwickia binata</i> Roxb.	Anjan	Narayepi
21	<i>Holoptelea integrifolia</i> (Roxb.) Planch.	Kanju	Nemalinara
22	<i>Magnoliachampaca</i> L.	Champak	Sampangi
23	<i>Mitragyna parviflora</i> (Roxb.) Korth.	Kaim	Battaganapa
24	<i>Phyllanthus emblica</i> L.	Amla	Usiri
25	<i>Pongamia pinnata</i> (L.) Panigrahi	Indian Beech Tree	Kanuga
26	<i>Pterocarpus marsupium</i> Roxb.	Bijasal	Yegisa
27	<i>Pterocarpus santalinus</i> L.f.	Red sanders	Erra chandanam
28	<i>Soyimida febrifuga</i> (Roxb.) Juss.	Indian Red Wood	Somi
29	<i>Sterculia urens</i> Roxb.	Kateera-Gum	Tapasi
30	<i>Swietenia macrophylla</i> King.	Mahogany	Mahagani
31	<i>Syzygium cumini</i> (L.) Skeels	Jambu	Neredu
32	<i>Tamarindus indica</i> L.	Tamarind tree	Chinta
33	<i>Tectona grandis</i> L.f.	Teak	Teak
34	<i>Terminalia alata</i> Heyne ex. Roth	Maddi	Nallamaddi
35	<i>Terminalia arjuna</i> (Roxb.) Wight & Arn.	Arjun	Tellamaddi

sluggish at later stages. Cultural activities and Protection works were largely fair. The overall survival percentages of the plantations are rated as moderately fair to excellent that is described in detail with respective tables of the forest divisions.

These are about 35 different tree species used for raising plantations in different locations as per their locality factors and socio-economic demands of the society. The list of the species planted at different sites are as displayed below:

Efficiency

The present monitoring and evaluation found that the overall performance of plantations was fair to excellent, sometimes the fund flow not hampered the operations of plantations, maintenance works taken up on time and hence the performance level of the plantations is appreciable and the growth of the plantations good to excellent yielded the expectations of the results of CAMPA. The soil conditions ameliorated in many plantations because of the soil and moisture conservation works. Documentation of plantation journals done appreciably in most cases. There is an involvement of local communities in the process of planting activities

generating a lot of employment to the unemployed. Besides, the benefits can be noticed in future if the plantations are maintained properly. Hence, the plantation activities under the scheme were observed to be effective.

CHAPTER-4

STATE MONITORING REPORT

During the year 2015-16, CAMPA plantations were established in 67 ranges, 18 forest divisions covering all the 7 Circles. Based on the prescribed methodology, 72 % of the total plantations were sampled by covering about 417.2 ha. Considering the above facts, division-wise details are furnished below.

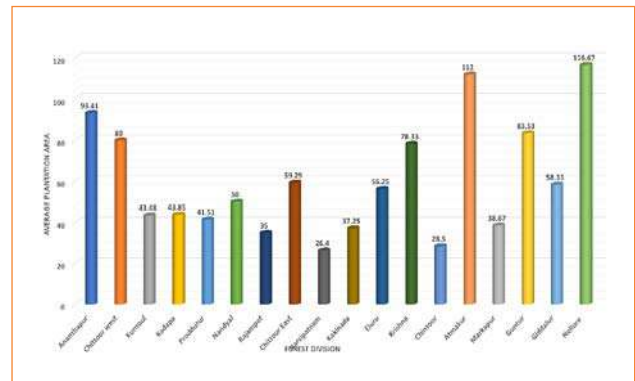
Average plantation area

Out of 4095.514 ha of CAMPA plantations were raised during 2015-16, the maximum area was fallen by Nellore forest division with an extent of 700 ha with an average of 116.67 ha per forest range and the minimum area was falls by Chittoor forest division to the extent of 57 ha with an average of 28.5 ha per forest range.

Table 1: Average plantation area of range (ha)

S.No	Forest Division	Average plantation area (ha)
1	Ananthapur	93.41
2	Chittoor west	80
3	Kurnool	43.48
4	Kadapa	43.85
5	Proddutur	41.51
6	Nandyal	50
7	Rajampet	35
8	Chittoor East	59.29
9	Narsipatnam	26.4
10	Kakinada	37.25
11	Eluru	56.25
12	Krishna	78.33
13	Chintoor	28.5
14	Atmakur	112
15	Markapur	38.67
16	Guntur	83.53
17	Giddalur	58.33
18	Nellore	116.67

Figure 1: Division wise average plantation area (ha)



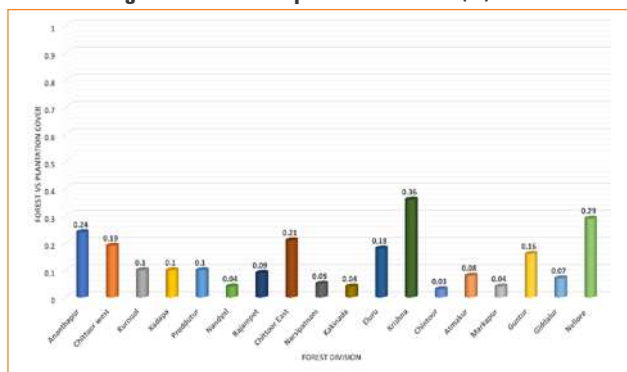
Forest vs plantation cover (%)

The forest cover of the Andhra Pradesh reasonably increased through the CAMPA plantations. The maximum percentage was contributed based on the total area of the division by Krishna forest division (0.36%) and the minimum was contributed by Chittoor forest division (0.03 %).

Table : 2 Forest vs plantation cover (%)

S. No	Forest Division	Forest vs Plantation Cover
1	Ananthapur	0.24
2	Chittoor west	0.19
3	Kurnool	0.1
4	Kadapa	0.1
5	Proddutur	0.1
6	Nandyal	0.04
7	Rajampet	0.09
8	Chittoor East	0.21
9	Narsipatnam	0.05
10	Kakinada	0.04
11	Eluru	0.18
12	Krishna	0.36
13	Chintoor	0.03
14	Atmakur	0.08
15	Markapur	0.04
16	Guntur	0.16
17	Giddalur	0.07
18	Nellore	0.29

Figure: 2 Forest vs plantation cover (%)



The average number of plant species

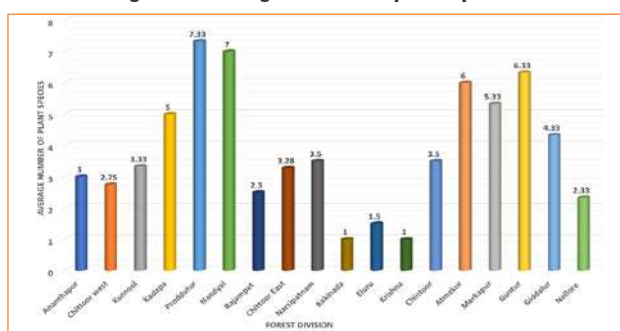
Species diversity was observed to be more in Kurnool, Madanapalli, Punganur, Kadapa, Vontimitta, Rudravaram, Chintapally, Narsipatnam, Kasibugga, Nuzived, Eluru, Vijayawada, Yerragondapalem, Guntur, Vinukonda, Giddalur, Kanigiri, Tirumella, Kavali, Nellore, Rapur, Venkatagiri and udayagiri ranges where monoculture plantations were grown. Mixed plantations with excellent survival percentage led to more species diversity which is essential for ecological balance.

Table 3: Average number of plant species

Sl. No.	Forest Division	Average number of plant species
1	Ananthapur	3
2	Chittoor west	2.75
3	Kurnool	3.33
4	Kadapa	5
5	Proddutur	7.33

Sl. No.	Forest Division	Average number of plant species
6	Nandyal	7
7	Rajampet	2.5
8	Chittoor East	3.28
9	Narsipatnam	3.5
10	Kakinada	1
11	Eluru	1.5
12	Krishna	1
13	Chittoor	3.5
14	Atmakur	6
15	Markapur	5.33
16	Guntur	6.33
17	Giddalur	4.33
18	Nellore	2.33

Figure: 3 Average number of plant species



Survival percentages of the plantations

Based on the survival percentage, plantations were categorized into four different groups. The maximum survival

Table: 5 Survival percentages of the plantations

S. No	Forest Division	Excellent (> 79 %)		Very Good (70-79%)		Good (60-69%)		Average (< 60%)	
		CA	NPV	CA	NPV	CA	NPV	CA	NPV
1	Ananthapur	92.7	96.5	-	-	-	-	-	-
2	Chittoor West	-	95	-	-	-	-	-	-
3	Kurnool	88.5	93.25	-	-	-	-	-	14
4	Kadapa	81	90	-	78.2	-	67.3	-	58
5	Proddutur	89.8	89.7	-	-	-	-	-	-
6	Nandyal	-	87.75	-	-	-	-	-	-
7	Rajampet	-	91.25	-	-	-	-	-	-
8	Chittoor East	95.2	91.46	-	-	-	-	-	-
9	Narsipatnam	-	82	76	72	-	-	-	37.5
10	Kakinada	82	82	79	-	-	-	-	-
11	Eluru	-	-	70	74.2	65	66.1	-	-
12	Krishna	-	-	74	71.62	66	69	-	-
13	Chittoor	-	-	-	-	-	-	-	51.12
14	Atmakur	90	-	-	-	-	-	-	-
15	Markapur	97	-	-	-	-	-	50.5	-
16	Guntur	84.1	83.5	-	75	-	-	-	-
17	Giddalur	-	86.59	-	75.5	-	67.27	-	-
18	Nellore	-	89	-	-	-	-	-	-

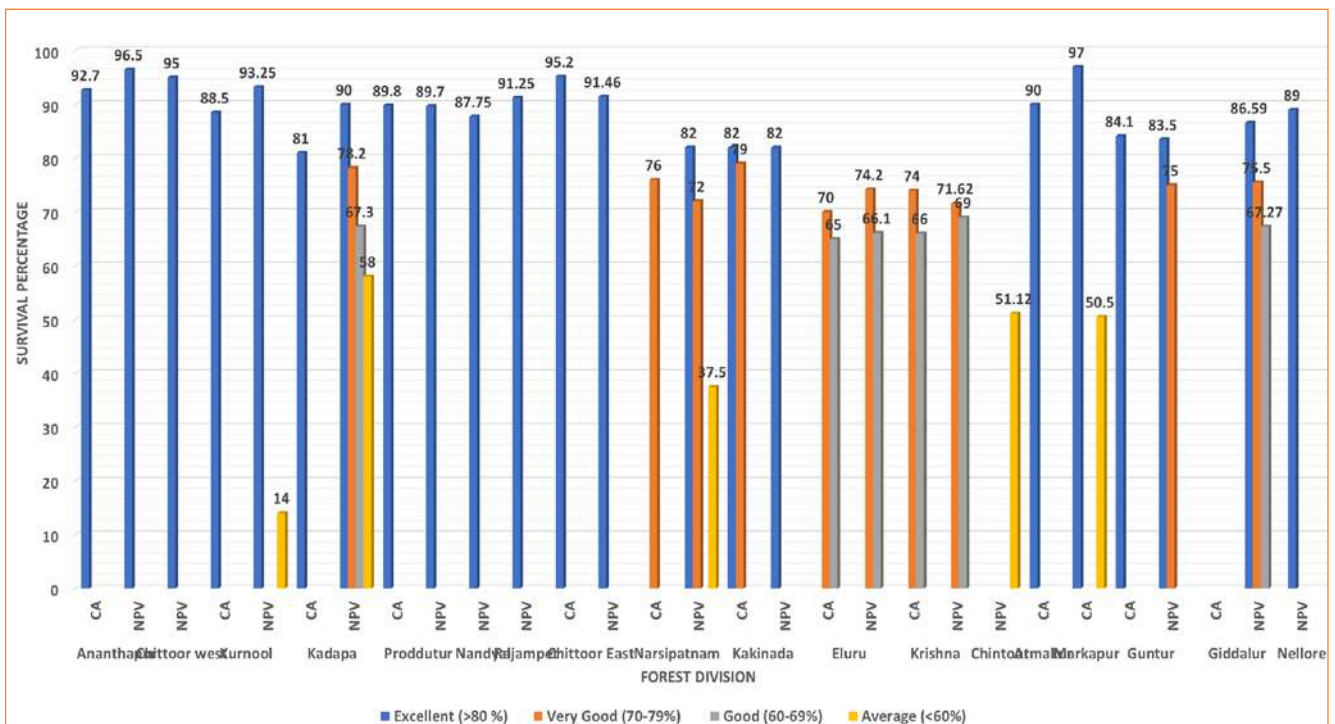
percentage was observed in Markapur forest division with an average of 96.4%, whereas in Narsipatnam, Eluru and Guntur divisions shown varied survival percentages. The comparatively low survival percentage was observed in Chittoor forest division with the survival of 51.67 %.

Overall Assessment

CAMPA plantations played a significant role in achieving the goal of afforestation the degraded and open forests or vacant land to increase the forest cover in Andhra Pradesh State. Out of the total CAMPA plantations under Compensatory afforestation (CA) plantations has covered with 25.47% of the area with an extent of 1038.354 ha and Net Present Value (NPV) has covered with 74.5%

of the area with an extent of 3037.24 ha. The average survival for the year 2015-16, both CA and NPV plantations have shown the better performance of 89.07% and 88.9% respectively in most of the locations. The maximum green cover had contributed by the plantations of the forest division of Nellore (700 ha), Ananthapur (467.054 ha+13 km), Chittoor East (415 ha) and Chittoor West (400 ha) divisions. Out of 18 forest divisions, CA plantations of the Chittoor East observed to be the best plantations with an average survival of 95.2% and NPV plantations of the Ananthapur and Chittoor west observed to be the best plantations with an average survival of 96.5% and 95% respectively in most of the plantation locations.

Figure 4: Survival percentages of the plantations



CHAPTER-5

CRITICAL REVIEW AND LESSONS LEARNED

SUGGESTIONS

The Monitoring and Evaluation process of CAMAP plantations raised by Andhra Pradesh Forest Department during the year 2015 - 16 under CAMPA Fund was critically evaluated by the Institute of Forest Biodiversity, Hyderabad. The outcome of the evaluation process leads us to appreciate the contribution made by these plantations for the achievement of the national as well as the international goals committed by our nation. The same commitments were witnessed and supported by the State forest department by establishing plantations for improving the green cover. Thereby it increases the Carbon sequestration at the ground level. Directly these plantations support in the contribution of tangible and intangible benefits for both the forest and the forest-dependent communities. On the other hand, the areas belonging to Non-forest/open lands have been converted into Green Cover/Forest Cover areas. Ecological balance and Environmental stability are the focused goals of plantation activity. Plantations raised under CAMPA scheme in various areas, both Forest and outside the forest areas were scientifically examined for their structural, functional and financial aspects and the critical observations were recorded and documented. Based on the field data/observations, some of the suggestions needed to consider for improvement of plantations are furnished below in detail.

Soil and Moisture Conservation

Soil and water conservation measures as per the secondary data were taken up to enrich the soil moisture and reduce the loss of soil nutrients. Works taken up were weeding, pitting, trenching and terracing etc., at the earlier stage of plantation work. After planting inadequate SMC works were carried out and no maintenance work about soil was witnessed. Part of the plantation area was covered with weeds and some of the plantations were having a higher competition for space and nutrients with weeds. Enhancing the productivity of the land, groundwater recharging, enhancing the water table and improving the survival rate of the plantations by improving the productivity and thereby increasing the soil moisture content was the motto of the plantation work.

Diversity in choice of species

Through Monitoring and Evaluation, it is observed that there are many ranges with plantations having mixed crops as well as a monoculture to achieve the target of greening the land. Various plant species, for example, *Pongamia pinnata*, *Ficus mollis*, *Dalbergia sissoo*, *Ficus religiosa*, *Ficus benghalensis*, *Spathodea campanulata* and *Bauhinia racemosawere* adopted as a mixed crop to facilitate the forest ecosystem both ecologically and socioeconomically to sustain the forests. Some of the species used were fast-growing fodder, fuel and

small timber tree species which support the society as well as result in achieving the national target of improving the growing stock and carbon fixation levels.

Protection & Management of plantations

As per field data, the choice of the species was optimum as per site quality and their performance rated fair to excellent. In some of the plantation sites, protection measures taken up at the earlier stage were not evident; they were inadequate in protecting for saplings to reach pole stage or tree stages. Maintenance works were witnessed poor in a few plantation sites.

Maintenance of plantation records

Plantation journals were updated and maintained well for most of the plantations. However, periodic updation of plantation journals with different inspection notes on different management activities were placed for most of the plantations.

Budget inflow and utilization

The indicator showed that based on the data collected from plantation journals of different ranges suggest that the fund flow was fair and smooth until the initial stages of the raising of the plantation. A regular flow of fund was not taken place during the plantation work process on some of the divisions. The effective execution of plantation work was hampered due to improper flow of fund in most of the plantation after planting work was taken place. Most of the plantations lake fund for maintenance work for the subsequent years after initial planting works taken place.

Suggestions

These data analysis and field examination revealed that a positive trend in both effectiveness and efficiency in work performed by the forest department to achieve the targets provided by usage of available resources. Eventhough work done was appreciable; there are still scopes for further for achieving the ultimate goal of ecological balance and environmental stability along with socio-economic benefit to the dependent communities. Following suggestions would make to achieve the ultimate goal of ecological balance. Some of them followed as below:

1. CAMPA project should be continued to enhance the quality of the degraded forest and to increase the quantity of forest & Trees Outside Forest (TOF) areas. Wherever ecologically sustainable areas are available for plantation they should be utilized.
2. For any new plantation activities in future, carrying capacity of the locality should be studied and also feasibility study should be carried out well in advance at compartment/range level. Consider identification and documentation of socio-economic needs of the local community people should after

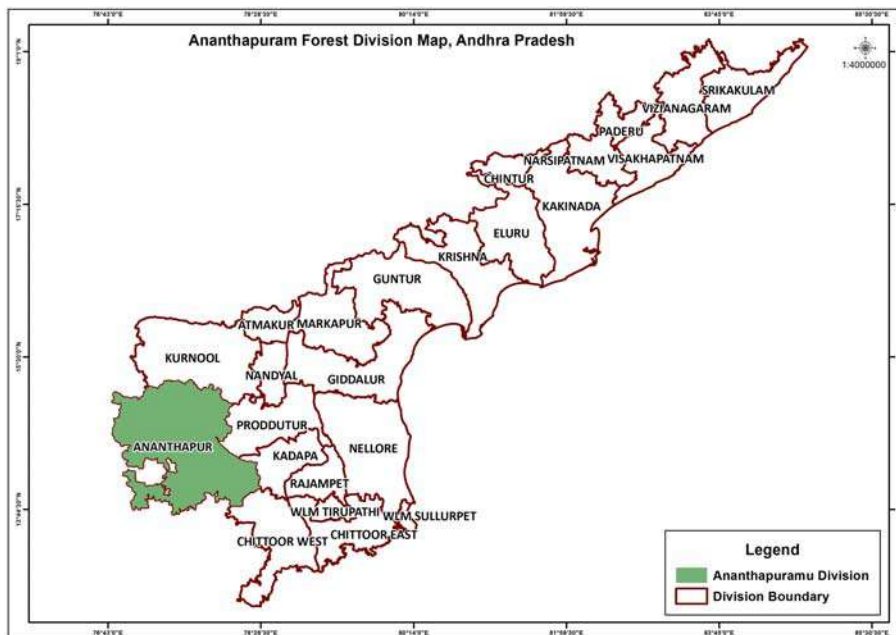
- meeting the primary need of the ecological function of the environment.
3. Range wise or compartment wise soil fertility/ productivity studies should be carried out to know the soil profile and other soil and geological properties. Soil physical, chemical and biological parameters should be analysed and documented periodically. There should be a soil testing laboratory attached to each range and all the field foresters should be made aware of the soil analysis process like a collection of soil, processing and laboratory analysis. Periodic training on modern technology and equipment should be imparted to them. There must be a mini soil and site quality maps prepared at range wise and division wise needs to be distributed to the forest officers as a ready reckoner for any kind of forest management interventions. Problematic soils and their reclamation methods should be made aware of the forest staff so that the plantation works in such places could be taken up successfully.
 4. Soil and moisture conservation activities like erosion control measures, mulching, nurse cropping at an early stage of planting, moisture-retaining measures like construction of check dams, gully plugging measures etc. should be taken up to ensure the effective establishment of plantations. Based on the locality factors, soil and moisture conservation works should be taken up, especially climatic and edaphic factors such as duration of rain, the intensity of rain, erodibility and erosivity are factors. Starting from Gully control to flash erosion control measures, all kinds of erosion control measures should be taken up periodically and recorded for future guidance.
 5. Locally available seeds are collected and stored in local seed bank as seed sources for future use to create a natural forest to maintain genetic diversity. In the case of afforestation in non-forest areas, superior quality seeds/clones could be used for a better outcome to meet the demands of society for fodder, fuel, small timber etc.
 6. Fringe forest areas should be maintained with trees of economically important monoculture /mixed plantations to meet societal demands like wood and non-wood forest produces. Local Forest Range Officers/any other Field Officers' opinion along with that of local village panchayat could be taken for the establishment of such plantations.
 7. Wherever open areas are found inside the forest, they should be studied prudently in connection with the importance of wildlife and selective rejuvenation measures that could be adopted to manage them effectively. In case of gaps in a dense or moderately dense forest of ecological importance available trees of existing (indigenous) species could be taken up.
 8. Introduction of local or foreign exotics to any forest areas should be done after a thorough examination of multi trail field study. For achieving normal forest different species with different age gradation and of different storeys should be created to improve the growing stock. Periodic quantification of the growing stock should be carried out after analysis it must be documented for the future.
 9. The relationship between flora and fauna should be maintained, promoted for effective maintenance of forest ecology by the reintroduction of native plant species.
 10. All kind of micro and macro flora and fauna needs to be supported for ecological balancing process. To achieve that starting from microbes to mega animals, all of their host plants needs to be established where ever required (maintain their prey predator relationship).
 11. The ecological relationship of flora and fauna is highly imbalanced due to many factors like human and cattle pressures. By creating awareness among the public on the importance of the forests and their role in the conservation of the ecosystem should be increased by regular training, workshops/ecotourism trips and other awareness-building programmes. To create awareness among the general public on Biodiversity, the importance of different ecosystems and role of ecology there must be several biodiversity parks and Interpretation centres for different flora and fauna should be established in each division. Systematic displayed on structure and function of forest ecosystem should be done pictorially.
 12. Documentation of the forest taxa and wild animals by regular census should be done after thorough examination in the field. Systematic updating of taxonomical information at compartment/ range level should be carried out by using information and communication tools. Documentation, digitalization and publication required to be done to expose among the public about our natural resources.
 13. The global commitments of our nation like carbon sequestration, CITES commitments on wildlife conservation and allied environmental conservation measures should be made aware of among the foresters by regular updating from time to time through in-service training/ workshops/ conferences/ seminars etc. This should ensure our global commitment on Intended Nationally Determined Contributions (INDC) to support government targets. Fast-growing tree species should be raised for achieving the same goal.
 14. Knowledge on advanced technology like Information and Communication Technology (ICT), Remote sensing, GIS, GPS, use of drones etc. should be exposed among field officials along with first-hand training and practices. This could help in the management of forests like fire management, wildlife management and other forest management practices. In

particular fire alarm system through SMS should be developed and interlinked with all the field staff duly connecting with the head of the state.

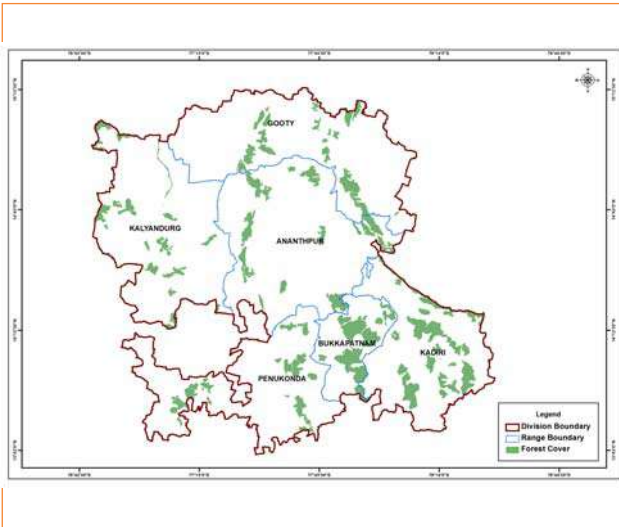
15. To ease pressure on natural forests, Trees Outside Forest (TOF) should be encouraged under CAMPA scheme to protect biodiversity. Most of the forest species are being cultivated with multi-storied like trees, shrubs and herbs. Such standardised models established by research organizations could be made use under CAMPA scheme to suit different soils and climatic conditions.
16. Establishment of energy plantation, fodder bank and high density plantation are some of the recommendations to meet the demands of the local community which needs to be established outside forest areas. This avoids conflict among human and wild animals in the same forest products. Choice of species should be based on the site quality and ecological need of the locality.
17. Forest dependent communities and other NGOs could be used as live fence for protection of forests against all biotic pressures from civilized regions.
18. Silviculture combined with Agroforestry practices like Bamboo cultivation, Apiculture, Sericulture, Horticulture, floriculture in agroforestry systems could be taken up all along the fringe forest areas as per the requirement of the society without compromising the ecological need of the forest and wild animals.
19. Plantation areas could be used for ecotourism purposes to improve the economic condition of the local community. By making use of available diverse ecosystems like open scrubs, undulated terrain, awareness among the public could be created on the importance of forest and biodiversity.
20. Indigenous traditional knowledge and related medicinal plants should be maintained for our future generation by establishing trees species of medicinal values to human and animals.

MONITORING REPORT

ANANTHAPUR FOREST DIVISION

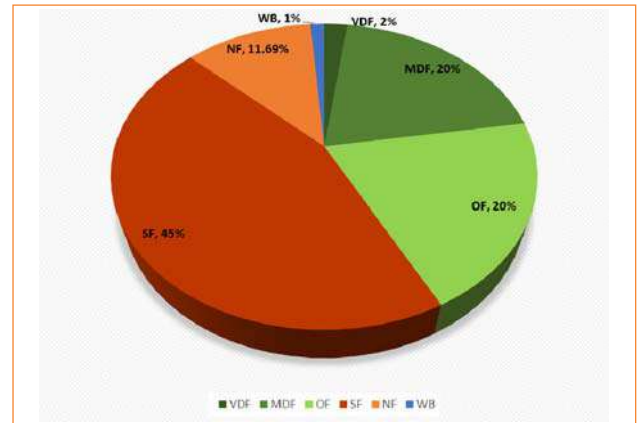


ANANTHAPUR FOREST DIVISION



Ananthapur is the seventh-largest district in India and the driest place in Southern India. Geographically, it is located in the South-Western part of Andhra Pradesh bordering with Karnataka state in the west. Ananthapur Forest Division is part of the Ananthapur district covering notified forests area of 1969.78Km² which is 10.3% of total forest division.

Figure 1: Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

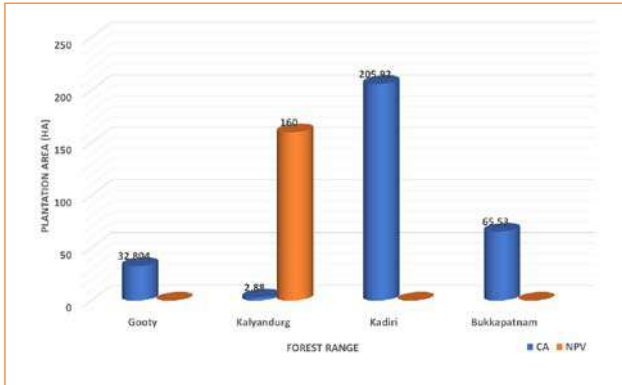
Ananthapur division comprises six forest ranges, namely Penugonda, Gooty, Kalyandurg, Kadiri, Ananthapur and Bukkapatnam. During the year of 2015-16, Ananthapur division has taken up plantation work in an area of 467.054 ha covering five out of six ranges, namely Ananthapur (13 km canal plantation), Bukkapatnam (65.53ha), Gooty (32.804ha), Kalyandurg (162.8 ha) and Kadiri (205.92ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By random sampling method, the total area was partially enumerated in 11 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Gooty	Monoculture	<i>Sterculia urens</i>	32.804	-	High	93.5	-	2.83	12.27
Kalyandurg	Mixed	<i>Hardwickia binata</i> <i>Azadirachta indica</i>	2.88	160	High	98	96.5	4	15.82
Kadiri	Mixed	<i>Sterculia urens</i> <i>Hardwickia binata</i> <i>Albizia lebbeck</i>	205.92	-	High	85.5	-	2	0.85
Ananthapur	Mixed	<i>Pongamia pinnata</i> <i>Ficus mollis</i> <i>Dalbergia sissoo</i> <i>Ficus religiosa</i> <i>Ficus benghalensis</i> <i>Bauhinia racemosa</i> <i>Spathodea campanulata</i>	13 km	-	High	97	-	2.25	12.96
Bukkapatnam	Monoculture	<i>Sterculia urens</i> <i>Hardwickia binata</i>	65.53	-	High	89.5	-	1	3.20

Plantation area

In the division, maximum was planted in Kadiri forest range and the minimum was planted in Gooty forest range.

Figure: 2 Plantation areas in the Ananthapur forest division

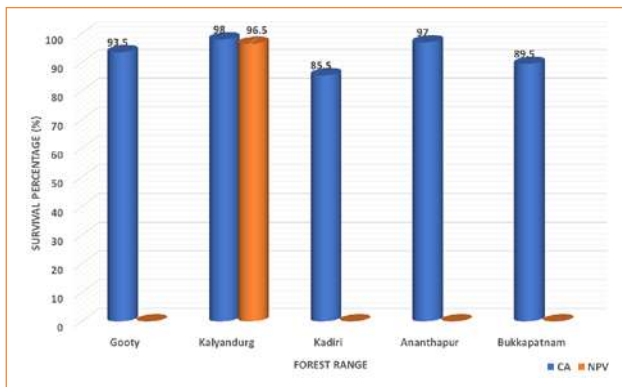


*Note : Plantation area of the Ananthapur range was not shown in the graph (Figure 2) as it is given in kilometres.

Survival percentage

The survival percentage is maximum in Ananthapur which is having 97% and minimum in Kadiri range which is having 85.5%.

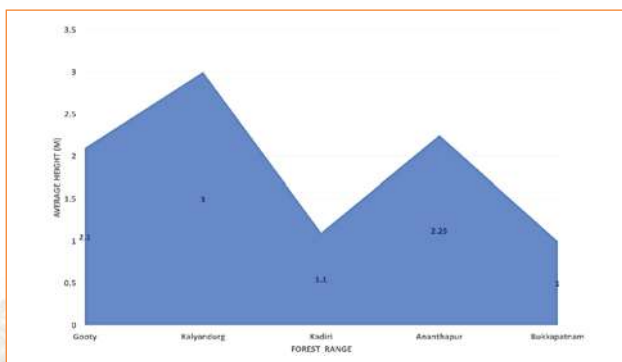
Figure: 3 Survival Percentages



Average height

In the division, most of the plantations were healthy and maximum growth was observed in Kalyandurg range with an average height of 3 m and minimum growth was observed in Bukkapatnam range with an average height of 0.55 m.

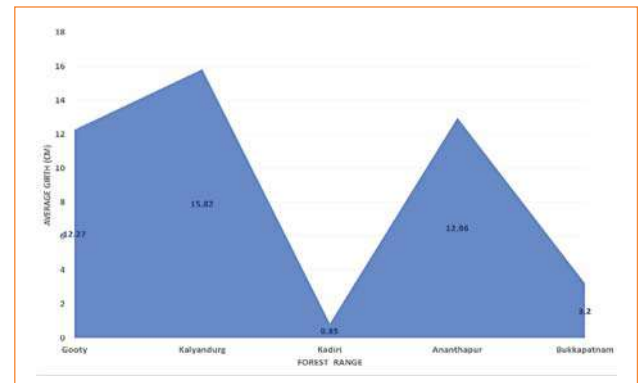
Figure: 4 Average height of plantations (m)



Average girth

In the division, maximum girth was observed in Kalyandurg range with an average of 15.82cm and the minimum was observed in Kadiri range with an average of 0.85cm.

Figure: 5 Average girth of plantations (cm)



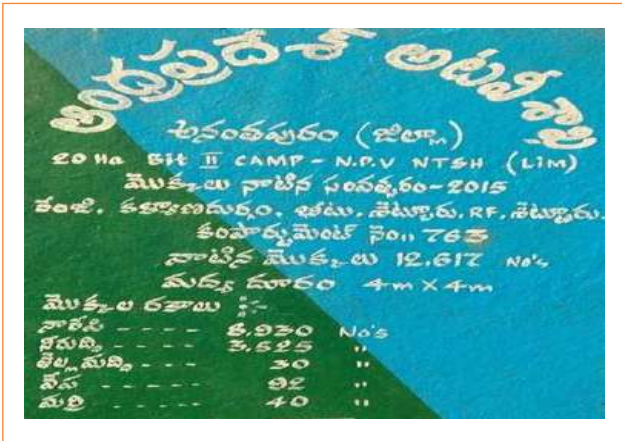
Observations

In the division, Setturu compartment No.763 of Kalyandurg forest range plantations was observed to be the best plantations.

- Survival percentage of the plantations was observed to be excellent with an average of 93.45%, survival percentages were ranging from 85.5% -97.25% in most of the plantations.
- Site Quality was taken as criteria for the choice of species. The species chosen were *Pongamia pinnata*, *Ficus religiosa*, *Ficus racemosa*, *Ficus benghalensis*, *Spathodea campanulata*, *Sterculia urens*, *Hardwickia binata*, *Azadirachta indica* and *Simarouba glauca* which are suitable to the dry and xerophytic conditions.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting (45cm³) with spacing (3X3, 4X4 & 5X5 m²) resulted in mixed crop plantations. Cultural operations (cleaning, weeding, and climber cutting) and SMC operations and water harvesting structures such as, check dams & contour trenching were taken up at the initial stages only.
- The average height of tree species was 2.46m which is ranging from 1 to 4 m. Tending operations (Pruning, Singling & Thinning) were carried out. Live fencing, kaccha fencing, boulder walls and social fencing were created to protect plantations from biotic pressure (man and animals).
- Grazing is seen despite the protective measures in the division. Though there are severe temperature and low rainfall and the impact of drought on the growth of the plantations comparatively low, hence the good survival percentage was observed. It appears that the protective measure has yielded results.

- Local communities were benefited by the planting activities for gathering fuelwood, fodder and other intangible benefits like water level appear to increase in their wells due to the green cover and plantation activities.
- Plantation journals were maintained in most of the sites but inspection notes by higher authorities were found only at someplace.

- No major constrains were found for growing the plantation. CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during the initial period of the plantation works and most of the plantations received funds timely without any delay.
- Despite lowest rainfall plantations were healthy because of good maintenance activities.



Plantation boards for the year of 2015-16 in Anantapur Division



Plantation boards for the year of 2015-16 in Anantapur Division



Mixed plantations in Anantapur division



Pongamia pinnata plantations in Ananthapur range



Azadirachta indica plantations in Kalyandurg range

EVALUATION FORMAT OF ANANTHPUR DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE: ANANTHAPUR						
NAME OF THE DIVISION : ANANTHAPUR						
S. No	Name of the Range	Ananthapur	Bukkapatnam	Gooty	Kadiri	Kalyandurg
1	GPS Coordinates	N 14.35' 181 E 77.5992	N 14.18' E 77.75'	N 14.44' E 77.54'	N 14 E 78.14'	N 14.33' E 77.06'
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mono Culture crop	Mono Culture crop	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	13 KMs	65.53 Ha	32.80 Ha	205.92 Ha	162.8 Ha
5	Choice of Tree Species	<i>Pongamia pinnata</i> , <i>Ficus mollis</i> , <i>Dalbergia sissoo</i> , <i>Ficus religiosa</i> , <i>Ficus benghalensis</i> , <i>Spathodea campanulata</i> , <i>Bauhinia racemosa</i>	<i>Sterculia urens</i> , <i>Hardwickia binata</i>	<i>Sterculia urens</i>	<i>Sterculia urens</i> , <i>Hardwickia binata</i>	<i>Hardwickia binata</i> , <i>Azadirachta indica</i>
6	Qualitative Assessment					
6.1	Suitability of area	Highly Suitable	Highly suitable	Highly suitable	Highly suitable	Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.)	45 cm ³ , Pitting, 5x5 m ² spaced planting was done	45 cm ³ , Pitting, 5x5 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² spaced planting was done
6.3.1	Survival Percentage	97 %	89.5 %	93.5%	85.5 %	97.25 %
6.3.2	Average height /Girth	2.25 m / 12.96 cm	0.55 m / 3.2 cm	2.1 m / 12.27 cm	1.1 m / 0.85 cm	3 m / 15.82 cm
6.4	Tending Operations (Singling/ pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations witnessed. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations witnessed. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Canal Plantation	Cultural operations	No	contour trenches	No
6.6	Increase in availability of Biomass for the local community. Status?	Not available	Fodder & Broom Sticks are available	Broom & Fodder Sticks are available	Fodder & Broom Sticks are available	Broom and Fodder Sticks are available
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on people life.	Living standards of people got improved.	Living standards of people got improved.	Living standards of people got improved.	Living standards of people got improved.

7	Protection works like fencing etc.,								
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No measures are taken up	Trenching, Watch & Ward	Trenching, social fencing done.	Trenching was done	Healthy	Healthy	Healthy	Journal updated till 2018
8	The health of raised plantation	Healthy	Healthy	Healthy	Healthy	Healthy	Healthy	Healthy	Journal updated till 2018
9	Maintenance of Records								
9.1	Updating of plantation journal	Journal updated till 2018	Journal updated till 2017	Journal updated till 2018	Journal updated till 2018	Journal updated till 2017	Journal updated till 2018	Journal updated till 2018	Journal updated till 2018
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No special Indications	Ploughing & Weeding was instructed	Ploughing & Weeding was instructed	Ploughing & Weeding was instructed	No	No	No	Pits, act as a mini water harvesting structures-by CCF.
10	Project Constraints/Limitations								
10.1	Constraints/Limitations faced by the authorities, if any?	Labour Problem	Labour and timely fund flow are constraining	Labour and timely fund flow are constraining	Labour and timely fund flow are constraining	Labour and timely fund flow are constraining	Labour and timely fund flow are constraining	Labour and timely fund flow are constraining	Not indicated.
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.,								
11.1	Any scope for improving the project output?	YES, Funds required for Maintenance work	YES, Funds required for Maintenance work	YES, Funds required for Maintenance work	YES, Funds required for Maintenance work	YES, Funds required for Maintenance work	YES, Funds required for Maintenance work	YES, Funds required for Maintenance work	YES, Funds required for Maintenance work
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted.	Yes. Local fruit varieties were suggested to be planted.	Yes. Local fruit varieties were suggested to be planted.	Yes. Local fruit varieties were suggested to be planted.	Yes. Local fruit varieties were suggested to be planted.	Yes. Local fruit varieties were suggested to be planted.	Yes. Local fruit varieties were suggested to be planted.	Yes. Local fruit varieties were suggested to be planted.
12	Suggestions for improvements from the Evaluating Agency/Consultants								
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated & Maintained well.	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated Properly Maintained
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall, still Good Maintenance witnessed.	Lowest Rainfall, still Good Maintenance witnessed	Lowest Rainfall, still Good Maintenance witnessed	Lowest Rainfall, still Good Maintenance witnessed	Lowest Rainfall, still Good Maintenance witnessed	Lowest Rainfall, still Good Maintenance witnessed	Lowest Rainfall, still Good Maintenance witnessed	Lowest Rainfall, still Good Maintenance witnessed

EVALUATION FORMAT OF ANANTHAPUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: ANANTHAPUR	
NAME OF THE RANGE: ANANTHAPUR	
S. No	Name of the Compartment
	535
	Singavaram
1	GPS Coordinates Lakshumpalli-Veligandla Canal. N 14.35' 181 E 77.599289
2	Legal Status of Land Reserve Forest
3	Type of Plantation Mixed Crop plantation
4	Plantation Area (in Ha) 4 KMS
5	Choice of Tree Species <i>Pongamia pinnata</i> , <i>Ficusmollis</i> , <i>Dalbergia sissoo</i> , <i>Ficus religiosa</i> , <i>Ficus benghalensis</i> , <i>Spathodea campanulata</i> , <i>Bauhinia racemosa</i>
6	Qualitative Assessment
6.1	Suitability of area Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,) 45 cm ³ , Pitting, 5x5 m ² spaced planting was done
6.3.1	Survival Percentage 97%
6.3.2	Average height/Average girth 4 m/12.96 cm
6.4	Tending Operations (Singling/pruning & other operations) Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments Canal Plantation
6.6	Increase in availability of Biomass for the local community. Status? Not available
6.7	Improvement in quality of life of people due to risen plantation No direct impact on people life.
7	Protection works like fencing etc.,
7.1	Protection measures against Biotic Pressure (Cattles etc.) No measures are taken up
8	The health of raised plantation Healthy

9	Maintenance of Records		
9.1	Updating of plantation journal	Journal Updated Up to 2017-18	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No Special indications	
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?	Labour Problem	
10.2	Source of funds	Compensatory Afforestation (CA) fund	
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.,?		
11.1	Any scope for improving the project output?	YES, Funds required for maintenance work	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted.	
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated & Maintained well.	
12.2	Whether the project should be continued/modified/discontinued (reasons)?	To be continued to enhance the quality of Forest/ Tree Cover.	
13	Overall Grading based on survival %	Excellent	
14	Any other information about the plantation	Lowest Rainfall, still Good Maintenance witnessed	

EVALUATION FORMAT OF BUKKAPATNAM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: ANANTHAPUR																
NAME OF THE RANGE: BUKKAPATNAM																
S. No	Name of the Compartment															
225																
Name of the Beat	GUNI PALLE															
GPS Coordinates	BOMMALAYA KONDA/N 14.22'884 E 77.90'901															
Legal Status of Land	Reserve Forest															
Type of Plantation	Mono Culture crop															
Plantation Area (in Ha)	14.85 Ha															
Choice of Tree Species	<i>Hardwickia binata</i>															
6	Qualitative Assessment															
6.1	Suitability of area															
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)															
6.3.1	Survival Percentage															
6.3.2	Average height/Average girth															
6.4	Tending Operations (Singling/pruning & other operations)															
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments															
6.6	Increase in availability of Biomass for the local community. Status?															
6.7	Improvement in quality of life of people due to risen plantation															
7	Protection works like fencing etc.,															
7.1	Protection measures against Biotic Pressure (Cattles etc.)															
8	The health of raised plantation															
225	GUNI PALLE	BOMMALAYA KONDA/N 14.13'11 E 77.55'4	Reserve Forest	Mono Culture Crop	14.85 Ha	<i>Sterculia urens</i>	Moderately Suitable	45 cm ³ , Pitting, 5x5 m ² spaced planting was done	87 %	1 m/3.2 cm	Tending operations carried out. (Singling and Pruning)	Cultural operations were carried out	Fodder and Broom Sticks are available	Living standards of people got improved	Trenching, Watch & Ward	Healthy
225	GUNI PALLE	BOMMALAYA KONDA/N 14.22'884 E 77.90'901	Reserve Forest	Mono Culture crop	14.85 Ha	<i>Hardwickia binata</i>	Highly Suitable	45 cm ³ , Pitting, 5x5 m ² spaced planting was done	92 %	1 m/3.2 cm	Tending operations carried out. (Singling and Pruning)	Cultural operations were carried out	Fodder and Broom Sticks are available	Living standards of people got improved	Trenching, Watch & Ward	Healthy

9	Maintenance of Records			
9.1	Updating of plantation journal	Journal Updated up to 2017	Journal Updated up to 2017	Journal Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Ploughing & weeding is instructed	Ploughing & weeding is instructed	Ploughing & weeding is instructed
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem
10.2	Source of funds	CA, Jaypee Balaji Cement Projects	CA, Jaypee Balaji Cement Projects	CA, Jaypee Balaji Cement Projects
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth funds flow	Smooth funds flow	Smooth funds flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc..?			
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated & Maintained well.	Journal should be updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.
13	Overall Grading based on survival %	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall, still Good Maintenance witnessed	Lowest Rainfall, still Good Maintenance witnessed	Lowest Rainfall, still Good Maintenance witnessed

EVALUATION FORMAT OF GOOTY RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: ANANTHAPUR

NAME OF THE RANGE: GOOTY

S. No	Name of the Compartment	571	570-571
	Name of the Beat	MADDI PALLE	MADDI PALLE
1	GPS Coordinates	MADDI PALLE N 14.45'253 E 77.53.762	MADDI PALLE N 14.43'992 E 77.55'157
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mono Culture crop	Mono Culture crop
4	Plantation Area (in Ha)	10.8 Ha	10.51 Ha
5	Choice of Tree Species	<i>Sterculia urens</i>	<i>Sterculia urens</i>
6	Qualitative Assessment		
6.1	Suitability of area	Moderately suitable	Moderately suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.)	45 cm3, Pitting, 4x4 m2spaced planting was done	45 cm3, Pitting, 4x4 m2spaced planting was done
6.3.1	Survival Percentage	88%	99%
6.3.2	Average height/Average girth	4 m/12.27 cm	3 m/12.27 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling, Pruning)	Tending operations carried out. (Singling, Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Not witnessed	Not witnessed
6.6	Increase in availability of Biomass for the local community. Status?	Fodder and Broom Sticks are available	Fodder and Broom Sticks are available
6.7	Improvement in quality of life of people due to risen plantation	Living standards of people got improved	Living standards of people got improved
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No measures taken up	No measures taken up
8	Health of raised plantation	Healthy	Healthy

9	Maintenance of Records			
9.1	Updating of plantation journal		Journal Updated up to 2015-16	Journal Updated up to 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		Ploughing & weeding is instructed	Ploughing & weeding is instructed
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?		Labour Problem	Labour Problem
10.2	Source of funds		CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?		Smooth funds flow	Smooth funds flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?		YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues		Journal should be Updated, Inspection Note to be Attached, Not Properly Maintained	Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?		Journal should be updated & Maintained well.	Journal should be Updated, Inspection Note to be Attached
13	Overall Grading based on survival %		To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.
14	Any other information about the plantation		Lowest Rainfall, Average Maintenance	Lowest Rainfall, still Good Maintenance

EVALUATION FORMAT OF KADIRI RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: ANANTHAPUR	
NAME OF THE RANGE: KADIRI	
S. No	Name of the Compartment
41	
KOKKANTI	
61	
KOKKANTI	
1	GPS Coordinates Chinnarammagari Palle/ N 13.93'583 E 78.13'367
2	Legal Status of Land Reserve forest
3	Type of Plantation Mono Culture crop
4	Plantation Area (in Ha) 7.66 Ha
5	Choice of Tree Species <i>Sterculia urens, Hardwickia binata, Acacia lebbeck</i>
6	Qualitative Assessment
6.1	Suitability of area Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,) 45 cm ³ , Pitting, 4x4 m ² spaced planting was done
6.3.1	Survival Percentage 90%
6.3.2	Average height/Average girth 2 m/0.85 cm
6.4	Tending Operations (Singling/pruning & other operations) Tending operations carried out. (Singling, Pruning
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments contour trenches are constructed in some places
6.6	Increase in availability of Biomass for the local community. Status? Fodder and Broom Sticks are available
6.7	Improvement in quality of life of people due to risen plantation Living standards of people got improved
7	Protection works like fencing etc.,
7.1	Protection measures against Biotic Pressure (Cattles etc.) Trenching, social fencing

8	The health of raised plantation	Healthy	Healthy
9	Maintenance of Records		
9.1	Updating of plantation journal	Journal Updated up to 2017-18	Journal Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	recommended casualty replacement – CCF	recommended casualty replacement - CCF
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?	Labour Problem	Not Indicated
10.2	Source of funds	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth funds flow	Smooth funds flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?	YES, Funds for maintenance	YES, Funds for maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated & Maintained well.	Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.
13	Overall Grading based on survival %	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Suitable

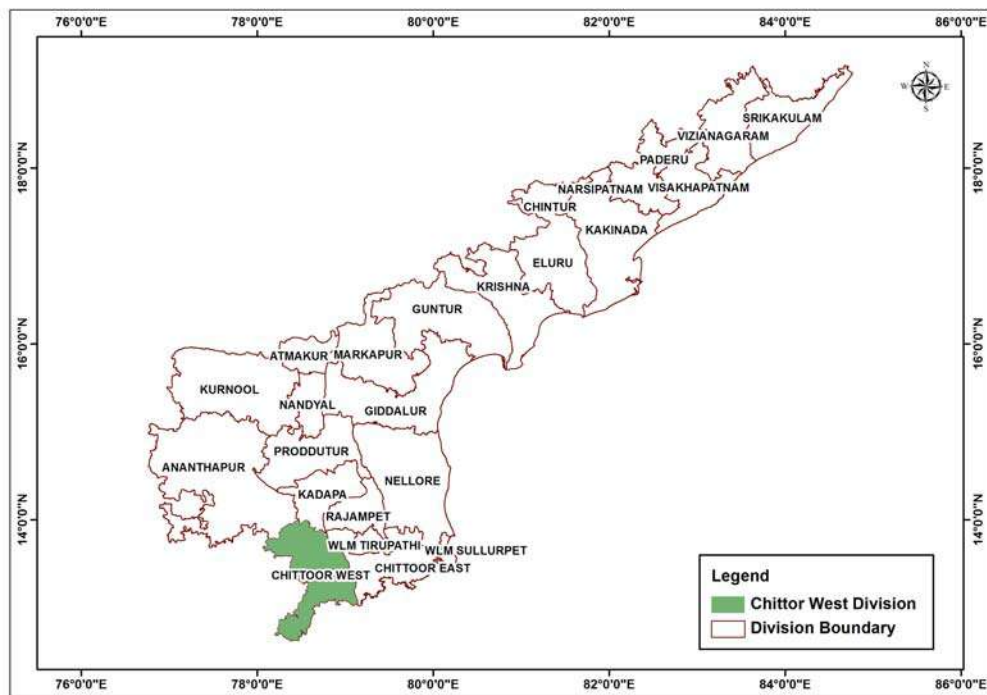
EVALUATION FORMAT OF KALYANDURG RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: ANANTHAPUR						
NAME OF THE RANGE: KALYANDURG						
S. No	Name of the Compartment	764	764	763	763	
	Name of the Beat	SETTURU	KALYANDURG	SETTURU	SETTURU	
1	GPS Coordinates	SETTURU BIT -1/N 14.33'25 E 77.6' 58	SETTURU/N 14.33'25 E 77.6' 58	SETTURU/ N 14.33'25 E 77.6' 58	SETTURU/ N 14.47'830 E 77.01' 428	
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest	
3	Type of Plantation	Mono Culture Crop	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	
4	Plantation Area (in Ha)	20 Ha	20 Ha	20 Ha	20 Ha	
5	Choice of Tree Species	<i>Hardwickia binata</i>	<i>Azadirachta indica</i> , <i>Hardwickia binata</i>	<i>Hardwickia binata</i>	<i>Hardwickia binata</i>	
6	Qualitative Assessment					
6.1	Suitability of area	Highly suitable	Highly suitable	Highly suitable	Highly suitable	
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 4x4 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² spaced planting was done	
6.3.1	Survival Percentage	96%	95%	98%	100%	
6.3.2	Average height/Average girth	4 m/15.82 cm	4 m/15.82 cm	4 m/15.82 cm	4 m/15.82 cm	
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling, Pruning)	Tending operations carried out. (Singling, Pruning)	Tending operations carried out. (Singling, Pruning)	Tending operations carried out. (Singling)	
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Not witnessed	Not witnessed	Not witnessed	Not witnessed	
6.6	Increase in availability of Biomass for the local community. Status?	Fodder and Broom Sticks are available	Fodder and Broom Sticks are available	Fodder and Broom Sticks are available	Fodder and Broom Sticks are available	
6.7	Improvement in quality of life of people due to risen plantation	Living standards of people got improved	Living standards of people got improved	Living standards of people got improved	Living standards of people got improved	

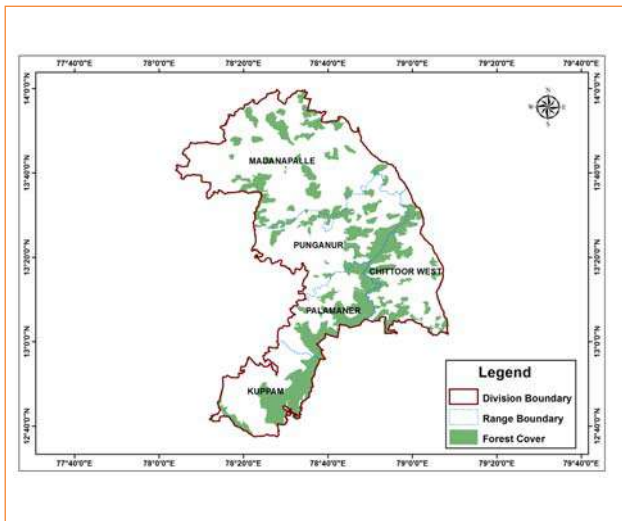
7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure	Brush Wood	Trenching	Trenching	Trenching	Trenching
8	The health of raised plantation	Healthy	20% Diseased	Healthy	Healthy	Healthy
9	Maintenance of Records					
9.1	Updating of plantation journal	Updated till 2015	Updated till 2017-18	Updated till 2017-18	Updated till 2017-18	Updated till 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	casualty replacement was suggested - CCF	No observations	Pits, act as a mini watershed by CCF.	Pits, act as a mini watershed by CCF.	Pits, act as a mini watershed by CCF.
10	Project Constraints/Limitations					
10.1	Constraints/Limitations faced by the authorities, if any?	Not indicated	Not indicated	Not indicated	Not indicated	Not indicated
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth funds flow	Smooth funds flow	Smooth funds flow	Smooth funds flow	Smooth funds flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.,?					
11.1	Any scope for improving the project output?	YES, Funds for maintenance	YES, Funds for maintenance	YES, Funds for maintenance	YES, Funds for maintenance	YES, Funds for maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated & Maintained well.	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated Properly Maintained	Journal should be Updated Properly Maintained
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.
13	Overall Grading based on survival %	Excellent	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance

MONITORING REPORT

CHITTOOR WEST FOREST DIVISION

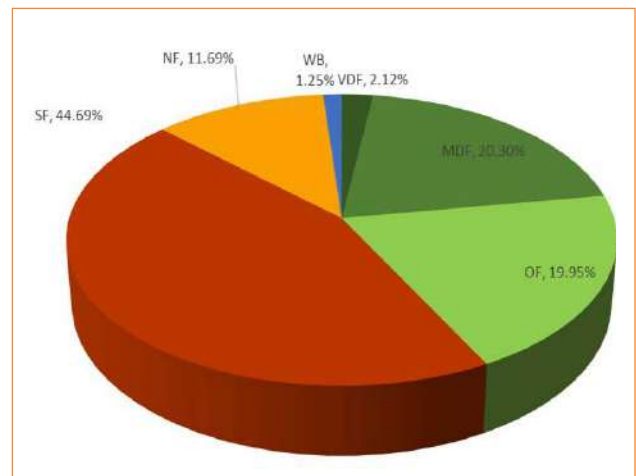


CHITTOOR WEST FOREST DIVISION



Chittoor district is part of Rayalaseema region located in the southernmost part of Andhra Pradesh state bordering with Tamil Nadu in the south and Karnataka in the south-west part. The total geographical area of the district is 15,359 km² with a population of 4.17 million (2011 census). Chittoor West forest division (Latitudes 12° 37' 22" and 13° 59' 37.76" N & Longitudes 78° 40' 12" & 79° 08' 35.52" E.) is part of Anantapur circle with the total forest area of 7,944 km² which is 52.32% of the geographical area of the district.

Figure 1: Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

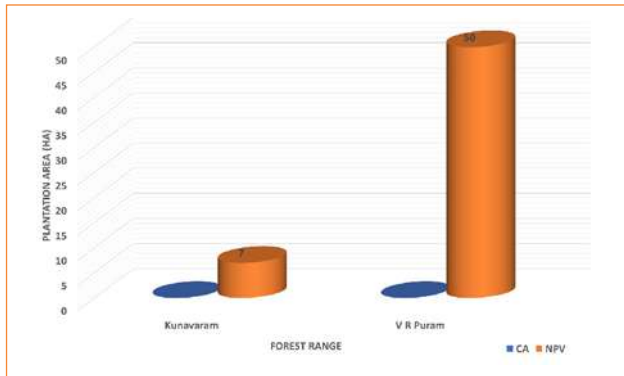
Chittoor West Division comprises total 5 ranges namely Chittoor West, Kuppam, Madanapalle, Punganuru & Palamaneru. For the year 2015-16, Division has taken up plantation work over an area of about 400 ha covering all the five ranges namely Chittoor west (55 ha), Kuppam (105 ha), Madanapalle (70 ha), Punganur (50 ha) & Palamaneru (120 ha) under CAMPA. By Random Sampling method, the total area was partially enumerated in 7 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Chittoor West	Mixed	<i>Hardwickia binata</i> <i>Pterocarpus santalinus</i> <i>Dolichandrone crispera</i>	-	55	High	-	95	3.5	18.21
Kuppam	Mixed	<i>Terminalia arjuna</i> <i>Hardwickia binata</i> <i>Swietenia macrophylla</i> <i>Syzygium cumini</i> <i>Pterocarpus santalinus</i>	-	105	High	-	97	2.5	12.38
Madanapalle	Mixed	<i>Hardwickia binata</i> <i>Sterculia urens</i>	-	70	High	-	90	4	18.65
Punganur	Mixed	<i>Pterocarpus santalinus</i>	-	50	High	-	100	3.5	20.74
Palamaneru	Mixed	<i>Hardwickia binata</i> <i>Pterocarpus santalinus</i> <i>Dolichandrone crispera</i>	-	120	High	-	93	3	19.45

Plantation Area

In the division, maximum was planted in Palamaner forest range and comparatively less plantation was planted in Punganur forest range.

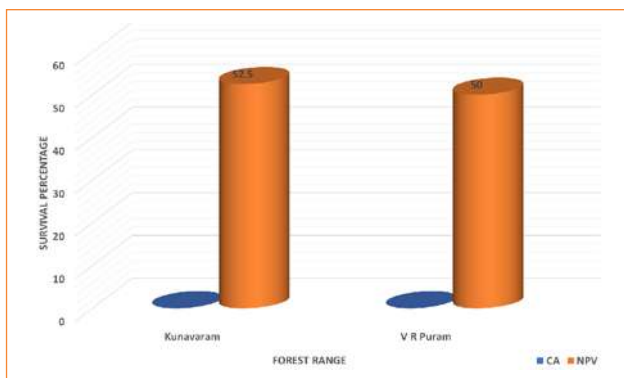
Figure 2: Plantation area Chittoor West forest division



Survival Percentage

Overall survival percentage of Chittoor West plantations was observed to be excellent ranging from 90 % to 100%. The survival percentage is maximum in Punganur and Chittoor Ranges which are having 100 %.

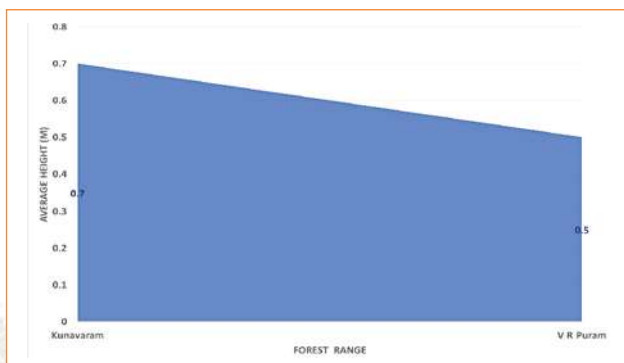
Figure 3 : Survival percentages of plantations



Average height

In the division, most of the plantations were healthy and maximum height was observed in Madanapalle range with an average height of 4m and minimum growth was observed in Kuppam range with an average height of 2.5 m.

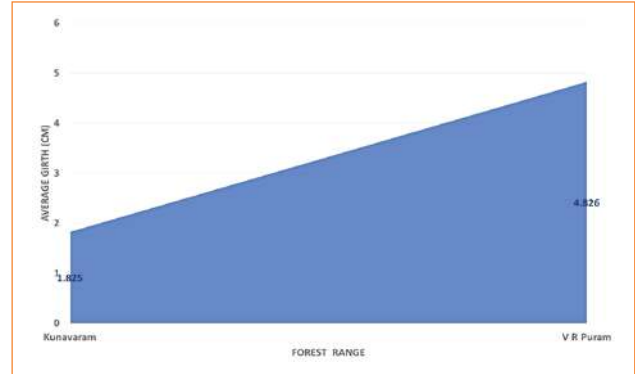
Figure 4 Average height of the plantations (m)



Average Girth

In the division, maximum girth was observed in Punganur range with an average of 20.74cm & the minimum was observed in Kuppam range with an average of 12.38 cm.

Figure 4 : Average girths of the plantations (cm)



Observations:

In the division, compartment No.373 of Madanapalle Range and Nemipalle compartment No.213 of Punganur Forest range plantations were observed to be the best plantations.

- Survival percentage of plantations was Excellent with an average of 96.8% ranging from 90% - 100% in most of the plantations.
- Site quality was taken up as criteria for the choice of species and was highly suitable to the conditions. The species planted were *Hardwickia binata*, *Syzygium cumini*, *Terminalia arjuna*, *Swietenia mahagoni*, and *Sterculia urens* which are suitable to the dry tropical deciduous vegetations.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with spacing (3x3m²) resulted in mixed crop plantations. Cultural operations (cleaning, weeding and climber cutting) and SMC operations and water harvesting structures, such as check dams & contour trenching were taken up at the initial stages.
- There are moderate temperatures and good rainfall and climatic conditions had an impact on the growth of the plantations, hence the good survival percentage was observed. It appears that the best plantations were established with favourable climatic conditions along with proper protection measures.
- The average height of tree species was 5.12 which is ranging from 3.5 to 6 m. Tending operations (pruning, singling & thinning) were carried out. Live fencing, kaccha fencing, boulder walls and social fencing

were created to protect plantations from biotic pressure.

- Local communities were benefited by gathering fuelwood, fodder and other intangible benefits like water level increase in their wells due to the plantation activities carried out and consequent groundwater recharge.
- Plantation journals were maintained in most of the sites but inspecting authorities made recommendations in

some sites such as inter ploughing and casualty replacements.

- No major constrains were found for growing the plantations. CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during the initial period of the plantation works and most of the plantations received funds timely without any delay.
- Growing of plantations has generally contributed to improving the living standard of the people.



NTSH plantation in Chittoor West range



Pterocarpus santalinus plantations in Palamaneru range



Syzygium cumini plantations in Palamaneru range



NTSH plantation in Palamaneru range

FEVALUATION FORMAT OF CHITTOOR WEST DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: CHITTOOR WEST						
NAME OF THE CIRCLE : ANANTHAPURAM						
S.No.	Name of the Range	Chittoor	Kuppam	Madanapalli	Punganur	
1	GPS Coordinates	N 13.15' E 78.87'	N 12.53' E 78.29'	N 13.47' E 78.48'	N 13.26'05 E 78.62'417	
2	Legal Status of Land	Reserve forest	Reserve forest	Reserve forest	Reserve forest	
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	
4	Plantation Area (in ha)	55ha	105ha	70 ha	50ha	
5	Choice of Tree Species	<i>Hardwickia binata</i> , <i>Syzygium cumini</i>	<i>Terminalia Arjuna</i> , <i>Hardwickia binata</i> , <i>Swieteniamacrophylla</i> , <i>Syzygium cumini</i>	<i>Hardwickia binata</i> , <i>Sterculia urens</i>	<i>Pterocarpus santalinus</i>	
7	Qualitative Assessment					
7.1	Suitability of area	Highly Suitable	Highly Suitable	Highly Suitable	Highly Suitable	
7.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	
7.3.1	Survival Percentage	95 %	97 %	90 %	100 %	
7.3.2	Average height/Average girth	3.5 m / 18.21 cm	2.5 m / 12.38 cm	4 m / 18.65 cm	3.5 m / 20.74 cm	
7.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	NRG occurred, tending operations carried out. (Singling and Pruning)	Tending operations (Singling and Pruning) in progress	Tending operations carried out. (Singling and Pruning)	
7.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Not Witnessed	Not Witnessed	Cultural operations were carried out	Not witnessed	
7.6	Increase in availability of Biomass for local community. Status?	Fuel wood, Fodder, Broom Sticks	Not available	Not available	Fodder and Broom Sticks	
7.7	Improvement in quality of life of people due to risen plantation	Living standards of people got improved	No direct impact on people's lives.	Living standards of people got improved	Living standards of people got improved	

8	Protection works like fencing etc.,						
8.1	Protection measures against Biotic Pressure (Cattles etc.)	Kuchcha fencing	Kuchcha fencing with Bushes	Social Fencing, Watch & Ward	Kuchcha fencing	Healthy	Healthy
8.2	The health of raised plantation	Healthy	Healthy	Healthy	Healthy		
9	Maintenance of Records						
9.1	Updating of plantation journal	up to 2018	Updated up to 2017	Updated up to 2015	updated up to 2018		
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Recommended for casualty replacement by authorities	Growth was observed	Burn collected bushes, Mini PT & RFDs	Inter Ploughing recommended - DFO, CCF		
10	Project Constraints/Limitations						
10.1	Constraints/Limitations faced by the authorities, if any?	Not indicated	Not indicated	Not indicated	Not indicated		
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA		
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth Funds flow	Smooth Funds flow	Smooth Funds flow	Smooth Funds flow		
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.,?						
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance		
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs		
12	Suggestions for improvements from the Evaluating Agency/Consultants						
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated & Maintained well.	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated Properly Maintained		
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.		
13	Overall Grading based on survival %	Excellent	Excellent	Excellent	Excellent		
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance		

EVALUATION FORMAT OF CHITTOOR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: CHITTOOR WEST		196	197
NAME OF THE RANGE : CHITTOOR			
S.No.	Name of the Compartment	196	197
	Name of the Beat	M.V. GIRI	M.V. GIRI
1	GPS Coordinates	VEPANAPALLE/N 13.17'280 E 078.86'348	VEPANAPALLE/N 13.14'552 E 078.88'264
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20 Ha	20 Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i> , <i>Dolichandrone crispera</i>	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i> , <i>Dolichandrone crispera</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done
6.3.1	Survival Percentage	91%	97%
6.3.2	Average height/Average girth	6m/18021 cm	4 m/18.21 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Not Witnessed	Not Witnessed
6.6	Increase in availability of Biomass for the local community. Status?	Fodder and Broom Sticks are available	Fodder and Broom Sticks are available
6.7	Improvement in quality of life of people due to risen plantation	Living standards of people got improved.	Living standards of people got improved.
7	Protection works like fencing etc..		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	PPT's on Road Side	PPT's Road Side, Brushwood fencing
8	The health of raised plantation	Healthy	Healthy

9	Maintenance of Records		
9.1	Updating of plantation journal	Yes 2015-16	Yes 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	recommended for casualty replacement by authorities	recommended for casualty replacement by authorities
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?	No	No
10.2	Source of funds	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth funds flow	Smooth funds flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc..?		
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated & Maintained well.	Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.
13	Overall Grading based on survival %	Excellent	Excellent
14	Any other information about the plantation	Maintenance is Good	Maintenance is Good

EVALUATION FORMAT OF KUPPAM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: CHITTOOR WEST

NAME OF THE RANGE : KUPPAM

S.No.	Name of the Compartment	373	371
	Name of the Beat	MUDDANAPALLE	MUDDANAPALLE
1	GPS Coordinates	MUDDANAPALLE/N 12.53'47 E 78.29'54	MUDDANAPALLE/ N 12.54'11 E 78.29'44
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Monocultureplantation
4	Plantation Area (in Ha)	10 Ha	10 Ha
5	Choice of Tree Species	<i>Syzygium cumini</i> , <i>Terminalia arjuna</i> , <i>Hardwickia binata</i> , <i>Swietenia macrophylla</i>	<i>Pterocarpus santalinus</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done
6.3.1	Survival Percentage	100 %	95 %
6.3.2	Average height/Average girth	3m / 12.38 cm	3m/12.8 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Not Witnessed	Not Witnessed
6.6	Increase in availability of Biomass for the local community. Status?	Not available	Not available
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on people's lives	No direct impact on people's lives
7	Protection works like fencing etc..		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Kuchcha fencing	Kuchcha fencing with Bushes
8	The health of raised plantation	Healthy	Good

9	Maintenance of Records			
9.1	Updating of plantation journal	2017		Yes-2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	good growth is seen		the growth process has been seen
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	Not indicated		Not indicated
10.2	Source of funds	CAMPA		CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth funds flow		Smooth funds flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc...?			
11.1	Any scope for improving the project output?	Yes		Yes
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs		Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated & Maintained well.		Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	To be continued to enhance the quality of Forest/ Tree Cover.		To be continued to enhance the quality of Forest/ Tree Cover.
13	Overall Grading based on survival %	Excellent		Excellent
14	Any other information about the plantation	Good Maintenance		Good Maintenance

EVALUATION FORMAT OF MADANAPALLI RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: CHITTOOR WEST

NAME OF THE RANGE : MADANAPALLI

S.No.	Name of the Compartment	70	70
	Name of the Beat	Nadimcherla	Nadimcherla
1	GPS Coordinates	Urakonda/ N 13.47 & E 078.49	Urakonda/ N 13.47 & E 078.48
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Sterculia urens	Hardwickia binata
4	Plantation Area (in Ha)	10 Ha	10 Ha
5	Choice of Tree Species	Mono Culture Crop	Mono Culture Crop
6	Qualitative Assessment		
6.1	Suitability of area	Moderately Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done
6.3.1	Survival Percentage	86%	94%
6.3.2	Average height/Average girth	5m/ 18.65cm	5m/18.65 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling, etc)	Tending operations carried out. (Singling, etc)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Pits, act as a mini water harvesting structures-by CCF.	Pits, act as a mini water harvesting structures-by CCF.
6.6	Increase in availability of Biomass for the local community. Status?	Not witnessed	Not witnessed
6.7	Improvement in quality of life of people due to risen plantation	The living standard of the people got improved	The living standard of the people got improved
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Social Fencing, Watch & Ward	Social Fencing, Watch & Ward
8	The health of raised plantation	Healthy	Healthy

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2015	Updated up to 2015	Updated up to 2015
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Burn collected bushes, Mini PT & RFDs	Burn collected bushes, Mini PT & RFDs	Burn collected bushes, Mini PT & RFDs
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	Not indicated	Not indicated	Not indicated
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth funds flow	Smooth funds flow	Smooth funds flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc..?			
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated & Maintained well.	Journal should be updated & Maintained well.	Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.
13	Overall Grading based on survival %	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF PUNGANUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: CHITTOOR WEST

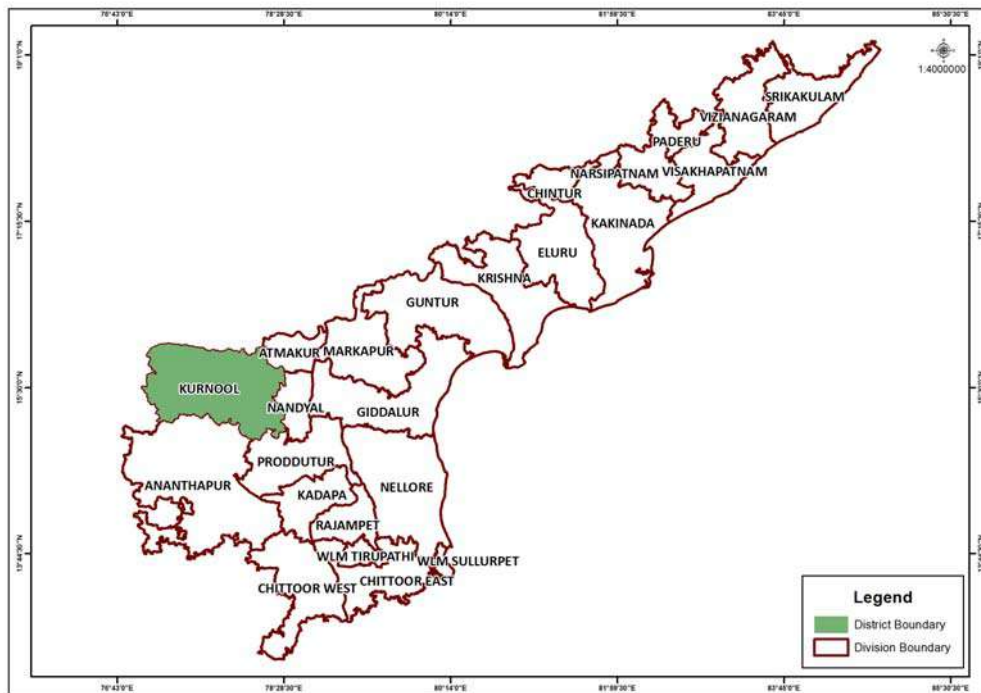
NAME OF THE RANGE : PUNGANUR

S.No.	Name of the Compartment	213
	Name of the Beat	Punganur Range
1	GPS Coordinates	Nemipalle/ N13.26'055 & E 78.62'417
2	Legal Status of Land	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>
6	Qualitative Assessment	
6.1	Suitability of area	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3 m ² spaced planting was done
6.3.1	Survival Percentage	100 %
6.3.2	Average height/Average girth	6 m/20.74 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Not Witnessed
6.6	Increase in availability of Biomass for the local community. Status?	Fodder and Broom Sticks are available
6.7	Improvement in quality of life of people due to risen plantation	The living standard of the people got improved
7	Protection works like fencing etc.,	
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Kuchcha fencing
8	The health of raised plantation	Healthy

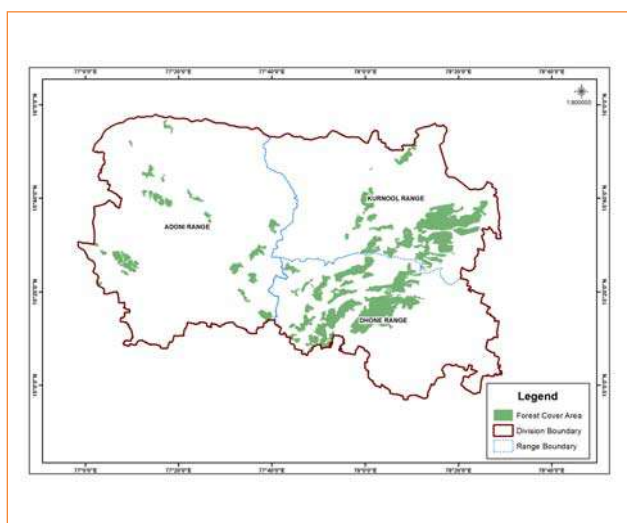
9	Maintenance of Records		
9.1	Updating of plantation journal		Updated up to 2018
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		Inter Ploughing recommended by DFO, CCF
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?		Not indicated
10.2	Source of funds		CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smooth Funds Flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc...?		
11.1	Any scope for improving the project output?		YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues		Journal should be updated & Maintained well.
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?		To be continued to enhance the quality of Forest/ Tree Cover.
13	Overall Grading based on survival %		Excellent
14	Any other information about the plantation		Maintenance is Good

MONITORING REPORT

KURNOOL FOREST DIVISION

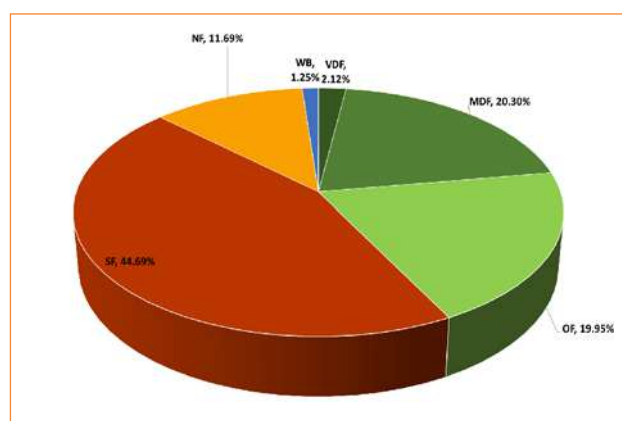


KURNOOL FOREST DIVISION



Kurnool district is a part of Rayalaseema region located in the west-central part of Andhra Pradesh state bordering with Telangana in the north and Maharashtra in the west. The area of the district is 17658 Km² and the population is 4.04 million (2011 census). Kurnool Forest Division (latitudes 14°56'49.56" and 15°57'49.68" N and longitudes 76°58'26.04" and 78°29'22.56" E) is part of Kurnool circle with the geographical area of 12,904 Km² which is 73.07% area of the district.

Figure 1: Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

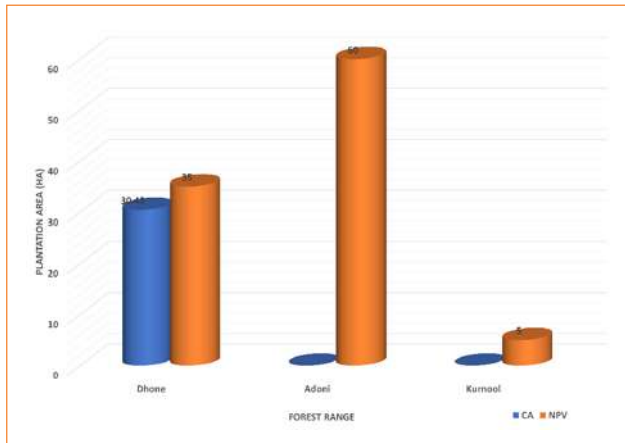
Kurnool Division comprises a total of 5 ranges namely Dhone, Adoni, Kurnool, G.I.S, and Mining. For the year 2015-16, Division has taken up plantation work over an area of about 130.43 ha covering all the three out of five ranges namely Dhone (65.43 ha), Adoni (60 ha), and Kurnool (5 ha) under CAMPA. Monitoring and Evaluation of CAMPA plantation works were carried out by knowing the status of the plantations. By Random Sampling method, the total area was partially enumerated in 5 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Dhone	Mixed	<i>Holoptelea integrifolia</i> <i>Eucalyptus tereticornis</i> <i>Sterculia urens</i> <i>Syzygium cumini</i> <i>Hardwickia binata</i>	30.43	35	High	88.5	90	3.18	14.91
Adoni	Mixed	<i>Azadirachta indica</i> <i>Holoptelea integrifolia</i> <i>Terminalia arjuna</i>	-	60	High	-	96.5	3.75	19.25
Kurnool	Mixed	<i>Pongamia pinnata</i> <i>Sterculia urens</i>	-	5	Poor	-	14	5	4.133

Plantation area

In the division, maximum was planted in Dhone forest range and the minimum was planted in Kurnool forest range.

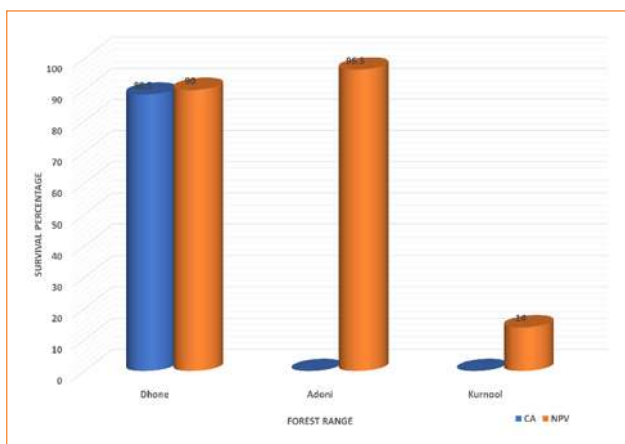
Figure 2: Plantation area (ha) of Kurnool Division



Survival percentage

The survival percentage is maximum in Adoni followed by Dhone which are having 96.5% and 89.25 % respectively and a minimum in Kurnool range which is having 14%.

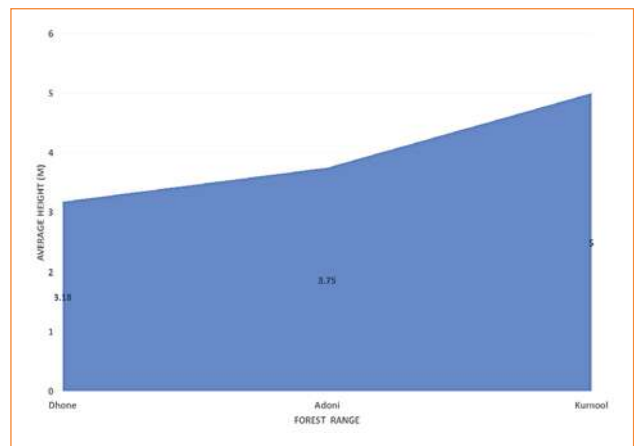
Figure 3: Survival percentage of plantations



Average height

In the division, plantations were healthy and maximum growth was observed in Kurnool range with an average height of 5 m and minimum growth was observed in Dhone range with an average height 3.18m.

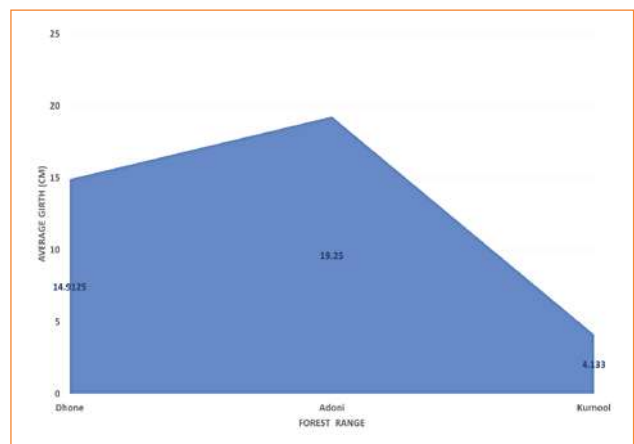
Figure 4: Average height of plantations



Average Girth

In the division, maximum girth was observed in Adoni range with an average of 19.25cm and the minimum was observed in Kurnool range with an average of 4.13cm.

Figure 5: Average girth of plantations (cm)



Observations:

In the division, in compartment Nos. 181 &182 of Mulyala of Dhone forest range and in compartment No.49 of Gunollakonda of Adoni Forest range plantations were observed to be the best plantations.

- Survival percentage of the plantations was excellent in two out of the three plantations (average 92.8%) and was poor in one plantation (14%).
- Site Quality was taken as criteria for the choice of species. The species chosen were *Holoptelea integrifolia*, *Eucalyptus tereticornis*, *Hardwickia binata*, *Azadirachta indica*, *Terminalia arjuna*, *Pongamia pinnata* and *Sterculia urens* which are suitable for tropical dry deciduous vegetations.

- Reserve Forest area was taken up for plantation activities. Linear-Pit planting with spacing (of 3x2, 3x3, and 4 x 4 m²) resulted in mixed crop plantations. Cultural operations (cleaning, weeding and climber cutting) and SMC operations and water harvesting structures (check dams & contour trenching) were taken up at the initial stages.
- Though there are severe temperature and low rainfall and the impact of hostile conditions on the growth of the plantations comparatively low in most of the sites, hence the good survival percentage was observed. It appears that the suitability of species and proper protection measures has yielded results.
- The average height of tree species was 2.97m and it was ranging from 2 to 3.75m. Tending operations (pruning & singling) were carried out. Trenching and social fencing were created to protect plantations from biotic pressure.

- Plantation journals were maintained in most of the sites but inspecting authorities made recommendations in some sites such as Instructed to take up circular weeding, soil work as per calendar operations and casualty replacement.
- Labour problem was found to be major constrain during the maintenance of the plantations. CAMPA fund was used for raising plantations in and around forest areas/outside forest areas and flow of funds was smooth during the initial period of the plantation works and most of the plantations received funds timely without any delay.
- Local communities got benefited by gathering fuelwood, fodder and other intangible benefits like water level increase in their wells due to the plantation activities and consequent water recharge.



Plantation board for the year of 2015-16 in Adoni Range, Kurnool Division



Plantation board for the year of 2015-16 in Dhone Range, Kurnool Division



Azadirachta indica plantation in Dhone range, Kurnool Forest Division

EVALUATION FORMAT OF KURNOOL DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : KURNOOL						
NAME OF THE DIVISION : KURNOOL						
S.No.	Name of the Range	DHONE	ADONI	KURNOOL		
1	GPS Coordinates	N 15.30' E 77.75'	N 15.48' E 77.61'	N 15.52' E 78.93'		
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest		
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation		
4	Plantation Area (in Ha)	65.43 Ha	60 Ha	5 Ha		
5	Choice of Tree Species	<i>Holoptelea integrifolia</i> , <i>Eucalyptus tereticornis</i> , <i>Hardwickia binata</i>	<i>Azadirachta indica</i> , <i>Holoptelea integrifolia</i> , <i>Terminalia arjuna</i>	<i>Pongamia pinnata</i> , <i>Sterculia urens</i>		
6	Qualitative Assessment					
6.1	Suitability of area	Highly suitable	Highly suitable	Poorly suitable		
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x2 m ² , 3x3 m ² , 4x4 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done		
6.3.1	Survival Percentage	89.25%	96.5%	14%		
6.3.2	Average height / /Average girth	3.18m / 14.91 cm	3.75m / 19.25 cm	5m / 4.13 cm		
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out (Singling and Pruning)	Tending operations carried out (Singling and Pruning)	Tending operations carried out (Singling and Pruning)		
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Cultural operations	Cultural operations	Cultural operations		
6.6	Increase in availability of Biomass for local community. Status?	Small Timber e	Small Timber	No		
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on people	No direct impact on people	No direct impact on people		
7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc)	Trenching, Watch & Ward	Trenching, Watch & Ward	Trenching, Watch & Ward		

	Healthy	Healthy	Healthy	Healthy	unhealthy
8	The health of raised plantation	Healthy	Healthy	Healthy	unhealthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2018	Updated up to 2017	Updated up to 2018	Updated up to 2018
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding, soil work as per calendar operations – CCF	Recommended for casualty replacement by authorities	Recommended for casualty replacement by authorities	Recommended for casualty replacement by authorities
10	Project Constraints/Limitations				
10.1	Constraints faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem	Labour Problem
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.?				
11.1	Any scope for improving the project output?	YES, if funds were provided for maintenance works	YES, if funds were provided for maintenance works	YES, if funds were provided for maintenance works	YES, if funds were provided for maintenance works
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted.	Yes. Local fruit varieties were suggested to be planted.	Yes. Local fruit varieties were suggested to be planted.	Yes. Local fruit varieties were suggested to be planted.
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be updated & Maintained well.	Journal should be updated & Maintained well.	Journal should be updated & Maintained well.	Journal should be updated & Maintained well.
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.	To be continued to enhance the quality of Forest/ Tree Cover.
13	Overall Grading/ Rating	Excellent	Excellent	Poor	Poor
14	Any other information about the plantation	Lowest Rainfall, Average Maintenance	Lowest Rainfall	Lowest Rainfall	Lowest Rainfall

EVALUATION FORMAT OF DHONE RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : KURNOOL						
NAME OF THE RANGE : DHONE						
S.No.	Name of the Compartment	CHERLOPALLE RF	OWK – RF	OWK - RF	OWK	OWK - RF
	Name of the Beat	OWK	OWK	OWK	OWK	OWK
1	GPS Coordinates	Sangapatnam N 15.17.301 E 78.111.40	Sangapatnam N 15.172.43 E 78.111.56	Sangapatnam N 15.174.24 E 78.112.08	Sangapatnam N 15.174.24 E 78.112.08	Sangapatnam N 15.174.24 E 78.112.08
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed Crop Plantation	Mixed Crop Plantation	Mixed Crop Plantation	Mixed Crop Plantation	Mixed Crop Plantation
4	Plantation Area (in Ha)	30 Ha	30 Ha	30 Ha	30 Ha	30 Ha
5	Choice of Tree Species	<i>Holoptelea integrifolia</i> , <i>Sterculia urens</i>	<i>Holoptelea integrifolia</i> , <i>Sterculia urens</i>	<i>Holoptelea integrifolia</i> , <i>Sterculia urens</i>	<i>Holoptelea integrifolia</i> , <i>Sterculia urens</i>	<i>Holoptelea integrifolia</i> , <i>Sterculia urens</i>
6	Qualitative Assessment					
6.1	Suitability of area	Moderately suitable	Moderately suitable	Moderately suitable	Moderately suitable	Moderately suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 4x4 m ² , 5x5 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² , 5x5 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² , 5x5 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² , 5x5 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² , 5x5 m ² spaced planting was done
6.3.1	Survival Percentage	90%	90%	90%	90%	70%
6.3.2	Average height/Average girth	3 m/14.91 cm	2.5 m/14.91 cm	3 m/14.91 cm	3 m/14.91 cm	3 m/14.91 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Inter Ploughing)	Tending operations carried out. (Inter Ploughing)	Tending operations carried out. (Inter Ploughing)	Tending operations carried out. (Inter Ploughing)	Tending operations carried out. (Inter Ploughing)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work is done, weeding,	Soil work is done, weeding,	Soil work is done, weeding,	Soil work is done, weeding,	Soil work is done, weeding,
6.6	Increase in availability of Biomass for the local community. Status?	Small Timber	Small Timber	Small Timber	Small Timber	Small Timber
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on people	No direct impact on people	No direct impact on people	No direct impact on people	No direct impact on people

7	Protection works like fencing etc.,				
7.1	Protection measures against Biotic Pressure (Cattles etc)	Trenching, Watch & Ward	Trenching, Watch & Ward	Trenching, Watch & Ward	Trenching, Watch & Ward
8	The health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding, soil work as per calendar operations	Instructed to take up circular weeding, soil work as per calendar operations	Instructed to take up circular weeding, soil work as per calendar operations	Instructed to take up circular weeding, soil work as per calendar operations
10	Project Constraints/Limitations				
10.1	Constraints faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem	Labour Problem
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted	Yes. Local fruit varieties were suggested to be planted	Yes. Local fruit varieties were suggested to be planted	Yes. Local fruit varieties were suggested to be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading/ Rating	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall, Average Maintenance	Lowest Rainfall, Average Maintenance	Lowest Rainfall, Average Maintenance	Lowest Rainfall, Average Maintenance

EVALUATION FORMAT OF DHONE RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : KURNOOL

NAME OF THE RANGE : DHONE

S.No.	Name of the Compartment	181 & 182	181 & 182	181 & 182
	Name of the Beat	MULYALA	MULYALA	MULYALA
1	GPS Coordinates	Kataru Konda N 15.41.253 E 77.72.350	Katarukonda N 15.413.44 E 77.727.26	Katarukonda/ N 15.411.97 E 77.72.037
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop Plantation	Mixed crop Plantation	Mixed crop Plantation
4	Plantation Area (in Ha)	35 Ha	35 Ha	35 Ha
5	Choice of Tree Species	<i>Sterculia urens</i> , <i>Syzygium cumini</i> <i>Hardwickia binata</i>	<i>Sterculia urens</i> , <i>Syzygium cumini</i> <i>Hardwickia binata</i>	<i>Sterculia urens</i> , <i>Syzygium cumini</i> <i>Hardwickia binata</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly suitable	Highly suitable	Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done
6.3.1	Survival Percentage	92 %	90 %	98 %
6.3.2	Average height/Average girth	3 m/14.91 cm	3 m/14.91 cm	3 m/14.91 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling, Inter Ploughing)	Tending operations carried out. (Singling, Inter Ploughing)	Tending operations carried out. (Singling, Inter Ploughing)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work Done, Weeding,	Soil Work Done, Weeding,	Soil Work Done, Weeding,
6.6	Increase in availability of Biomass for the local community. Status?	Small Timber	Small Timber	Small Timber
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on people	No direct impact on people	No direct impact on people

7	Protection works like fencing etc.,				
7.1	Protection measures against Biotic Pressure (Cattle etc)	Trenching	Trenching	Trenching	Trenching
8	The health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2018	Updated up to 2018	Updated up to 2018	Updated up to 2018
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	recommended for casualty replacement by authorities	recommended for casualty replacement by authorities	recommended for casualty replacement by authorities	recommended for casualty replacement by authorities
10	Project Constraints/Limitations				
10.1	Constraints faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem	Labour Problem
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.,				
11.1	Any scope for improving the project output?	YES, Need Watch & Ward	YES, Need Watch & Ward	YES, Need Watch & Ward	YES, Need Watch & Ward
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted	Yes. Local fruit varieties were suggested to be planted	Yes. Local fruit varieties were suggested to be planted	Yes. Local fruit varieties were suggested to be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance & other issues	Properly Maintained	Properly Maintained	Properly Maintained	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage, Discontinued? Reasons	Continued to enhance the quality of Forest/ Tree Coverage, Discontinued? Reasons	Continued to enhance the quality of Forest/ Tree Coverage, Discontinued? Reasons	Continued to enhance the quality of Forest/ Tree Coverage, Discontinued? Reasons
13	Overall Grading/ Rating	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall, Average Maintenance	Lowest Rainfall, Average Maintenance	Lowest Rainfall, Average Maintenance	Lowest Rainfall, Average Maintenance

EVALUATION FORMAT OF DHONE RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : KURNPOOL

NAME OF THE RANGE : DHONE

S.No.	Name of the Compartment	181	181
	Name of the Beat	MULYALA	MULYALA
1	GPS Coordinates	BOYABONTHIRALLA/ N 15.42.144 E 77.71 .263	BOYABONTHIRALLA/N 15.42.051 E 77.71 .342
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mono Culture Crop	Mono Culture Crop
4	Plantation Area (in Ha)	17 Ha	17 Ha
5	Choice of Tree Species	<i>Eucalyptus tereticornis</i>	<i>Eucalyptus tereticornis</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, etc.,)	45 cm ² , Pitting, 3x2 m ² , spaced planting was done	45 cm ² , Pitting, 3x2 m ² , spaced planting was done
6.3.1	Survival Percentage	97 %	84 %
6.3.2	Average height/Average girth	4 m/14.91 cm	5 m/14.91 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Inter Ploughing)	Tending operations carried out. (Singling and Inter Ploughing)
6.5	Soil and Moisture (SMC) Conservation works if taken up and their assessment	Soil work is done, weeding,	Soil work is done, weeding,
6.6	Increase in availability of Biomass for the local community. Status?	Small Timber	Small Timber
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on people	No direct impact on people
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc)	NO	NO
8	The health of raised plantation	Healthy	Healthy

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2012	Updated up to 2012	Updated up to 2012
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	recommended for casualty replacement by authorities	recommended for casualty replacement by authorities	recommended for casualty replacement by authorities
10	Project Constraints/Limitations			
10.1	Constraints faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted	Yes. Local fruit varieties were suggested to be planted	Yes. Local fruit varieties were suggested to be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage.	Continued to enhance the quality of Forest/ Tree Coverage.	Continued to enhance the quality of Forest/ Tree Coverage.
13	Overall Grading/ Rating	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall, Average Maintenance	Lowest Rainfall, Average Maintenance	Lowest Rainfall, Average Maintenance

EVALUATION FORMAT OF ADONI RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : KURNOOL

NAME OF THE RANGE : DHONE

S.No.	Name of the Compartment	49	49
	Name of the Beat	Gunolla Konda	Gunolla Konda
1	GPS Coordinates	DEVARA THIPPA N 15.48.143E 77.61.755	DEVARA THIPPA N 15.48.285E 77.61.810
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed Crop plantation	Mixed Crop plantation
4	Plantation Area (in Ha)	20 Ha	20 Ha
5	Choice of Tree Species	<i>Azadirachta indica</i> , <i>Holoptelea integrifolia</i> , <i>Terminalia arjuna</i>	<i>Azadirachta indica</i> , <i>Holoptelea integrifolia</i> , <i>Terminalia arjuna</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly suitable	Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done
6.3.1	Survival Percentage	99 %	94 %
6.3.2	Average height/Average girth	5 m/19.25 cm	5 m/19.25 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Inter Ploughing)	Tending operations carried out. (Singling, Pruning and Inter Ploughing)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil works are done	Soil works are done
6.6	Increase in availability of Biomass for the local community. Status?	Small Timber	Small Timber
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on people	No direct impact on people
7	Protection works like fencing etc..,		
7.1	Protection measures against Biotic Pressure (Cattles etc)	Trenching, Watch & Ward	Trenching, Watch & Ward

8	The health of raised plantation	Healthy	Healthy
9	Maintenance of Records		
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	recommended for casualty replacement by authorities	recommended for casualty replacement by authorities
10	Project Constraints/Limitations		
10.1	Constraints faced by the authorities, if any?	Labour Problem	Labour Problem
10.2	Source of funds	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.,?		
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted.	Yes. Local fruit varieties were suggested to be planted.
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading/ Rating	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall	Lowest Rainfall

EVALUATION FORMAT OF KURNOOL RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

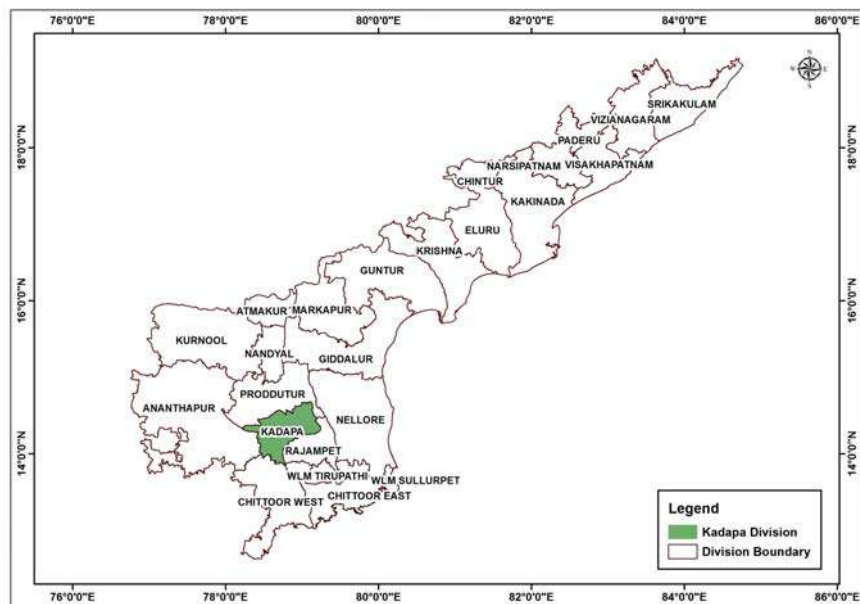
NAME OF THE DIVISION : KURNOOL

NAME OF THE RANGE : KURNOOL

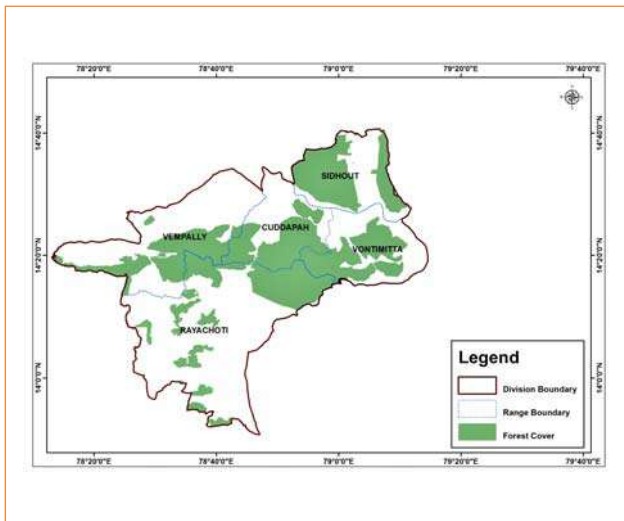
1	GPS Coordinates	N 15.52.354 E 78.93.711
2	Legal Status of Land	Reserve Forest
3	Type of Plantation	Mixed crop Plantation
4	Plantation Area (in Ha)	5 Ha
5	Choice of Tree Species	<i>Pongamia pinnata</i> , <i>Sterculia urens</i>
6	Qualitative Assessment	
6.1	Suitability of area	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done
6.3.1	Survival Percentage	14 %
6.3.2	Average height/Girth	2 m/4.13 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out(Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Cultural operations were carried out
6.6	Increase in availability of Biomass for the local community. Status?	Fodder and fuel
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on people
7	Protection works like fencing etc.,	
7.1	Protection measures against Biotic Pressure (Cattles etc)	Trenching
8	The health of raised plantation	Deformation

9	Maintenance of Records		
9.1	Updating of plantation journal		Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		Recommended for casualty replacement by authorities
10	Project Constraints/Limitations		
10.1	Constraints faced by the authorities, if any?		Labour Problem
10.2	Source of funds		CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?		
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		YES, Funds for Maintenance
11.1	Any scope for improving the project output?		Yes, if funds were provided for maintenance
11.2	Whether people of the area feel that need to improve any aspect of the project?		Yes. Local fruit varieties were suggested to be planted.
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance & other issues		Journal should be Updated
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?		Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading/ Rating		Poor
14	Any other information about the plantation		Lowest Rainfall

MONITORING REPORT KADAPA FOREST DIVISION

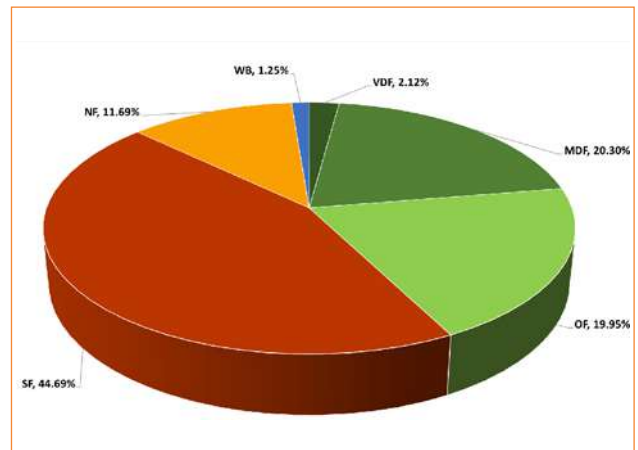


KADAPA FOREST DIVISION



Kadapa district is known to be the heart of the Rayalaseema region as it is centrally located in Rayalaseema region. It is located in the south-central part of Andhra Pradesh which connects all the 4 districts of Rayalaseema. The area of the district is 15,938 Km² and population is 2.8 million (2011 census). Kadapa Forest Division (latitudes 13°50'40" and 14°40'37" N and longitudes 78°13'9" and 79°14'39" E) is a part of Kurnool circle with the geographical area of 4,521 Km² which is 29.44 % of the area of the district.

Figure 1: Kadapa Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

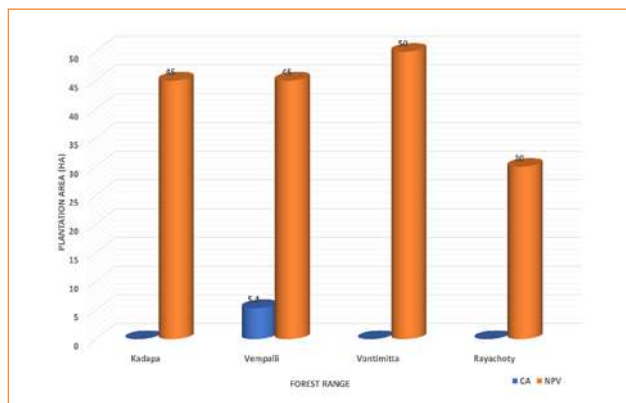
Kadapa Forest Division comprises a total of 5 ranges namely Kadapa, Vempally, Rayachoti, Siddhavattam and Vontimitta. For the year 2015-16, the division has taken up plantation work over an area of about 175.4 Ha covering the all four out of five ranges namely Kadapa (45 Ha), Vempalli (50.4 ha), Rayachoti (50 ha) and Vontimitta (30 ha) under CAMPA. By Random Sampling method, the total area was partially enumerated in 13 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Kadapa	Mixed	<i>Pterocarpus santalinus</i> <i>Hardwickia binata</i> <i>Syzygium cumini</i> <i>Gmelina arborea</i>	-	45	High	-	67.3	2.6	55.137
Vempalli	Mixed	<i>Pterocarpus santalinus</i> <i>Hardwickia binata</i> <i>Phyllanthus emblica</i> <i>Holoptelea integrifolia</i> <i>Syzygium cumini</i>	5.4	45	High	81	78.2	4	13.094
Vontimitta	Mixed	<i>Pterocarpus santalinus</i> <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i> <i>Phyllanthus Emblica</i> <i>Gmelina Arborea</i> <i>Sterculia urens</i> <i>Dalbergia latifolia</i>	-	50	High	-	58	3.52	8.94
Rayachoty	Mixed	<i>Pterocarpus santalinus</i> <i>Sterculia urens</i> <i>Dolichandrone crispera</i> <i>Hardwickia binata</i>	-	30	Moderate	-	90	4	11.877

Plantation area

In the division, maximum was planted in Vempalli followed by Rayachoty forest ranges and the minimum was planted in Vontimitta forest range.

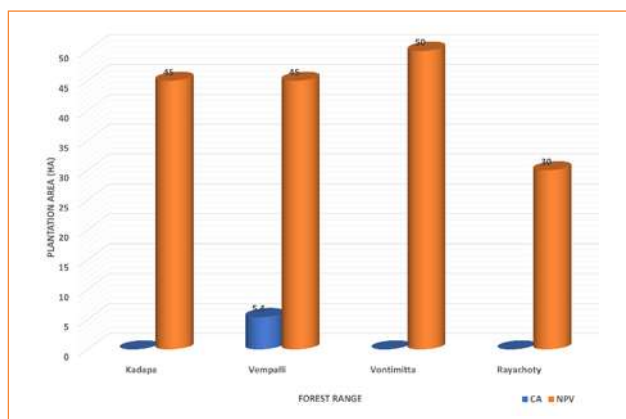
Figure 2: Plantation area in the Kadapa Division



Survival percentage

The survival percentage is maximum in Rayachoty which is having 90% and comparatively less percentage in Vontimitta range which is having 58%.

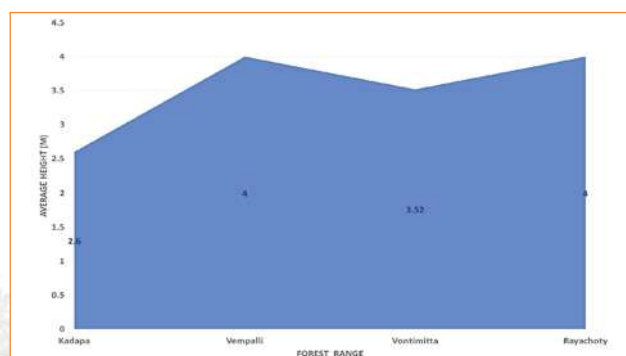
Figure 3: Survival Percentage of the Plantations



Average height

In the division, all the plantations were healthy, maximum height was observed in Vempalli and Rayachoty with an average of 4 m and comparatively less in Kadapa with an average height of 2.6m.

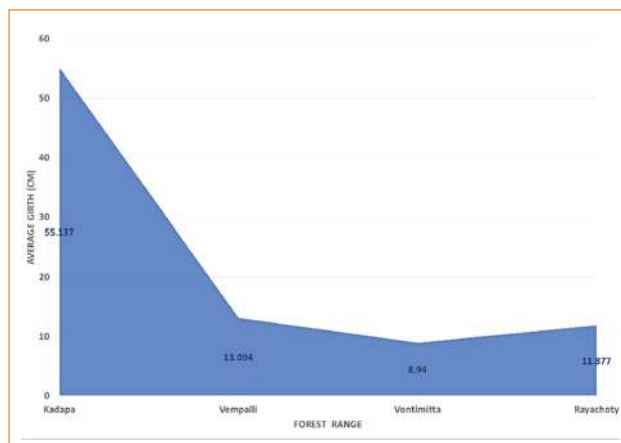
Figure 4: Average height of the plantations



Average girth

In the division, maximum girth was observed in Kadapa range with an average of 55.13 cm and the minimum was observed in Vontimitta range with an average of 13.09cm.

Figure 5: Average girth of the plantations



Observations

In the division, T. Saki Banda compartment No.720 of Rayachoty Forest range plantations were observed to be the best plantations.

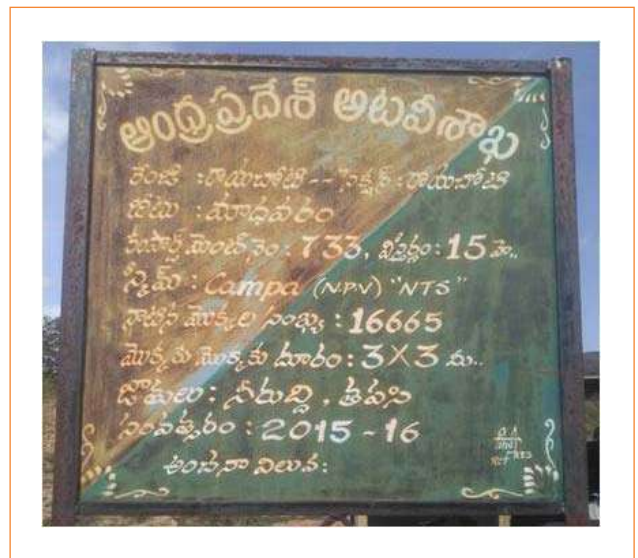
- Survival percentage of the plantations (average of 73.72%) was observed to be excellent, ranging from 58% - 90% in most of the plantations.
- Site Quality was taken as criteria for the choice of species. The species chosen were *Pterocarpus santalinus*, *Hardwickia binata*, *Gmelina arborea*, *Holoptelea integrifolia*, *Syzygium cumini* and *Dalbergia latifolia* which are suitable to the mixed dry deciduous vegetations.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with a spacing of 3m x3m & 5m x5m resulted in mixed crop plantations. Cultural operations (cleaning, weeding, climber cutting) and SMC operations and water harvesting structures (check dams & contour trenching) were taken up at the initial stages.
- Though there are severe temperature and low rainfall and the impact of drought on the growth of the plantations comparatively low, hence the good survival percentage was observed. It appears that the protection measure has yielded results.
- The average height of the tree species was 3.53m in most the plantations ranging from 2.6 to 4 m. Tending

operations (pruning & singling) were done. Live fencing and Kaccha fencing were created to protect plantations from biotic pressure.

- No direct impact on the local communities was observed due to plantation activities.
- Updating of plantation journals was observed in all sites and inspecting authorities made recommendations in some sites such as Delay of operations, poor

maintenance, the establishment of plantations and Wildlife damage notice, row-wise enumeration

- CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during the initial period of the plantation works and most of the plantations received funds timely without any delay.



Plantation board for the year of 2015-16 in Rayachoti Range, Kadapa Division



Dolichandrone crispera (Monoculture) plantation at Rayachoti Range, Kadapa Division



Collar girth measuring of *Hardwickia binata*

EVALUATION FORMAT OF KADAPA DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : KURNOOL						
NAME OF THE DIVISION : KADAPA						
S.No.	Name of the Range	KADAPA	VEMPALLI	VONTIMITTA	RAYACHOTY	
1	GPS Coordinates	N 14.36' E 78.81'	N 14.30' E 78.56'	N 14.31' E 79.07'	N 14.45' E 78.72'	
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserved Forest	Reserve Forest	
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	
4	Plantation Area (in Ha)	45 Ha	50.4 Ha	30 Ha	50 Ha	
5	Choice of Tree Species	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i> , <i>Gmelina arborea</i>	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Syzygium cumini</i>	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Dalbergia latifolia</i>	<i>Pterocarpus santalinus</i> , <i>Sterculia urens</i> , <i>Hardwickia binata</i> 6Qualitative Assessment	
6.1	Suitability of area	Moderately suitable	Moderately suitable	Moderately suitable	Highly suitable	
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	
6.3.1	Survival Percentage	67.3 %	79.6 %	58 %	90 %	
6.3.2	Average height / Girth	2.6m / 55.13 cm	4 m / 13.09 cm	3.52 m / 8.92 cm	4 m / 11.87 cm	
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Cultural operations were carried out	Cultural operations were carried out	Cultural operations were carried out	Cultural operations were carried out	
6.6	Increase in availability of Biomass for local community. Status?	Not Available	Not Available	Not Available	Not Available	
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on people life	No direct impact on people life	No direct impact on people life	No direct impact on people life	
7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc)	Trenching	Fencing	Fencing, Kuchcha fencing	Fencing	

8	The health of raised plantation	Healthy	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records					
9.1	Updating of plantation journal	Updated up to 2016	Updated up to 2016	Updated up to 2017	Updated up to 2016	Updated up to 2016
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Delay of operations, poor maintenance, establishment of plantations by ACF	No observations recorded	Wildlife damage noticed, row-wise enumeration to be done by-CCF	No observations recorded	No observations recorded
10	Project Constraints/Limitations					
10.1	Constraints faced by the authorities, if any?	No	NO	NO	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?					
11.1	Any scope for improving the project output?	Yes	YES, Funds for Maintenance	YES, Need Watch & Ward	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading/ Rating	Excellent	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF KADAPA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: KURNOOL						
NAME OF THE RANGE: KADAPA						
S.No.	Name of the Compartment	526-527	527	527	527	
	Name of the Beat	PEDDAKAMPALLE	PEDDAKAMPALLE	PEDDAKAMPALLE	PEDDAKAMPALLE	
1	GPS Coordinates	N 14.36.044E 78.81.055	N 14.36.391E 78.81.254	N 14.36.343E 78.81.274		
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest		
3	Type of Plantation	Mono Culture Crop	Mono Culture Crop	Mono Culture Crop		
4	Plantation Area (in Ha)	10 Ha	15 Ha	15 Ha		
5	Choice of Tree Species	<i>Pterocarpus Santalinus</i>	<i>Pterocarpus Santalinus, Hardwickia Binata, Gmelina Arborea, Syzygium Cumini</i>	<i>Pterocarpus Santalinus, Hardwickia Binata, Gmelina Arborea, Syzygium Cumini</i>		
6	Qualitative Assessment					
6.1	Suitability of area	Poorly Suitable	Moderately Suitable	Moderately Suitable		
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm3, Pitting, 5x5 m2, spaced planting was done	45 cm3, Pitting, 3x3 m2, spaced planting was done	45 cm3, Pitting, 3x3 m2, spaced planting was done		
6.3.1	Survival Percentage	72 %	92 %	38 %		
6.3.2	Average height/Girth	1 m/55.13 cm	3 m/55.13 cm	4 m/55.13 cm		
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)		
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Works Done	Soil Works Done	Soil Works Done		
6.6	Increased availability of Biomass for society. Status?	Not available	Not available	Not available		
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on peoples	No direct impact on peoples	No direct impact on peoples		
7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc)	Trenching	Trenching	Trenching		

8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	2013-14	2015-16	2015-16	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No Observations Recorded	Delay of operations, poor maintenance, the establishment of plantations by ACF	Delay of operations, poor maintenance, the establishment of plantations by CCF	
10	Project Constraints/Limitations				
10.1	Constraints faced by the authorities, if any?	No	No	No	
10.2	Source of funds	CAMPA	CAMPA	CAMPA	
10.3	If the flow of funds wasn't smooth, where did the delay arise?		Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	No	Yes	Yes	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Discontinued? Reasons	Continued to enhance the quality of Forest/ Tree Coverage	Modified for Quality of Forest Degraded	
13	Overall Grading/ Rating	Poor	Excellent	Poor	
14	Any other information about the plantation	Lowest Rainfall, Average Maintenance	Lowest Rainfall	Average Maintenance	

EVALUATION FORMAT OF VEMPALLI RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: KADAPA

NAME OF THE RANGE: VEMPALLI

S.No.	Name of the Compartment	636	636(2)	603 & 604
	Name of the Beat	B.G. CHERUVU	B.G. CHERUVU	INDUPULA PAI
1	GPS Coordinates	Pulikona N 14.308516 E 78.405107	Nallabolla Kona N 14.308878 E 78.400516	Valasagondi Moola N 14.340562 E 79.558752
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mono Culture Crop	Mono Culture	Mixed crop plantation
4	Plantation Area (in Ha)	20 Ha	20 Ha	15 Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>	<i>Hardwickia binata</i> , <i>Syzygium cumini</i> <i>Holoptelea integrifolia</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly suitable	Highly suitable	Moderately suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done
6.3.1	Survival Percentage	72 %	80 %	73 %
6.3.2	Average height/Girth	2.5 m/13.09 cm	3.1 m/13.09 cm	3.1 m/13.09 cm
6.4	Tending Operations (Singling/ pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Works have done	Soil Works have done	Soil Works have done
6.6	Increase in availability of Biomass for the local community. Status?	No	No	No
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on peoples	No direct impact on peoples	No direct impact on peoples
7	Protection works like fencing etc.,			
7.1	Protection measures against Biotic Pressure (Cattles etc)	NO	NO	Fencing

8	The health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2016	Updated up to 2016	Updated up to 2016	Updated up to 2016
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No Observations Recorded	No Observations Recorded	No Observations Recorded	No Observations Recorded
10	Project Constraints/Limitations				
10.1	Constraints faced by the authorities, if any?	NO	NO	NO	NO
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading/ Rating	Very Good	Excellent	Very Good	Very Good
14	Any other information about the plantation	Lowest Rainfall, Good Maintenance	Good Maintenance	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance

EVALUATION FORMAT OF VEMPALLI RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: KADAPA

NAME OF THE RANGE: VEMPALLI

S.No.	Name of the Compartment	603 & 604	571	570
	Name of the Beat	IDUPULAPAI	GORLAPALLI	GORLAPALLI
1	GPS Coordinates	Valasagondi Moola N 14.340562 E 78.558752	Dharlavanka N 14.392191 E 78.708253	Darla Vanka N 14.223350 E 78.767850
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	15 Ha	15 Ha	5.41 Ha
5	Choice of Tree Species	<i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Syzygium cumini</i>	<i>Hardwickia binata</i> , <i>Phyllanthus emblica</i> , <i>Pterocarpus santalinus</i>	<i>Syzygium cumini</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly suitable	Highly suitable	Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done
6.3.1	Survival Percentage	72 %	92 %	89 %
6.3.2	Average height/Girth	4 m/13.09 cm	5.2 m/13.09 cm	4 m/13.09 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Pruning)	Tending operations carried out. (Pruning)	Tending operations carried out. (Singling)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	NO	NO	soil work, ploughing
6.6	Increase in availability of Biomass for the local community. Status?	NO	NO	NO
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on peoples	No direct impact on peoples	No direct impact on peoples
7	Protection works like fencing etc..,			
7.1	Protection measures against Biotic Pressure (Cattles etc)	Fencing	NO	NO

8	The health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2016	Updated up to 2016	Updated up to 2016	Updated up to 2016
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No Observations Recorded	No Observations Recorded	No Observations Recorded	No Observations Recorded
10	Project Constraints/Limitations				
10.1	Constraints faced by the authorities, if any?	NO	NO	NO	NO
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading/ Rating	Very Good	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall, Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF VONTIMITTA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: KADAPA

NAME OF THE RANGE: VONTIMITTA

S.No.	Name of the Compartment	466	466	466
	Name of the Beat	NAUDALUR	NAUDALUR	NAUDALUR
1	GPS Coordinates	BEERAKONA N 14.27.730E 79.14.520	BEERAKONA N 14.27.153E 79.14.726	REDDIVARI PALLE N 14.28.779E 79.12.388
2	Legal Status of Land	Reserved Forest	Reserved Forest	Reserved Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mono Culture crop
4	Plantation Area (in Ha)	20HA	20HA	20HA
5	Choice of Tree Species	<i>Pterocarpus santalinus</i> , <i>Holoptelea integrifolia</i> , <i>Dalbergia latifolia</i> , <i>Phyllanthus emblica</i> , <i>Gmelina arborea</i>	<i>Pterocarpus santalinus</i> , <i>Holoptelea integrifolia</i> , <i>Dalbergia latifolia</i> , <i>Phyllanthus emblica</i> , <i>Gmelina arborea</i>	<i>Pterocarpus santalinus</i>
6	Qualitative Assessment			
6.1	Suitability of area	Moderately	Moderately	Moderately
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done
6.3.1	Survival Percentage	77 %	70 %	47 %
6.3.2	Average height/Girth	4 m/8.92 cm	4 m/8.92 cm	3 m/8.92 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out (Singling, Pruning)	Tending operations carried out (Singling and Pruning)	Tending operations carried out. (Singling, Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Works Completed	Soil Works Completed	Soil Works Completed
6.6	Increase in availability of Biomass for the local community. Status?	No	No	No
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on people	No direct impact on people	No direct impact on people
7	Protection works like fencing etc..,			
7.1	Protection measures against Biotic Pressure (Cattles etc)	Fencing, Kuchcha fencing	Fencing, Kuchcha fencing	NO

8	The health of raised plantation	Healthy	Healthy	Healthy	NO
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017	Updated up to 2016	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Red sander, H. binata have not shown much survival – by ACF	Red sander, H. binata have not shown much survival – by ACF	Red sander, H. binata have not shown much survival –by ACF	
10	Project Constraints/Limitations				
10.1	Constraints faced by the authorities, if any?	NO	NO	NO	
10.2	Source of funds	CAMPA	CAMPA	CAMPA	
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	
11	Suggestions for improvements (From Implementing/ Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES	YES, Need Watch & Ward	NO	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Special measures have to be incurred to improve the survival percentage	
13	Overall Grading/ Rating	Excellent	Excellent	Poor	
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Average Maintenance	

EVALUATION FORMAT OF VONTIMITTA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: KADAPA

NAME OF THE RANGE: VONTIMITTA

S.No.	Name of the Compartment	466	473
	Name of the Beat	NAUDALUR	MANDALUR
1	GPS Coordinates	REDDIVARI PALLE N 14.28.750E 79.12.383	CHERLOPALLI N 14.35.499E 79.01.112
2	Legal Status of Land	Reserved Forest	Reserved Forest
3	Type of Plantation	Mono Culture crop	Mixed crop plantation
4	Plantation Area (in Ha)	20HA	10 HA
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>	<i>Hardwickia Binata, Pterocarpus Santalinus, Sterculia Urens</i>
6	Qualitative Assessment		
6.1	Suitability of area	Moderately	Moderately
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done
6.3.1	Survival Percentage	48 %	48 %
6.3.2	Average height/Girth	4 m/8.92 cm	4 m/8.92 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work is done	Soil work is done
6.6	Increase in availability of Biomass for the local community. Status?	Fodder	Fodder
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on peoples	No direct impact on peoples
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc)	No	No
8	The health of raised plantation	No	No

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2016	Updated up to 2016	Updated up to 2016
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Wildlife damage is noticed row-wise enumeration is reported to be completed –CCF	Wildlife damage is noticed row-wise enumeration is reported to be completed –CCF	Wildlife damage is noticed row-wise enumeration is reported to be completed –CCF
10	Project Constraints/Limitations			
10.1	Constraints faced by the authorities, if any?	NO	NO	NO
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	NO	NO	NO
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Discontinued? Reasons	Discontinued? Reasons	Discontinued? Reasons
13	Overall Grading/ Rating on basis of Survival %	Poor	Poor	Poor
14	Any other information about the plantation	Average Maintenance	Average Maintenance	Average Maintenance

EVALUATION FORMAT OF RAYACHOTY RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

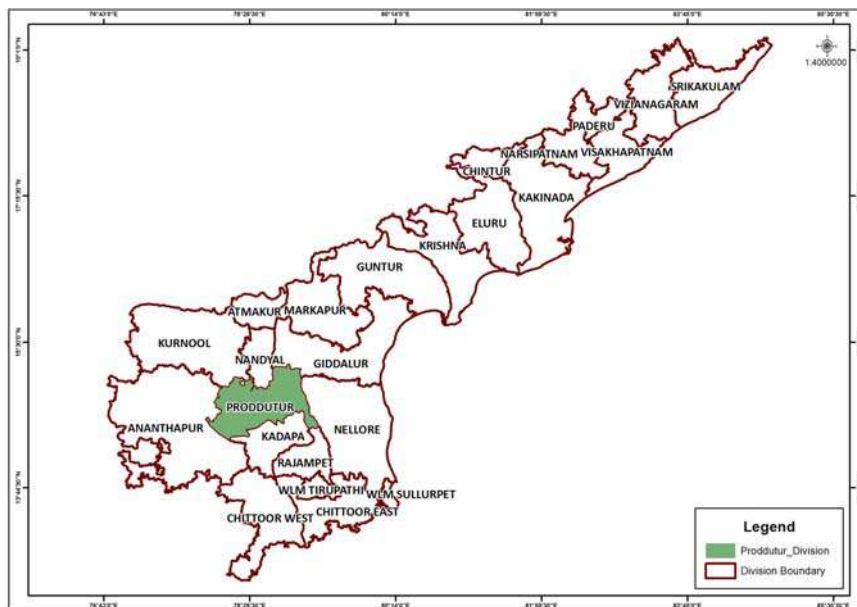
NAME OF THE DIVISION: KADAPA

NAME OF THE RANGE: RAYACHOTY

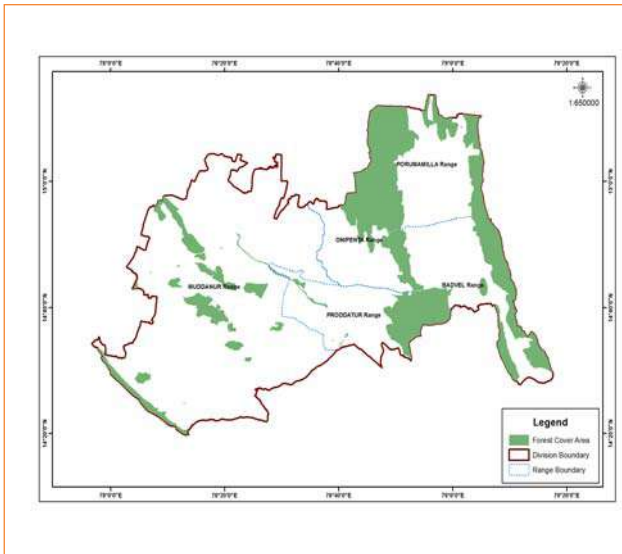
S.No.	Name of the Compartment	698	720	733
	Name of the Beat	KORTHIMADNGU	T. SAKI BANDA	MADHAVARAM
1	GPS Coordinates	Chintakonam N 14.19707 E 78.84631	Chinthala Pradesam N 14.97578 E 78.63840	Yerraddoppalle RSS N 14.07.970 E 78.60.697
2	Legal Status of Land	Reserve forest	Reserve forest	Reserve forest
3	Type of Plantation	Mono Culture	Mixed plantation	Mixed plantation
4	Plantation Area (in Ha)	15 Ha	10 Ha	15 Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>	<i>Sterculia urens</i> , <i>Dolichandrone atrovirens</i>	<i>Hardwickia binata</i> , <i>Sterculia urens</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly suitable	Highly suitable	Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done
6.3.1	Survival Percentage	80%	99%	91%
6.3.2	Average height/Girth	3 m/11.87 cm	4 m/11.87 cm	5 m/11.87 cm
6.4	Tending Operations (Singling/ pruning & other operations)	Tending operations carried out. (Inter Ploughing)	Tending operations carried out (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work done	Soil Work done	Soil Work done
6.6	Increase in availability of Biomass for the local community. Status?	No	No	No
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on peoples	No direct impact on peoples	No direct impact on peoples
7	Protection works like fencing etc.,			
7.1	Protection measures against Biotic Pressure (Cattles etc)	Fencing	No	No

8	The health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2016	Updated up to 2017	Updated up to 2016	Updated up to 2016
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No Observations Recorded	No Observations Recorded	No Observations Recorded	No Observations Recorded
10	Project Constraints/Limitations				
10.1	Constraints faced by the authorities, if any?	No	No	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading/ Rating	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall, good Maintenance	Lowest Rainfall, good Maintenance	Lowest Rainfall, good Maintenance	good Maintenance

MONITORING REPORT PRODDUTUR FOREST DIVISION

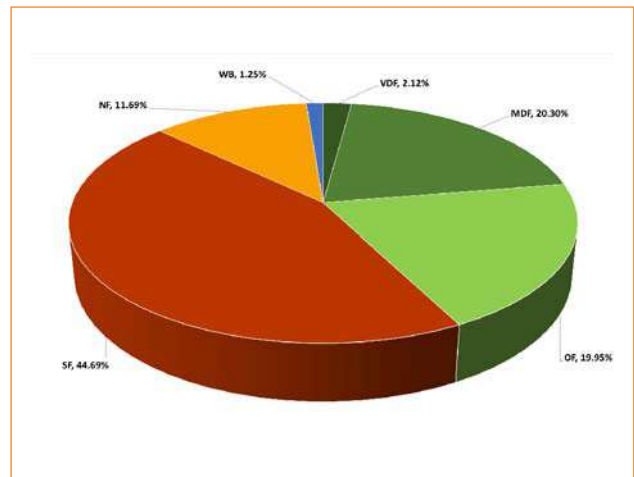


PRODDUTUR FOREST DIVISION



Proddutur, a town as well as an administrative division of Kadapa district, is located on the banks of river Penna in Andhra Pradesh (latitude 14.730 N and longitude 78.550E.). The area of the town is 21.06 km² and the population is 0.21 million (2011 census). Proddutur Forest Division is part of Kurnool circle and lies in the northern part of Kadapa district. The geographical area of the Division is 7,524 Km² which is 48.99 % of the geographical area of the district (15,938 Km²).

Figure 1: Proddutur Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

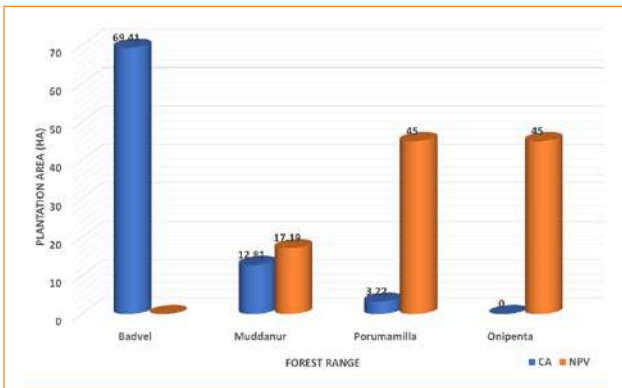
Proddutur division comprises of five forest ranges namely Proddutur, Muddanur, Onipenta, Porumamilla and Badvel. During the year of 2015-16, Proddutur division has taken up plantation work over an area of 166.03 ha covering four out of five plantations namely Badvel (40 ha), Muddanur (32.81ha), Porumamilla (48.22 ha) and Onipenta (45 ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling method, the total area was partially enumerated in 8 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Badvel	Mixed	<i>Pterocarpus santalinus</i> <i>Hardwickia binata</i> <i>Phyllanthus emblica</i> <i>Terminalia arjuna</i> <i>Syzygium cumini</i> <i>Tamarindus indica</i> <i>Azadirachta indica</i> <i>Sterculia urens</i>	-	40	High	84.4	-	1.85	4.605
Muddanur	Mixed	<i>Sterculia urens</i> <i>Cassine glauca</i> <i>Feronia elephantum</i> <i>Phyllanthus emblica</i> <i>Hardwickia binata</i> <i>Azadirachta indica</i> <i>Holoptelea integrifolia</i> <i>Dolichandrone crispera</i> <i>Pongamia pinnata</i>	12.81	20	High	94	91.6	3.8	14.605
Porumamilla	Mixed	<i>Holoptelea integrifolia</i> <i>Hardwickia binata</i> <i>Dolichandrone crispera</i> <i>Tectona grandis</i> <i>Pterocarpus santalinus</i>	3.22	45	High	91	89.5	3.71	12.272
Onipenta	Mixed	<i>Holoptelea integrifolia</i> <i>Hardwickia binata</i> <i>Dolichandrone crispera</i>	-	45	High	-	88	2.8	10.45

Plantation area

In the division, maximum was planted in Badvel forest range and the minimum was planted in Muddanur forest range.

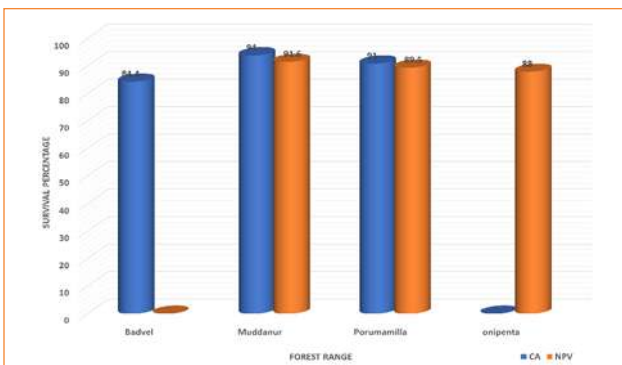
Figure 2: plantation area in Proddutur division



Survival percentage

The survival percentage is maximum in Muddanur followed by Porumamilla which are having 92.8% and 90.28 respectively and minimum in Badvel range which is having 84.4%.

Figure 3: Survival percentage of the Plantations



Average height

In the division, most of the plantations were healthy and maximum growth was observed in Muddanur range with an average height of 3.8m and minimum growth was observed in Badvel range with an average height of 1.85 m.

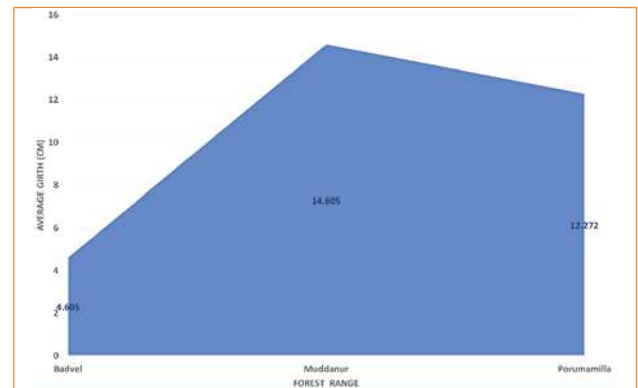
Figure 4: Average height of the plantations



Average girth

In the division, maximum girth was observed in Muddanur range with an average of 14.605 cm & the minimum was observed in Badvel range with an average of 4.605cm.

Figure 5: Average girth of the plantations (cm)



Observations

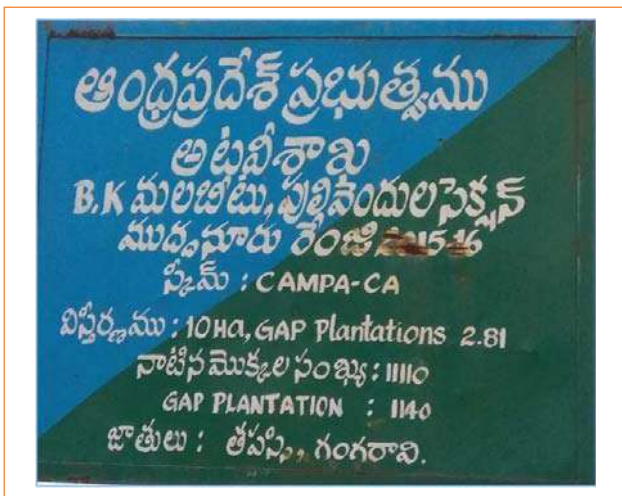
In the division, Settivaripalle compartment No.17 & 18 of Muddanur Forest range plantations were observed to be the best plantations.

- Survival percentage was rated overall excellent (average 89.16%) ranging from 84.4% - 90.28% in all the CAMPA plantations.
- Site quality was taken as criteria for the choice of species and was highly suitable to the conditions. The species planted were *Pterocarpus santalinus*, *Hardwickia binata*, *Phyllanthus emblica*, *Terminalia arjuna*, *Sterculia urens*, *Cassine glauca*, *Feronia elephantum*, *Pongamia pinnata*, *Holoptelea integrifolia* which are suitable for mixed dry deciduous vegetations.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with a spacing of 3mx3m resulted in mixed crop plantations. Cultural operations (cleaning, weeding, and climber cutting) and SMC Operations and water harvesting structures such as check dams & contour trenching were taken up at the initial stages.
- The average height of tree species was 3.12m which is ranging from 1.85 to 3.8 m. Tending operations (pruning, singling & Thinning) were carried out. Live fencing, Kucchafencing, boulder walls and social fencing were created to protect the plantations from biotic pressure.
- Though there is severe temperature and low rainfall and impact of drought on the growth of the plantations

comparatively low, hence the good survival percentage was observed. It appears that the protection measure has yielded results.

- Plantation journals were maintained in most of the sites but inspection notes by higher authorities were not found in most of the plantations
- Local communities were benefited by gathering fuelwood, fodder and other intangible benefits like water level increase in their wells due to the plantation activities

- No major constrains were found for growing the plantation CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during the initial period of the plantation works and most of the plantations received funds timely without any delay.
- The maintenance activities were observed to be good in the plantation sites.



Plantation board for the year of 2015-16 in Muddanur Range, Kadapa Division



Plantation board for the year of 2015-16 Vanipenta Range, Proddutur division



Holoptelea integrifolia plantation

EVALUATION FORMAT OF PRODDUTTUR DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: PRODDUTTUR						
NAME OF THE CIRCLE : KURNOOL						
S.No.	Name of the Range	BADVEL	MUDDANUR	PORUMAMILLA		
1	GPS Coordinates	N 14.71' E 79.17'	N 14.70' E 78.30'	N 14.99' E 79.05'	Reserve Forest	
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest		
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation		
4	Plantation Area (in Ha)	40 Ha	32.81 Ha	48.22 Ha		
5	Choice of Tree Species	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i> , <i>Phyllanthus emblica</i> , <i>Terminalia arjuna</i> , <i>Sterculia urens</i>	<i>Sterculia urens</i> , <i>Cassine glauca</i> , <i>Feronia elephantum</i> , <i>Phyllanthusemblica</i> , <i>Pongamia pinnata</i>	<i>Hardwickia binata</i> , <i>Phyllanthus emblica</i> , <i>Pterocarpus santalinus</i>		
6	Qualitative Assessment					
6.1	Suitability of area	Moderately Suitable	Highly Suitable	HIGHLY Suitable		
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done		
6.3.1	Survival Percentage	84.4 %	92.8 %	90.28 %		
6.3.2	Average height / Girth	1.85m / 4.6 cm	3.8 m / 14.6 cm	3.71 m / 12.27 cm		
6.4	Tending Operations (Singling/ pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)		
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Works Completed	SMC works carried out			
6.6	Increase in availability of Biomass for local community Status?	NO	Fodder	Fodder		
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	Improved		
7	Protection works like fencing etc..					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Watch & Ward	Watch & Ward, Kuchcha fencing	Trenching, Fencing, Kuchcha fencing		

8	The health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated Up To 2018	Updated Up to 2017	2015-2016	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	recommended for casualty replacement by authorities	recommended for casualty replacement by authorities	recommended for casualty replacement by authorities	
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	No	
10.2	Source of funds	CAMPA	CA	CAMPA	
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth Funds Flow	Smooth Funds Flow	Smooth Funds Flow	
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	Yes, funds for maintenance	Yes, funds for maintenance	Funds for maintenance	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated	
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	
13	Overall Grading on the basis of survival %	Excellent (>79%)	Excellent (>79%)	Excellent (>79%)	
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Suitable Geography, Good Maintenance	

EVALUATION FORMAT OF BADVEL RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: PRODDUTTUR		354	354	354
NAME OF THE CIRCLE : BADVEL		Gangapenta	Gangapenta	Gangapenta
S.No.	Name of the Compartment	Rowthupalle/N 14.87.762 E 79.06.668	Rowthupalle/N 14.87.798 E 79.06.679	Rowthupalle/N 14.87.544 E 79.06.659
1	GPS Coordinates	Rowthupalle/N 14.87.762 E 79.06.668	Rowthupalle/N 14.87.798 E 79.06.679	Rowthupalle/N 14.87.544 E 79.06.659
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	25 Ha	25 Ha	25 Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i>	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i>	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i>
6	Qualitative Assessment			
6.1	Suitability of area	Moderately	Moderately	Moderately
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	81 %	92 %	92 %
6.3.2	Average height/Girth	2 m/4.6 cm	2 m/4.6 cm	2 m/4.6 cm
6.4	Tending Operations (Singling/ pruning & other operations)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil works completed	Soil works completed	Soil works completed
6.6	Increase in availability of Biomass for the local community. Status?	No	No	No
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	No Difference
7	Protection works like fencing etc..			
7.1	Protection measures against Biotic Pressure	Trenching, Watch & Ward	Trenching, Watch & Ward	Trenching, Watch & Ward

8	The health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No observation	No observation	No observation	No observation No observation
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	NoNo	NoNo
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes,Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading based on survival %	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF BADVEL RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: PRODDUTUR							
NAME OF THE CIRCLE : BADVEL							
S.No.	Name of the Compartment	327	327	327			
	Name of the Beat	RAMAPURAM	RAMAPURAM	RAMAPURAM			
1	GPS Coordinates	P.D. KOTA/N 14.69.246 E 79.17.990	P.D. KOTA/N 14.69.246 E 79.17.990	P.D. KOTA/N 14.69.691 E 79.17.677			
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest			
3	Type of Plantation	Mono Culture crop	Mono Culture crop	Mono Culture crop			
4	Plantation Area (in Ha)	15.41 Ha	15.41 Ha	15.41 Ha			
5	Choice of Tree Species	<i>Phyllanthus emblica</i>	<i>Phyllanthus emblica</i>	<i>Phyllanthus emblica</i>			
6	Qualitative Assessment						
6.1	Suitability of area	Highly	Highly	Highly			
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done			
6.3.1	Survival Percentage	97 %	97 %	79%			
6.3.2	Average height/Girth	2 m/4.6 cm	2 m/4.6 cm	1 m/4.6 cm			
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)			
6.5	Soil and Moisture (SMC) Conservation works if taken up & its assessments	SMC works carried out	SMC works carried out	SMC works carried out			
6.6	Increase in availability of Biomass for the local community. Status?	NO	NO	NO			
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	No Difference			
7	Protection works like fencing etc..,						
7.1	Protection measures against Biotic Pressure (Cattles etc.)	NO	NO	NO			
8	The health of raised plantation	Healthy	Healthy	Healthy			

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated Up To 2016-17	Updated Up To 2016-17	Updated Up To 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No Observations	No Observations	
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	NO
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any others	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading based on survival %	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF BADVEL RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: PRODDUTTUR

NAME OF THE RANGE: BADVEL

NAME OF THE RANGE: BADVEL		302	302
S.No.	Name of the Compartment		
	Name of the Beat	JANGAMRAJUPALLE	JANGAMRAJUPALLE
1	GPS Coordinates	CHEEKATIVARIPALLE/14.69.615 E 79.17.040	CHEEKATIVARIPALLE/14.71.476 E 79.91.041
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	15 Ha	15 Ha
5	Choice of Tree Species	<i>Syzygium cumini</i> , <i>Sterculia Urens</i> , <i>Tamarindus Indica</i> , <i>Azadirachta indica</i> , <i>Hardwickia Binata</i> , <i>Terminalia Arjuna</i>	<i>Syzygium cumini</i> , <i>Sterculia Urens</i> , <i>Tamarindus Indica</i> , <i>Azadirachta indica</i> , <i>Hardwickia Binata</i> , <i>Terminalia Arjuna</i>
6	Qualitative Assessments		
6.1	Suitability of area	Highly	Moderately
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ Pitting, 3x3m ² spaced planting was done	45 cm ³ Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	58 %	92 %
6.3.2	Average height/Girth	2 m/4.6 cm	2 m/4.6 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	NO	NO
6.6	Increase in availability of Biomass for the local community. Status?	NTPP's Etc.,	NTPP's Etc.,
6.7	Improvement in quality of life of people due to risen plantation	No Differences	No Differences
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Watch & Ward, Kuchcha fencing	Watch & Ward, Kuchcha fencing
8	The health of raised plantation	Healthy	Healthy

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2015-16	Updated up to 2015-16	Updated up to 2015-16
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No observation, no journal	No observation, no journal	No observation recorded - no journal
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	YES, Adequate Funds	YES, Adequate Funds	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Modified for Quality of Forest Degraded	Modified for Quality of Forest Degraded	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading based on survival %	Average	Average	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF MUDDANUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: PRODDUTUR						
NAME OF THE RANGE: MUDDANUR						
S.No.	Name of the Compartment:	35	26	26	26	26
	Name of the Beat:	B.K. Mala	Venkayakalava	Venkayakalava	Venkayakalava	Venkayakalava
1	GPS Coordinates	Ahobilam N 14.65.442E 78.29.103	Venkayakalava N 14.71.222 E 78.07.496	Venkayakalava N 14.71.923 E 78.07.464	Venkayakalava N 14.71.923 E 78.07.464	Venkayakalava N 14.71.923 E 78.07.464
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	25 Ha	20 Ha	20 Ha	20 Ha	20 Ha
5	Choice of Tree Species	<i>Holoptelea integrifolia</i> , <i>Dolichandrone Crispa</i>	<i>Sterculia urens</i> , <i>Dolichandrone Crispa</i> , <i>Cassine glauca</i>	<i>Sterculia urens</i> , <i>Dolichandrone Crispa</i> , <i>Phyllanthus emblica</i> , <i>Cassine glauca</i>	<i>Sterculia urens</i> , <i>Dolichandrone Crispa</i> , <i>Phyllanthus emblica</i> , <i>Cassine glauca</i>	<i>Sterculia urens</i> , <i>Dolichandrone Crispa</i> , <i>Phyllanthus emblica</i> , <i>Cassine glauca</i>
6	Qualitative Assessment					
6.1	Suitability of area	Moderately suitable	Highly suitable	Highly suitable	Highly suitable	Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done
6.3.1	Survival Percentage	95 %	90%	92 %	92 %	92 %
6.3.2	Average height/Girth	3 m/14.6 cm	5 m/14.6 cm	4 m/14.6 cm	4 m/14.6 cm	4 m/14.6 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Cultural operations were carried out	Cultural operations were carried out	Cultural operations were carried out	Cultural operations were carried out	Cultural operations were carried out
6.6	Increase in availability of Biomass for the local community. Status?	No	No	no	no	no
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	Improved	Improved	Improved
7	Protection works like fencing etc..,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No	Watch & Ward, Kuchcha fencing	no	no	no

		Healthy	Healthy	Average	Healthy
8	The health of raised plantation		Healthy		Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal		Updated Up to 2015-16	Updated Up to 2016-17	Updated Up to 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		No special indications	no observations recorded	No special indications
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?		No	No	No
10.2	Source of funds		CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?		Smooth Funds Flow	Smooth Funds Flow	Smooth Funds Flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?		YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues		Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/modified/discontinued (reasons)?		Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading based on survival %		Excellent	Excellent	Excellent
14	Any other information about the plantation		Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF MUDDANUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: PRODDUTUR		17,18	17,18
NAME OF THE RANGE: MUDDANUR		SETTIVARIPALLIE	SETTIVARIPALLIE
S.No.	Name of the Compartment	17,18	17,18
	Name of the Beat	SETTIVARIPALLIE	SETTIVARIPALLIE
1	GPS Coordinates	G. KOTHAPALLE/N 14.75.710 E 78.30.604	G. KOTHAPALLE/N 14.75.856E 78.30.748
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20 Ha	20 Ha
5	Choice of Tree Species	<i>Feronia Elephantum, Pongamiapinnata, Hardwickia binata, Azadirachta indica, Sterculia urens, Phyllanthus emblica</i>	<i>Hardwickia binata, Azadirachta indica, Feronia elephantum, Pongamia Pinnata, Sterculia Urens, Phyllanthus emblica</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly	Highly
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	100 %	87 %
6.3.2	Average height/Girth	3 m/14.6 cm	4 m/14.6 cm
6.4	Tending Operations (Singling/pruning & other operations)	Singling, Pruning	Singling, Pruning
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	SMC works carried out	SMC works carried out
6.6	Increase in availability of Biomass for local community. Status?	Fodder	Fodder
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Watch & Ward	Watch & Ward
8	Health of raised plantation	Healthy	Healthy

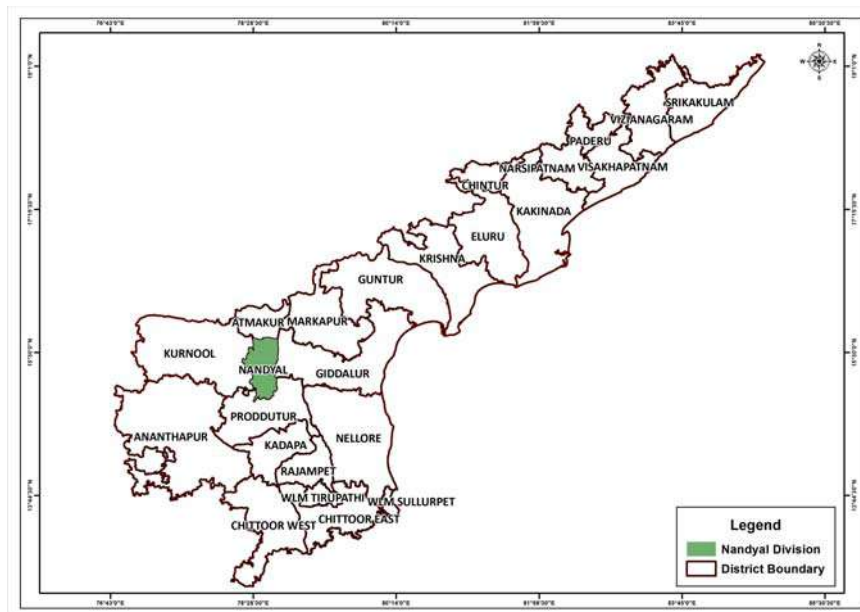
9	Maintenance of Records		
9.1	Updating of plantation journal	Updated up to 2016-17	Updated up to 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Cluster Ploughing Started, Signs of The Movement of Wild Bores Is Noticed and Damage Caused by Them Is Not Alarming	Cluster Ploughing Started, Signs of The Movement of Wild Bores Is Noticed and Damage Caused By them is not alarming.
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO
10.2	Source of funds	CAMPA	CA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?	YES	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading based on survival %	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF PORUMAMILLA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

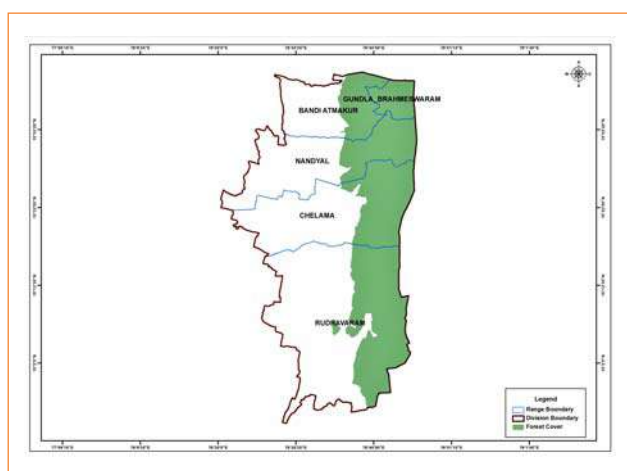
NAME OF THE DIVISION: PRODDUTTUR						
NAME OF THE RANGE: PORUMAMILLA						
S.No.	Name of the Compartment:	219	219	253	253	
Name of the Beat:	BALAYAPALLE	BALAYAPALLI	TEKURPETA	TEKURPETA	TEKURPETA	
1	GPS Coordinates	BALAYAPALLE / N 15.09.376 & E 79.86.124	BALAYAPALLI / N 15.09.397 & E 78.86.128	TEKURPETA / N 14.99.551 & E 79.25.936	TEKURPETA / N 14.99.424 & E 79.05.954	
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest	
3	Type of Plantation	Mixed Crop Plantation	Mixed Crop Plantation	Mixed Crop Plantation	Mixed Plantation	
4	Plantation Area (in Ha)	20 Ha	20 Ha	20 Ha	20 Ha	
5	Choice of Tree Species	<i>Dolichandrone crispera</i> , <i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Tectonagrandis</i>	<i>Dolichandrone crispera</i> , <i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Tectonagrandis</i>	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>	
6	Qualitative Assessment					
6.1	Suitability of area	Moderately suitable	Moderately suitable	Moderately suitable	Highly suitable	
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	
6.3.1	Survival Percentage	94%	93%	93%	90%	
6.3.2	Average height/Girth	2 m/12.27 cm	2 m/12.27 cm	2 m/12.27 cm	3 m/12.27 cm	
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Cultural operations were carried out	Cultural operations were carried out	Cultural operations were carried out	Cultural operations were carried out	
6.6	Increase in availability of Biomass for the local community. Status?	No	No	No	Fodder	
6.7	Improvement in quality of life of people due to risen plantation	No difference	Improved	Improved	Improved	

7	Protection works like fencing etc.,.						
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching	Trenching, Fencing	Trenching	Trenching	Trenching	Trenching
8	The health of raised plantation	Healthy	Healthy	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records						
9.1	Updating of plantation journal	2017-2018	2017-2018	2017-2018	2017-2018	2017-2018	2017-2018
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No special indications	Ploughing & weeding instructed	No special indications	No special indications	No special indications	No special indications
10	Project Constraints/Limitations						
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	No	No	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth Funds Flow	Smooth Funds Flow	Smooth Funds Flow	Smooth Funds Flow	Smooth Funds Flow	Smooth Funds Flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?						
11.1	Any scope for improving the project output?	Yes, if funds were provided for maintenance	Yes, if funds were provided for maintenance	Yes, if funds were provided for maintenance	Yes, if funds were provided for maintenance	Yes, if funds were provided for maintenance	Yes, if funds were provided for maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants						
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading based on survival %	Good	Excellent	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

MONITORING REPORT NANDYAL FOREST DIVISION

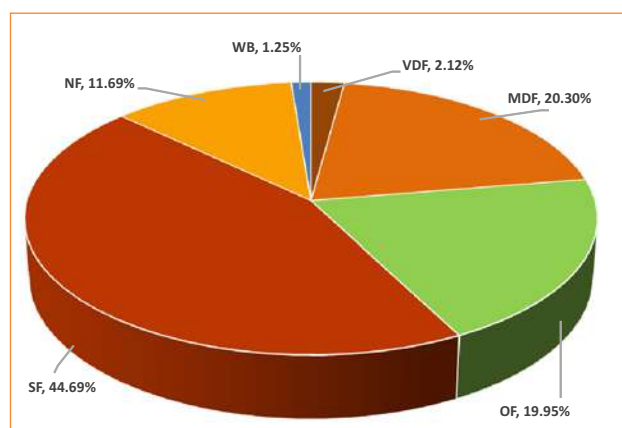


NANDYAL FOREST DIVISION



Nandyal, a town as well as an administrative division of Kurnool district, is located on the banks of river Kundu in Andhra Pradesh (latitude 15.4° N and longitude 78.480E). The area of the town is 19.00 km² and the population is 0.21 million (2011 census). Nandyal Forest Division is part of Kurnool circle and lies on the south-eastern part of Kurnool district. The geographical area of the Division is 2,600 Km² which is 14.73% of the geographical area of the district (17658Km²).

Figure 1: Nandyal Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

Nandyal Division comprises 5 forest ranges namely Bandi Atmakur, Rudravaram, Chelama, Nandyal and G.B.M. For the year of 2015-16, Nandyal Division has taken up plantation work over an area of 50 ha covering one out of five ranges namely Rudravaram (50 ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling method, the total area was partially enumerated in 4 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Rudravaram	Mixed	<i>Chloroxylon swietenia</i> <i>Hardwickia binata</i> <i>Dalbergia latifolia</i> <i>Soymida febrifuga</i> <i>Syzygium cumini</i> <i>Acacia chundra</i> <i>Mitragyna parviflora</i>	-	50	High	-	87.75	5.12	24.09

Observations

In the division, D V Penta compartment No.372 of Rudravaram Forest range plantations was observed to be the best plantations.

- Survival percentage was rated overall as excellent with the average of 86% in the entire planting area
- Site quality was taken as criteria for the choice of species and was moderately suitable to the conditions. The plant species selected were *Chloroxylon swietenia*, *Hardwickia binata*, *Dalbergia latifolia*, *Terminalia alata*, *Terminalia arjuna* was suitable for tropical dry deciduous vegetations.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with a spacing of 3m x 3m & 3m x 4m resulted in mixed crop plantations. Cultural operations (cleaning, weeding, and climber cutting) and SMC Operations and water harvesting structures such as check dams & contour trenching were taken up at the initial stages.
- The average height of important tree species was good with an average height of 5 Meters. Tending operations (pruning, singling & thinning) were carried out. Live fencing, kaccha fencing, boulder walls and social fencing were created to protect plantations from biotic pressure.

- There are moderate temperatures and good rainfall and climatic conditions had an impact on the growth of the plantations, hence the good survival percentage was observed. It appears that the best plantations were established with favourable climatic conditions along with proper protection measures.
- Local communities were benefited by gathering fuelwood, fodder and other intangible benefits like water level increase in their wells due to the plantation activities
- Plantation journals were maintained in most of the sites and inspecting authorities made recommendations in some sites such as circular weeding and soil working as per calendar of operations
- Maintenance problems were raised due to non-availability of sufficient labour force.
- CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during the initial period of the plantation works and most of the plantations received funds timely without any delay.

EVALUATION FORMAT OF MANDYAL DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : KURNOOL	
NAME OF THE DIVISION : MANDYAL	
S.No.	Name of the Range
1	GPS Coordinates
2	Legal Status of Land
3	Type of Plantation
4	Plantation Area (in Ha)
5	Choice of Tree Species
6	Qualitative Assessment
6.1	Suitability of area
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)
6.3.1	Survival Percentage
6.3.2	Average height/Average girth
6.4	Tending Operations (Singling/pruning & other operations)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments
6.6	Increase in availability of Biomass for the local community. Status?
6.7	Improvement in quality of life of people due to risen plantation
7	Protection works like fencing etc.,
7.1	Protection measures against Biotic Pressure (Cattles etc.)
8	The health of raised plantation
	RUDRAVARAM
	N 15.24' E 78.64'
	Reserve Forest
	Mixed crop plantation
	50 Ha
	Chloroxylon swietenia, Hardwickia binata, Dalbergia latifolia, Terminalia alata, Terminalia arjuna
	Highly suitable
	45 cm ³ , Pitting, 3X3 m ² , 3X4 m ² spaced planting was done
	87.75 %
	5.12m/24.09 cm
	Tending operations carried out. (Singling and Pruning)
	Soil work, weeding, ploughing, CCT's, PCT's, Earthen bonding
	Fodder
	Living standards of people got improved
	Trenching, Watch & Ward
	Healthy

9	Maintenance of Records		
9.1	Updating of plantation journal		2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		Instructed to take up circular weeding and soil working as per calendar of operations
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?		Labour Problem, Political Pressure
10.2	Source of funds		CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?		Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?		YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues		Journal should be Updated
12.2	Whether the project should be continued/modified/discontinued (reasons)?		Continued to enhance the quality of Forest
13	Overall Grading based on survival %		Excellent (>79%)
14	Any other information about the plantation		Good Maintenance

EVALUATION FORMAT OF RUDRAVARAM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : NANDYAL						
NAME OF THE RANGE : RUDRAVARAM						
S.No.	Name of the Compartment	372	372	372	372	372
	Name of the Beat	D.V. PENTA	D.V. PENTA	D.V. PENTA	D.V. PENTA	D.V. PENTA
1	GPS Coordinates	D.V. PENTA/N: 15.04021 E: 078.64458	D.V. PENTA/N: 15.04021 E: 078.64458	D.V. PENTA/N: 15.04021 E: 078.64458	D.V. PENTA/N: 15.04021 E: 078.64458	D.V. PENTA/N: 15.04021 E: 078.64458
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20 Ha	20 Ha	20 Ha	20 Ha	20 Ha
5	Choice of Tree Species	<i>Hardwickia binata</i> , <i>Chloroxylon swietenia</i>	<i>Hardwickia binata</i> , <i>Chloroxylon swietenia</i>	<i>Hardwickia binata</i> , <i>Chloroxylon swietenia</i>	<i>Hardwickia binata</i> , <i>Chloroxylon swietenia</i>	<i>Hardwickia binata</i> , <i>Chloroxylon swietenia</i>
6	Qualitative Assessment					
6.1	Suitability of area	Highly	Highly	Highly	Highly	Highly
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	90 %	90 %	90 %	90 %	90 %
6.3.2	Average height/Girth	6 m/24.09 cm	6 m/24.09 cm	6 m/24.09 cm	6 m/24.09 cm	6 m/24.09 cm
6.4	Tending Operations (Singling/pruning & other operations)	Natural Regeneration	Natural Regeneration	Natural Regeneration	Natural Regeneration	Singling, Pruning
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work, weeding, ploughing, CCT's, PCT's, Earthen bunding	Soil work, weeding, ploughing, CCT's, PCT's, Earthen bunding	Soil work, weeding, ploughing, CCT's, PCT's, Earthen bunding	Soil work, weeding, ploughing, CCT's, PCT's, Earthen bunding	Soil work, weeding, ploughing, CCT's, PCT's, Earthen bunding
6.6	Increase in availability of Biomass for local community. Status?	Fodder	Fodder	Fodder	Fodder	Fodder
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved	Improved	Improved

7	Protection works like fencing etc.,	Trenching, Watch & Ward	Trenching, Watch & Ward	Trenching, Watch & Ward	Trenching, Watch & Ward
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Healthy	Healthy	Healthy	Healthy
8	The health of raised plantation	Updated up to 2016-17	Updated up to 2016-17	Updated up to 2016-17	Updated up to 2016-17
9	Maintenance of Records	Instructed to taken up circular weeding soil work as per calendar operations	Instructed to take up circular weeding soil work as per calendar operations	Instructed to take up circular weeding soil work as per calendar operations	Instructed to take up circular weeding soil work as per calendar operations
9.1	Updating of plantation journal	Labour Problem, Political Pressure	Labour Problem, Political Pressure	Labour Problem, Political Pressure	Labour Problem, Political Pressure
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	CAMPA	CAMPA	CAMPA	CAMPA
10	Project Constraints/Limitations	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
10.1	Constraints/Limitations faced by the authorities, if any?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
10.2	Source of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.1	Any scope for improving the project output?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12	Suggestions for improvements from the Evaluating Agency/Consultants	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
12.1	Suggestions for improvement in record maintenance/or any other issues	Very Good	Very Good	Very Good	Excellent
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance
13	Overall Grading on the basis of survival %	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF RUDRAVRAM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : NANDYAL						
NAME OF THE RANGE : RUDRAVRAM						
S.No.	Name of the Compartment	372	372	372	372	372
	Name of the Beat	D.V. PENTA	D.V. PENTA	D.V. PENTA	D.V. PENTA	D.V. PENTA
1	GPS Coordinates	D.V. PENTA/N: 15.03961 E: 078.64441	D.V. PENTA/N: 15.03961 E: 078.64441	D.V. PENTA/N: 15.04681 E: 078.64055		
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST		
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation		
4	Plantation Area (in Ha)	10 Ha	10 Ha	15 Ha		
5	Choice of Tree Species	<i>Hardwickia binata</i> , <i>Mitragyna parviflora</i> , <i>Dalbergia latifolia</i>	<i>Hardwickia binata</i> , <i>Mitragyna parviflora</i> , <i>Dalbergia latifolia</i>	<i>Soymida febrifuga</i> , <i>Acacia chundra</i> , <i>Hardwickia binata</i>		
6	Qualitative Assessment					
6.1	Suitability of area	Highly	Highly	Highly		
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x4m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done		
6.3.1	Survival Percentage	85 %	85 %	92 %		
6.3.2	Average height/Girth	4 m/24.09 cm	4 m/24.09 cm	5 m/24.09 cm		
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)		
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work and inter plough	Soil work and inter plough	Soil work, weeding, Ploughing, CCT's, Earthen bunding		
6.6	Increase in availability of Biomass for local community. Status?	Fodder	Fodder	Fodder		
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved		

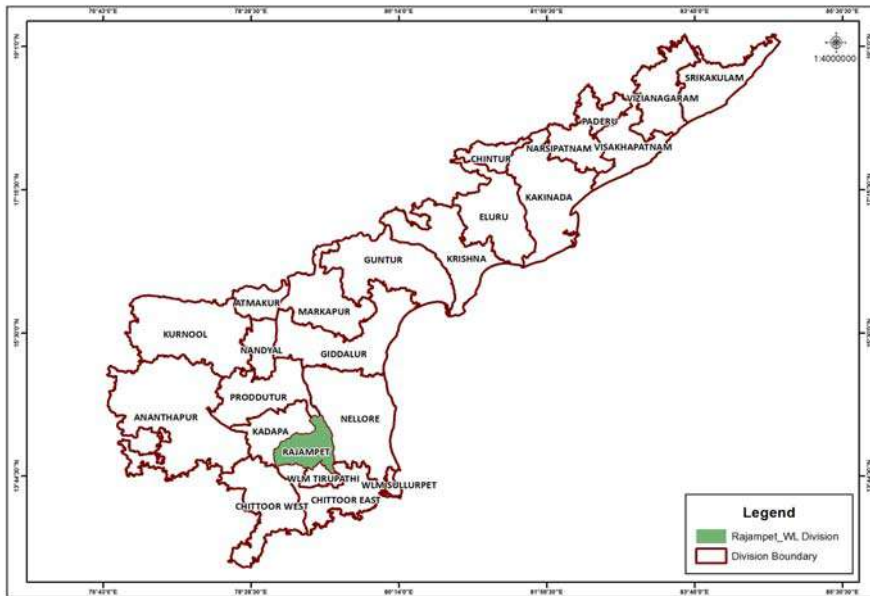
7	Protection works like fencing etc...	Watch & Ward	Watch & Ward	Watch & Ward	Trenching, Watch & Ward
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Healthy	Healthy	Healthy	Healthy
8	Health of raised plantation	UP TO 2016-17	UP TO 2016-17	UP TO 2016-17	UP TO 2016-17
9	Maintenance of Records	Instructed to take up circular weeding soil work as per calendar operations	Instructed to take up circular weeding soil work as per calendar operations	Instructed to take up circular weeding soil work as per calendar operations	Instructed to take up circular weeding soil work as per calendar operations
9.1	Updating of plantation journal	Labour Problem, Political Pressure	Labour Problem, Political Pressure	Labour Problem, Political Pressure	Labour Problem, Political Pressure
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	CAMPA	CAMPA	CAMPA	CAMPA
10	Project Constraints/Limitations	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
10.1	Constraints/Limitations faced by the authorities, if any?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
10.2	Source of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.1	Any scope for improving the project output?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12	Suggestions for improvements from the Evaluating Agency/Consultants	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
12.1	Suggestions for improvement in record maintenance/or any other issues	Excellent	Excellent	Excellent	Excellent
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance
13	Overall Grading on the basis of survival %	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF RUDRAVARAM RANGE WISE PLANTATIONS RAISED UNDER CAMPA SCHEME

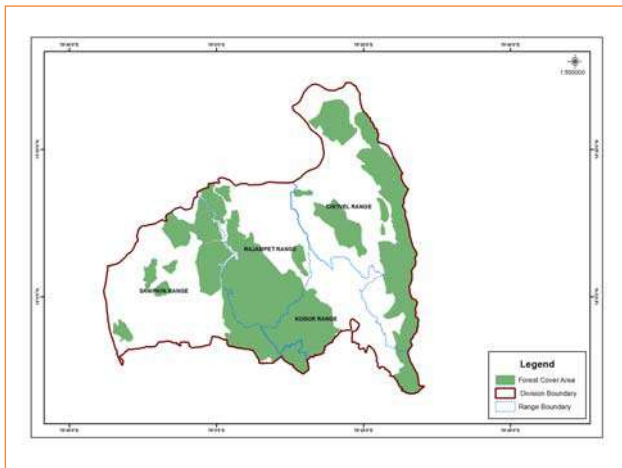
NAME OF THE DIVISION : NANDYAL	
NAME OF THE RANGE : RUDRAVARAM	
S.No.	Name of the Compartment
	372
	D.V. PENTA
1	D.V. PENTA/N: 15.04681 E: 078.64055
2	Reserve Forest
3	Mixed crop plantation
4	15 Ha
5	<i>Hardwickia binata</i> , <i>Soyimida febrifuga</i> , <i>Syzygium cumini</i>
6	Highly
6.1	Highly
6.2	45 cm ³ Pitting, 3x3m ² spaced planting was done
6.3.1	90 %
6.3.2	5 m/24.09 cm
6.4	Singling, Pruning
6.5	Soil work, weeding, Ploughing, CCT's, PCT's, Earthen bunding
6.6	Fodder
6.7	Improved
7	Improved
7.1	Trenching, Watch& Ward

8	Health of raised plantation	Healthy	Healthy
9	Maintenance of Records		
9.1	Updating of plantation journal	Updated Up To 2016-17	Updated Up To 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding soil work as per calendar operations	Instructed to take up circular weeding soil work as per calendar operations
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?	Labour Problem, Political Pressure	Labour Problem, Political Pressure
10.2	Source of funds	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds Yes, Local varieties should be planted	Smooth flow of funds Yes, Local varieties should be planted
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance

MONITORING REPORT RAJAMPET FOREST DIVISION

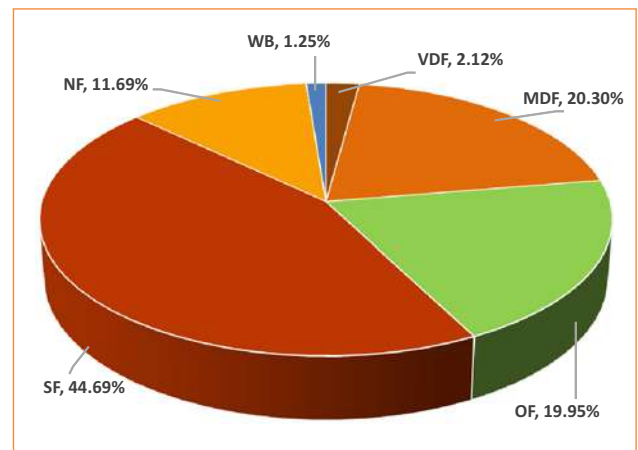


RAJAMPET FOREST DIVISION



Rajampet, a town as well as a revenue division of Kadapa district lies in Rayalaseema region of Andhra Pradesh (latitude 15.48° N and longitude 78.48° E). The area of the town is 13.38 Km² and 0.054 Million (2011 census). Rajampet WL Forest Division is a part of WLM Tirupathi circle and lies on the south-eastern part of Kadapa district (15,938 Km²). The geographical area of the Division is 3,027 Km² which is 19.71% of the geographical area of the district.

Figure 1: Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

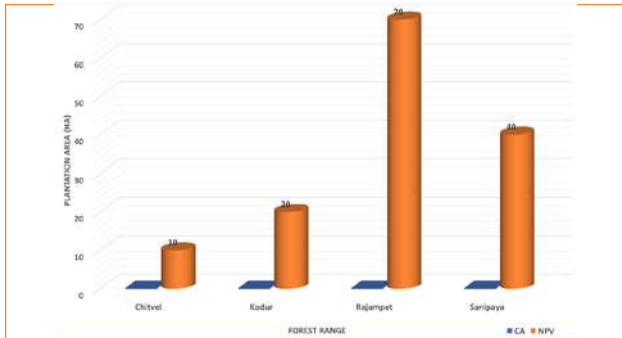
Rajampet Division comprises four forest ranges namely Rajampet, Kodur, Sanipaya and Chitvel. For the year of 2015-16, Rajampet Division has taken up plantation work over an area of 140 Ha covering all ranges namely Rajampet (10 ha), Kodur (20 ha), Sanipaya (70 ha) and Chitvel (40 ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling method, the total area was partially enumerated in 9 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Chitvel	Mixed	<i>Hardwickia binata</i> <i>Pterocarpus santalinus</i>	-	10	High	-	100	5.5	17.251
Kodur	Mixed	<i>Hardwickia binata</i> , <i>Pterocarpus santalinus</i>	-	20	High	-	89	3	5.949
Rajampet	Monoculture	<i>Pterocarpus santalinus</i>	-	70	High	-	96	6	8.443
Sanipaya	Mixed	<i>Hardwickia binata</i> <i>Holoptelea integrifolia</i> <i>Terminalia arjuna</i> <i>Annona squamosa</i> <i>Pterocarpus santalinus</i>	-	40	High	-	80	3	7.214

Plantation area

In the division, maximum was planted in Sanipaya forest range and the minimum was planted in Rajampet forest range.

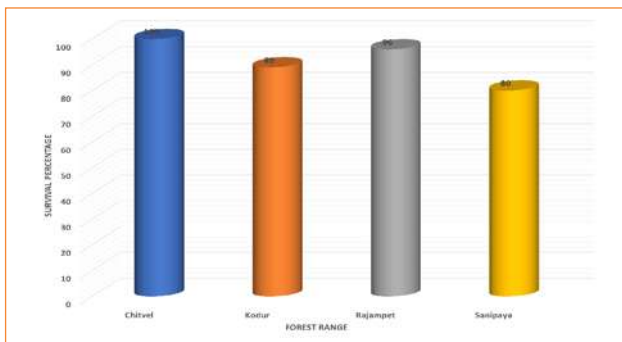
Figure 2: Plantation area in the Forest Division



Survival percentage

The survival percentage is maximum in Chitvel followed by Rajampet which are having 100% and 96% respectively and a minimum in Sanipaya range which is having 80%.

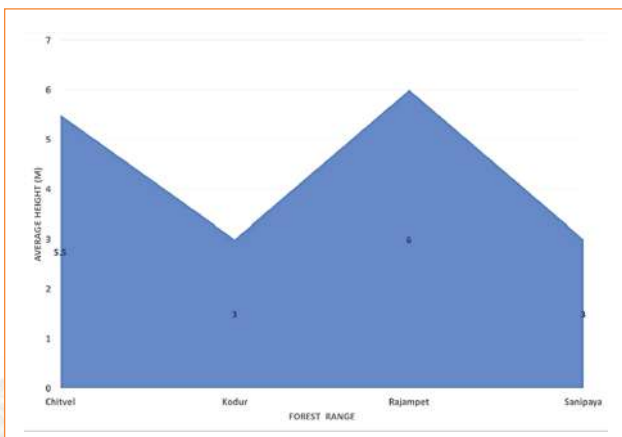
Figure 3: Survival percentage of the plantations



Average height

In the division, most of the plantations were healthy and maximum growth was observed in Rajampet followed by Chitvel range with an average height of 6m and 5.5m respectively and minimum growth was observed in Sanipaya and Kodur with an average height of 3m at both ranges.

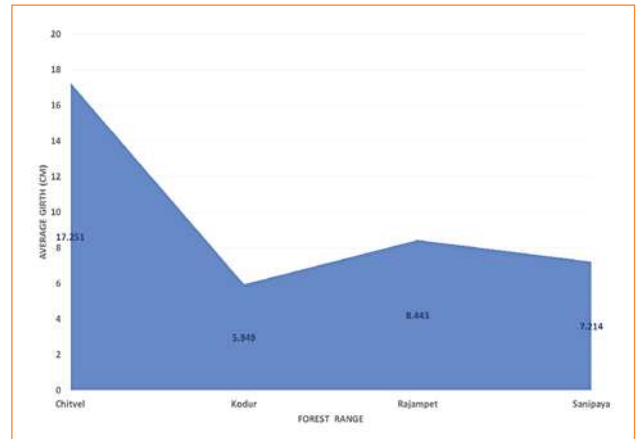
Figure 4: Average height of the plantations



Average girth

In the division, maximum girth was observed in Chitvel range with an average of 17.25cm and the minimum was observed in Kodur with an average of 5.95cm.

Figure 5: Average girth of the plantations



Observations

In the division, Sanipaya compartment No.810 & 811 of Sanipaya Forest range plantations were observed to be the best plantations.

- Survival percentage was rated overall excellent (average 91.25%) ranging from 80% - 100% in most of the plantation sites.
- Site quality was taken as criteria for the choice of species and was highly suitable to the conditions. The species planted were *Hardwickia binata*, *Syzygium cumini*, *Phyllanthus emblica*, *Pterocarpus santalinus*, *Holoptelea integrifolia* and *Terminalia arjuna* which are suitable for mixed dry deciduous vegetations.
- Reserve Forest area was taken up for plantation activities. Linear-Pit planting with a spacing of 3m x 3m resulted in mixed crop plantations. Cultural operations (cleaning, weeding, and climber cutting) and SMC operations and water harvesting structures (check dams & contour trenching) were taken up at the initial stages.
- The average height of important tree species was good with an average of 4.25m which is ranging from 3 to 6 m. Tending operations (pruning, singling and thinning) were carried out. Live fencing, kaccha fencing, boulder walls and social fencing were created to protect plantations from biotic pressure.

- Though there are severe temperature and low rainfall and the impact of drought on the growth of the plantations comparatively low, hence the good survival percentage was observed. It appears that the protection measure has yielded results.
- Local communities were benefited by gathering fuelwood, fodder and other intangible benefits like water level increase in their wells due to the plantation activities
- Plantation journals were maintained in most of the sites and inspecting authorities made recommendations in some sites such as casualty replacement with pitting.

- No major constrains were found for growing the plantation. CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during the initial period of the plantation works and most of the plantations received funds timely without any delay.
- Absence of funds for subsequent maintenance (after third-year maintenance) led to less protection against Grazing and damages by animals and human beings.



Petrocarpus santalinus plantation in Rajampet division

EVALUATION FORMAT OF RAJAMPET RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : WLM TIRUPATHI			
NAME OF THE DIVISION : RAJAMPET			
S.No.	Name of the Range	Chitvel	Kodur
1	GPS Coordinates	N 14.09' E 79.39'	N 13.11' E 79.77
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mono Culture Crops
4	Plantation Area (in Ha)	40 Ha	20Ha
5	Choice of Tree Species	<i>Hardwickia binata</i> , <i>Syzygium cumini</i> , <i>Phyllanthus emblica</i> , <i>Pterocarpus santalinus</i>	<i>Hardwickia binata</i> , <i>Pterocarpus santalinus</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly suitable	Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done
6.3.1	Survival Percentage	100 %	89 %
6.3.2	Average height /Girth	5.5 m / 17.25 cm	3 m / 5.94 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work completed	No
6.6	Increase in availability of Biomass for the local community. Status?	Small Timber	Fodder, Broom Sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved
7	Protection works like fencing etc..,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Fencing, Watch & Ward	Fencing
8	The health of raised plantation	Healthy	Healthy

9	Maintenance of Records			
9.1	Updating of plantation journal	Up to 2018	Up to 2014-15	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Casualty replacement with Pitting immediately - sub DFO	No journal	
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	
10.2	Source of funds	CAMPA	CAMPA	
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	YES, Adequate Fund	YES, Need Watch & Ward	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated,	Journal should be Updated.	
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	
13	Overall Grading based on survival %	Excellent	Excellent	
14	Any other information about the plantation	Suitable Geography	Good Maintenance	

EVALUATION FORMAT OF RAJAMPET DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : WLM TIRUPATHI

NAME OF THE DIVISION : RAJAMPET

S.No.	Name of the Range	RAJAMPET	SAMIPAYA
1	GPS Coordinates	N 14.07.333 E 79.12.917	N 14.05' E 78.84'
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mono Culture crop	Mixed crop plantation
4	Plantation Area (in Ha)	10 Ha	70 Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>	<i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Terminalia arjuna</i> , <i>Pterocarpus santalinus</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly Suitable	Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	96%	80%
6.3.2	Average height	6 m / 8.44 cm	3 m / 7.21 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil works completed	No
6.6	Increase in availability of Biomass for the local community. Status?	Small Timber	Fodder, Broomsticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Fencing, Watch & Ward	Trenching, Watch & Ward
8	The health of raised plantation	Healthy	Healthy

9	Maintenance of Records			
9.1	Updating of plantation journal	UPDATED UP TO 2017-18	Updated up to 2018	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Casualty replacement with tall seedling - Sub DFO	Casualty replacement with tall seedling - Sub DFO	
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	
10.2	Source of funds	CAMPA	CAMPA	
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	YES, Need Watch & Ward	YES, Funds for Maintenance	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	
13	Overall Grading based on survival %	Excellent	Excellent	
14	Any other information about the plantation	Suitable Geography	Good Maintenance	

EVALUATION FORMAT OF CHITVEL RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: RAJAMPET	
NAME OF THE RANGE : CHITVEL	
S.No.	Name of the Beat
1	SALIVENDULA YELLAMANU THARAPALLU/N 14.16.311 E 79.404815
2	Reserve Forest
3	Mixed crop plantation
4	10 Ha
5	<i>Pterocarpus Santalinus, Hardwickia Binata</i>
6	
6.1	Highly
6.2	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	97%
6.3.2	5 m/17.25 cm
6.4	Tending operations are carried out (Singling and Pruning)
6.5	NO
6.6	Small Timber
6.7	Improved
7	
7.1	Trenching, Fencing, Watch & Ward
8	NO

	R.V.PALLI
	NAGIRIPADU/N 14.13.431 E 79.366945
	Reserve Forest
	Mono Culture
	10 Ha
	<i>Pterocarpus Santalinus</i>
	Highly
	45 cm ³ , Pitting, 3x3m ² spaced planting was done
	97%
	5 m/17.25 cm
	Tending operations are carried out (Singling and Pruning)
	Soil work completed
	Small Timber
	Trenching, Fencing, Watch & Ward
	NO

9	Maintenance of Records		
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Causalities replacement with pitting immediately - sub DFO	Causalities replacement with pitting immediately - sub-DFO
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO
10.2	Source of funds	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?	YES, Adequate Fund	YES, Adequate Fund
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated,	Journal should be Updated,
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading based on survival %	Excellent	Excellent
14	Any other information about the plantation	Suitable Geography Good Maintenance	Suitable Geography

EVALUATION FORMAT OF KODUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : RAJAMPET

NAME OF THE RANGE : KODUR

S.No.	Name of the compartment	1123
	Name of the Beat	M.BHAVI
1	GPS Coordinates	N 13.11'269 E 79.7'699
2	Legal Status of Land	Reserve Forest
3	Type of Plantation	Mono Culture Crops
4	Plantation Area (in Ha)	20Ha
5	Choice of Tree Species	<i>Hardwickia binata</i> , <i>Pterocarpus santalinus</i>
6	Qualitative Assessment	
6.1	Suitability of area	Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,.	45 cm ³ , Pitting, 3X3 m ² spaced planting was done
6.3.1	Survival Percentage	89%
6.3.2	Average height/Girth	3 m/5.94 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	No
6.6	Increase in availability of Biomass for the local community. Status?	Fodder, Broom Sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved
7	Protection works like fencing etc.,.	
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Fencing
8	The health of raised plantation	Healthy

9	Maintenance of Records		
9.1	Updating of plantation journal		Updated up to 2014-15
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		No Journal
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?		No
10.2	Source of funds		CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?		Smooth Funds Flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?		YES, Need Watch & Ward
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues		Journal should be updated, Inspection Note to be Attached
12.2	Whether the project should be continued/modified/discontinued (reasons)?		Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading based on survival %		Excellent
14	Any other information about the plantation		Good Maintenance

EVALUATION FORMAT OF RAJAMPET RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : RAJAMPET

NAME OF THE RANGE : RAJAMPET

S.No.	Name of the compartment	897
	Name of the Beat	CC KUNTA
1	GPS Coordinates	N 14.07.333 E 79.12.917
2	Legal Status of Land	Reserve Forest
3	Type of Plantation	Mixed crop plantation
4	Plantation Area (in Ha)	10 Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>
6	Qualitative Assessment	
6.1	Suitability of area	Highly
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 5X5 m ² spaced planting was done
6.3.1	Survival Percentage	96%
6.3.2	Average height/Girth	6 m/8.44 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil works completed
6.6	Increase in availability of Biomass for the local community. Status?	Small Timber
6.7	Improvement in quality of life of people due to risen plantation	Improved
7	Protection works like fencing etc..	
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Fencing, Watch & Ward
8	The health of raised plantation	Healthy

9	Maintenance of Records		
9.1	Updating of plantation journal		Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		Casualty replacement of tall seeding - sub-DFO
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?		NO
10.2	Source of funds		CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?		Smooth Funds Flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?		YES, Need Watch & Ward
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes. Local fruitvarieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues		Journal should be Updated
12.2	Whether the project should be continued/modified/discontinued (reasons)?		Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading based on survival %		Excellent
14	Any other information about the plantation		Suitable Geography

EVALUATION FORMAT OF SANIPAYA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : RAJAMPET

NAME OF THE RANGE: SANIPAYA

S.No.	Name of the compartment	810 & 811 SANIPAYA	810 & 811 SANIPAYA	811 SANIPAYA
1	Name of the Beat GPS Coordinates	SHIKARIPALEM/N 14.06.621 E 78.84.478	SHIKARIPALEM/N 14.06.604 E 78.85.413	ODIVEEDU (BODIPALLE MORDUO)/N 14.05.804 E 78.83.685
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20ha	20ha	20ha
5	Choice of Tree Species	<i>Holoptelea integrifolia</i> , <i>Terminalia Arjuna</i> , <i>Annonasquamosa</i>	<i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Terminalia Arjuna</i>	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly suitable	Highly suitable	Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 5X5 m ² spaced planting was done	45 cm ³ , Pitting, 5X5 m ² spaced planting was done	45 cm ³ , Pitting, 5X5 m ² spaced planting was done
6.3.1	Survival Percentage	90 %	99 %	93 %
6.3.2	Average height/Girth	3 m/7.21 cm	5 m/7.21 cm	2 m/7.21 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Cultural operations were not done	Cultural operations were not done	Cultural operations were not done
6.6	Increase in availability of Biomass for the local community. Status?	Fodder, Broomsticks	Fodder, Broomsticks	Fodder, Broomsticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	NO	Improved

7	Protection works like fencing etc.,				
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Watch & Ward	Trenching, Watch & Ward	Trenching, Watch & Ward	Trenching, Watch & Ward
8	The health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No observations recorded	No	No	No
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/ or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/ modified/discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading based on survival %	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Lowest Rainfall, Good Maintenance

EVALUATION FORMAT OF SAMIPAYA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : RAJAMPET

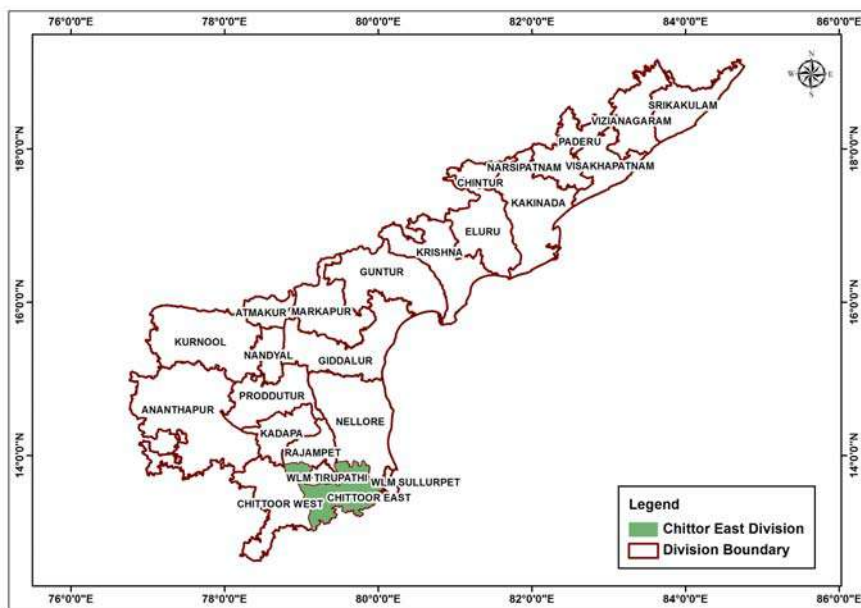
NAME OF THE RANGE: SAMIPAYA

S.No.	Name of the compartment	811	809	809	809
	Name of the Beat	SAMIPAYA	T. SUNDUPALLE	T. SUNDUPALLE	T. SUNDUPALLE
1	GPS Coordinates	ODIVEEDU (BODEPALLE MOBALU/N 14.05.976 E 78.83.897	ANUMPALLE/N 14.03.365 E 18.85.423	ANUMPALLE/N 14.03.462 E 78.85.432	ANUMPALLE/N 14.03.542 E 78.85.434
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20ha	30 Ha	30 Ha	30 Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i>	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i>	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i>	<i>Pterocarpus santalinus</i> , <i>Hardwickia binata</i> L1M
6	Qualitative Assessment				
6.1	Suitability of area				
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	80%	80%	80%	80%
6.3.2	Average height/Girth	3 m/7.21 cm	3 m/7.21 cm	3 m/7.21 cm	3 m/7.21 cm
6.4	Tending Operations (Singling/ pruning & other operations)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	No	NO	NO	NO
6.6	Increase in availability of Biomass for the local community. Status?	Fodder, Broomsticks	Fodder, Broomsticks	Fodder, Broomsticks	Fodder, Broomsticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved	Improved

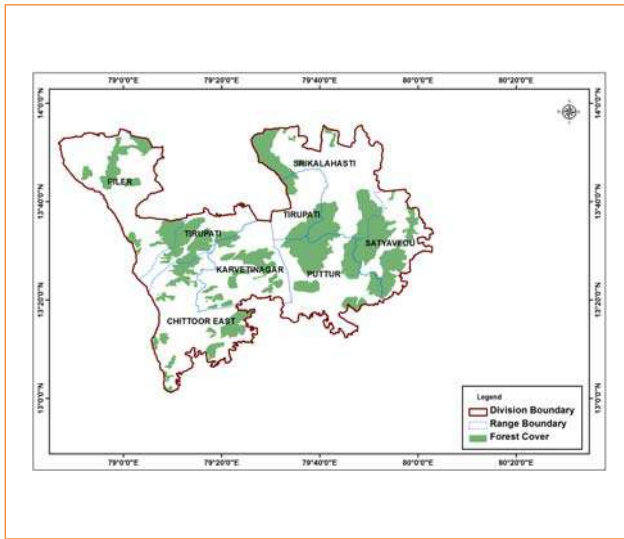
7	Protection works like fencing etc.,	Trenching, Watch & Ward	Trenching, Watch & Ward	Trenching, Watch & Ward	Trenching, Watch & Ward	Trenching, Watch & Ward
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Healthy	Healthy	Healthy	Healthy	Healthy
8	The health of raised plantation	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18
9	Maintenance of Records	Casualty replacement by ACCF	No observations recorded	No observations recorded	No observations recorded	No observations recorded
9.1	Updating of plantation journal	No	NO	NO	NO	NO
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10	Project Constraints/Limitations	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	NO	NO	NO
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.1	Any scope for improving the project output?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12	Suggestions for improvements from the Evaluating Agency/Consultants	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
12.1	Suggestions for improvement in record maintenance/or any other issues	Excellent	Excellent	Excellent	Excellent	Excellent
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance
13	Overall Grading based on survival %	Excellent	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

MONITORING REPORT

CHITTOOR EAST FOREST DIVISION

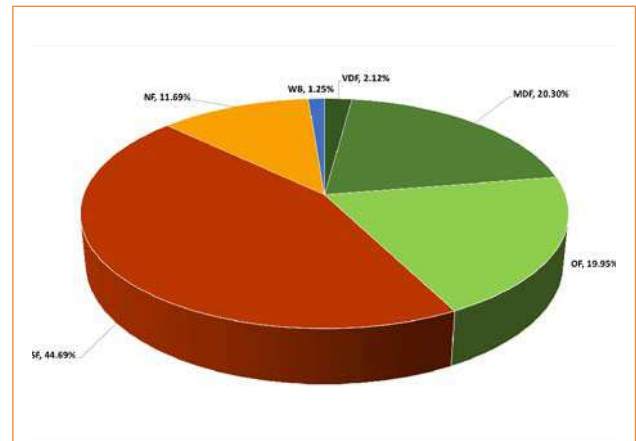


CHITTOOR EAST FOREST DIVISION



Chittoor district is part of Rayalaseema region located in the southernmost part of Andhra Pradesh state bordering Tamil Nadu in the south and Karnataka in the south-west part. The total geographical area of the district is 15,359 km² with a population of 4.17 Million (2011 census). Chittoor East WL Forest Division which is part of WLM Tirupati lies in the south of Andhra Pradesh and Eastern part of Chittoor District (latitudes 13°1' 7.32" and 13°55'28.56" N and longitudes 78°46' 50.88" and 80° 03'10.44" E). The Geographical Area of the Division is 6,769.18 Km² which is 44.58 % of the area of the District.

Figure 1: Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

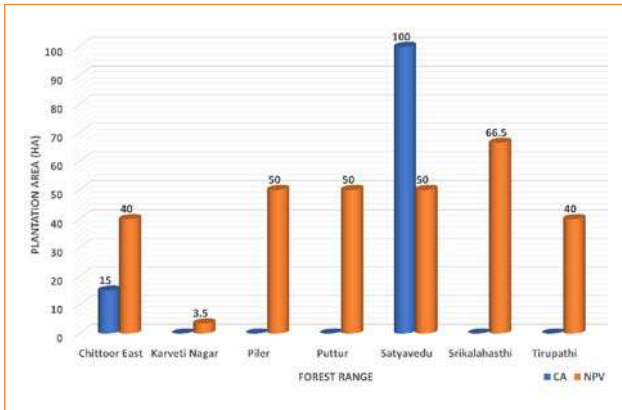
Chittoor East Division comprises seven forest ranges namely Chittoor East, Karvet Nagar, Pileru, Puttur, Satyavedu, Srikalahasti and Tirupathi. For the year of 2015-16, Chittoor East Division has taken up plantation work over an area of 415 ha covering all ranges namely Chittoor East (55 ha), Karveti Nagar (3.5 ha), Pileru (50 ha), Puttur (50 ha), Satyavedu (150 ha), Srikalahasti (66.5 ha) and Tirupathi (40 ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling method, the total area was partially enumerated in 25 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Chittoor East	Mixed	<i>Eucalyptus tereticornis</i> <i>Pterocarpus santalinus</i>	15	40	High	96	94	5.66	11.067
Karvetinagar	Mixed	<i>Hardwickia binata</i> <i>Pterocarpus santalinus</i>	-	3.5	High	-	86	4	8.324
Piler	Mixed	<i>Hardwickia binata</i> <i>Azadirachta indica</i> <i>Albizia odoratissima</i> <i>Pterocarpus santalinus</i> <i>Sterculia urens</i> <i>Syzygium cumini</i> <i>Terminalia alata</i>	-	50	High	-	89.8	3.8	13.903
Puttur	Monoculture	<i>Pterocarpus santalinus</i>	-	50	High	-	92.2	4.2	9.47
Satyavedu	Mixed	<i>Hardwickia binata</i> <i>Albiziaodoratissima</i> <i>Terminalia arjuna,</i> <i>Azadirachta indica</i> <i>Syzygium cumini</i> <i>Pterocarpus santalinus</i> <i>Dolichandrone crispera</i> <i>Terminalia alata</i> <i>Dalbergia latifolia</i>	100	50	High	94.4	95	4.1	14.25
Srikalahasti	Monoculture	<i>Pterocarpus santalinus</i>	-	66.5	High	-	92.25	5.3	16.116
Tirupathi	Monoculture	<i>Pterocarpus santalinus</i>	-	40	High	-	91	5.2	13.681

Plantation area

In the division, maximum was planted in Satyavedu forest range and the minimum was planted in Karvetinagar forest range.

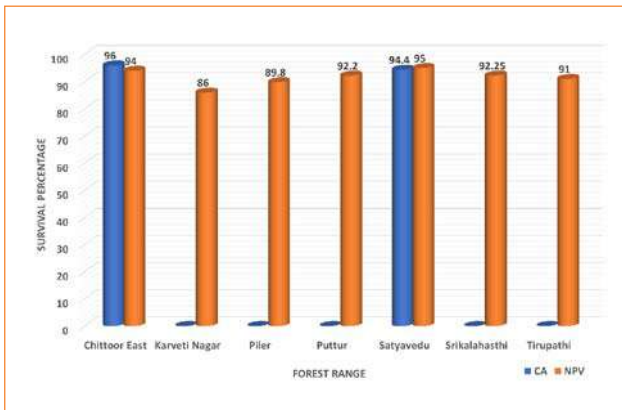
Figure 2 : Plantation area in the Chittoor East Forest Division



Survival percentage

The survival percentage is maximum in Chittoor east which is having 95% and minimum in Karvetinagar range which is having 86%.

Figure 3 : Survival percentage of the plantations



Average height

In the division, most of the plantations were healthy and maximum growth was observed in Chittoor east with an average height of 5.6m and minimum growth was observed in Piler range with an average height of 3.8m.

Figure 4 : Average height of the plantations



Average height

In the division, maximum girth was observed in Srikalahasti with an average of 16.116 cm and minimum girth was observed in Puttur range with an average of 9.47 cm.

Figure 5: Average height of the plantations



Observations

In the division, Vanallur beat of Satyavedu Forest range plantations was observed to be the best plantations.

- Survival percentage was rated overall excellent with an average of 91.5% which is ranging from 86% - 95% in all the CAMPA plantations.
- Multiple plant species were selected based on the site quality and they were ranging from moderately to highly suitable to the conditions. The species planted were *Hardwickia binata*, *Syzygium cumini*, *Pterocarpus santalinus*, *Azadirachta indica* and *Terminalia alata* which are suitable for tropical dry mixed deciduous vegetations.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with spacing 3m x 3m resulted in mixed crop plantations. Cultural operations (cleaning, weeding, and climber cutting) and SMC Operations and water harvesting structures such as check dams & contour trenching were taken up at the initial stages.
- The average height of important tree species was 4.6 which is ranging from 3.8 to 5.6m. Tending operations (Pruning, singling and thinning) were carried out. Live fencing and social fencing were created to protect plantations from biotic pressure. Tending operations has given better results in most of the plantations.
- There are moderate temperatures and good rainfall and climatic conditions had an impact on the growth of the plantations, hence the good survival percentage was observed. It appears that the best plantations were established with favourable climatic conditions along with proper protection measures.

- Local communities were benefited by gathering fuelwood, fodder and other intangible benefits like water level increase in their wells due to the plantation activities
- Plantation journals were maintained in most of the sites and inspecting authorities made recommendations in some sites such as circular weeding & soil works and Pruning & unwanted weeding growth in plantation

- No major constrains were found for growing the plantation. CAMPA fund was used for raising plantations in and around forest areas/outside forest areas and flow of funds was smooth during the initial period of the plantation works and most of the plantations received funds timely without any delay.
- Absence of funds for subsequent maintenance (after third-year maintenance) led to less protection against Grazing and damages by animals and human beings.



Hardwickia binata plantations in Chittoor East forest division



Collar girth measurement



Pterocarpus santalinus plantations in Bommasamudram Beat



Hardwickia binata plantations in Chittoor East division



Collar girth measuring



Overview of the mixed plantation



Pterocarpus santalinus plantations in Panduru Beat



Pterocarpus santalinus plantations in Satyavedu Forest range



Pterocarpus santalinus plantations

EVALUATION FORMAT OF CHITTOOR EAST DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE: WLM TIRUPATHI							
NAME OF THE DIVISION : CHITTOOR EAST							
S.No.	Name of the Range	CHITTOOR EAST	KARVETI NAGAR	PILER			
1	GPS Coordinates	N 13.15 E 79.11	N 13.33.567 E 79.32.304	N 13.43' E 78.56'			
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest			
3	Type of Plantation	Mixed crop plantation	Mono Culture Crops	Mixed crop plantation			
4	Plantation Area (in Ha)	55 Ha	3.5 Ha	50 Ha			
5	Choice of Tree Species	<i>Hardwickia binata</i> , <i>Syzygium cumini</i>	<i>Hardwickia binata</i> , <i>Pterocarpus santalinus</i>	<i>Hardwickia binata</i> , <i>Azadirachta indica</i> , <i>Terminalia alata</i>			
6	Qualitative assessment						
6.1	Suitability of area	Moderately suitable	Moderately Suitable	Highly suitable			
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 5X5 m ² spaced planting was done	45 cm ³ , Pitting, 5X5 m ² spaced planting was done	45 cm ³ , Pitting, 5X5 m ² spaced planting was done			
6.3.1	Survival Percentage	95%	86%	89.8%			
6.3.2	Average height / Girth	5.66 m / 11.06 cm	4 m / 8.32 cm	3.8 m / 13.90 cm			
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)			
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Works Were Carried Out	Soil Works Done	Soil Works Completed			
6.6	Increase in availability of Biomass for the local community. Status?	Fodder, broomsticks	Fodder, Broom Sticks	Fodder, Broomsticks			
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved			
7	Protection works like fencing etc..,						
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No	No	Fencing, Kuchcha fencing			
8	The health of raised plantation	Healthy	Healthy	Healthy			

9	Maintenance of Records				
9.1	Updating of plantation journal	Updating up to 2017-18	Updating up to 2016-2017	Updating up to 2017-18	Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	circular weeding & soil works	No Observations Recorded		safeguard the plantation from grazing and biotic interference
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	NO	
10.2	Source of funds	CAMPA	CAMPA	CAMPA	
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Need Watch & Ward	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs.	Yes. Local fruit varieties were suggested to be planted for their needs.	Yes. Local fruit varieties were suggested to be planted for their needs.	Yes. Local fruit varieties were suggested to be planted for their needs.
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Modified for Quality of Forest Degraded	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading based on survival %	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF CHITTOOR EAST DIVISION WISE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE: WLM TIRUPATHI

NAME OF THE DIVISION : CHITTOOR EAST

S.No.	Name of the Range	PUTTUR	SATHYAVEDU	SRIKALAHASTHI	TIRUPATHI
1	GPS Coordinates	N 13.39' E 79.60'	N 13.32' E 79.52'	N 13.42' E 79.48'	N 13.71' E 79.56'
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mono Culture	Mixed crop plantation	Mono Culture	Mono Culture
4	Plantation Area (in Ha)	50Ha	150Ha	66.5 Ha	40Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>	<i>Hardwickia binata</i> , <i>Azadirachta indica</i> , <i>Syzygium cumini</i> <i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>
6	Qualitative Assessment				
6.1	Suitability of area	Highly Suitable	Highly Suitable	Highly suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	92.2%	94.7%	92.25%	91%
6.3.2	Average height / Girth	4.2 m / 9.47 cm	4.1 m / 14.25 cm	5.3 m / 16.11 cm	5.25 m / 13.68 cm
6.4	Tending Operations (Singling/ pruning & other operations)	Tending operations are carried out (Singling, Pruning)	Tending operations are carried out (Singling, Pruning)	Tending operations are carried out (Singling, Pruning)	Tending operations are carried out (Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Ploughing, weeding, side branch cutting done	Soil work, water plough, weeding works done	Soil works done	SMC works carried out
6.6	Increase in availability of Biomass for the local community. Status?	Fodder, Broom Sticks	Fodder, Broomsticks	Fodder, Broomsticks	Fodder, Broom Sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved	Improved

7	Protection works like fencing etc.,						
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Brush wood Fencing	Kuchcha fencing, Watch ward	Trenching, Watch & Ward	Trenching, Watch & Ward		
8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy		
9	Maintenance of Records						
9.1	Updating of plantation journal	Updated up to 2018	Updated up to 2018	Updated up to 2018	Updated up to 2018		
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	NO	Instructed to Complete the Replacements, Take Measures for Biotic Interference- by DFO	Inter Ploughing Is Completed	Pruning & Unwanted Weeding Growth in Plantation- by SDFO		
10	Project Constraints/Limitations						
10.1	Constraints/Limitations faced by the authorities, if any?		NO	No	No/NO		
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA		
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds		
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?						
11.1	Any scope for improving the project output?	YES, Need Watch & Ward	YES, Funds for Maintenance	YES, Need Watch & Ward	YES, Funds for Maintenance		
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted		
12	Suggestions for improvements from the Evaluating Agency/Consultants						
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached		
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage		
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent		
14	Any other information about the plantation	Average Maintenance	Lowest Rainfall, Good Maintenance	Good Maintenance	Good Maintenance		

EVALUATION FORMAT OF CHITTOOR EAST RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST						
NAME OF THE RANGE: CHITTOOR EAST						
S.No.	Name of the Compartment	450	455	459		
	Name of the Beat	CHASIS HILL	CHITTOOR EAST	BOMMA SAMUDRAM		
1	GPS Coordinates	CHINNAMMAGUDIPALLE/ N 13.11'530 E 79.7'704	VSS-197 RAMAPURAM/ N 13.7'174 E 79.10'200	KALAKANERI/ N 13.1'860 E 79.9'577		
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest		
3	Type of Plantation	Mono Culture crops	Mono Culture crops	Mono Culture crops		
4	Plantation Area (in Ha)	10Ha	10Ha	5Ha		
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>	<i>Eucalyptus tereticornis</i>		
6	Qualitative Assessment					
6.1	Suitability of area	Highly suitable	Highly suitable	Highly suitable		
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 5X5 m ² spaced planting was done	45 cm ³ , Pitting, 5X5 m ² spaced planting was done	45 cm ³ , Pitting, 5X5 m ² spaced planting was done		
6.3.1	Survival Percentage	96%	87%	89%		
6.3.2	Average height/Girth	3.6 m/11.06 cm	3.75 m/11.06 cm	3.75 m/11.06 cm		
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)		
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	No	No	No		
6.6	Increase in availability of Biomass for local community. Status?	Fodder, broom sticks	Fodder, broom sticks	Fodder, broom sticks		
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved		
7	Protection works like fencing etc..					
7.1	Protection measures against Biotic Pressure	Fencing	Trenching, Watch work	No		

8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updating up to 2014-15	Updating up to 2015-16	Updating up to 2014-15	Updating up to 2014-15
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Weeding has to be taken up - FRO		Start fire lines instructed by FRO	Established well - DFO
10	Project Constraints/Limitations				
10.1	Constraints faced by the authorities, if any?	No constraints	No constraints	No constraints	No constraints
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	Yes, need watch & ward	Yes, need watch & ward	Yes, need watch & ward	Yes, need watch & ward
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated, Inspection Note Attached	Journal should be Updated, Inspection Note Attached	Journal should be Updated, Inspection Note Attached	Journal should be Updated, Inspection Note Attached
12	Whether the project should be continued/modified/discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF KARVETINAGAR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : KARVETINAGAR

S.No.	Name of the compartment	397
	Name of the Beat	ALLAMADUGU
1	GPS Coordinates	ALLAMADUGU/ N 13.33.567& E 79.32.304
2	Legal Status of Land	Reserve Forest
3	Type of Plantation	Mono Culture Crops
4	Plantation Area (in Ha)	4Ha
5	Choice of Tree Species	Hardwickia binata, Pterocarpus santalinus
6	Qualitative Assessment	
6.1	Suitability of area	Moderately Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm3, Pitting, 3X3 m2spaced planting was done
6.3.1	Survival Percentage	86%
6.3.2	Average height/Girth	4 m/8.32 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	soil works were done
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom Sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved
7	Protection works like fencing etc..,	
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Very few measures taken like fencing etc
8	Health of raised plantation	Healthy

9	Maintenance of Records		
9.1	Updating of plantation journal		Updated up to 2016-2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		No observations recorded
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?		No
10.2	Source of funds		CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?		YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues		Journal should be Updated
12.2	Whether the project should be continued/modified/discontinued (reasons)?		Modified for Quality of Forest Degraded
13	Overall Grading on the basis of survival %		Excellent
14	Any other information about the plantation		Good Maintenance

EVALUATION FORMAT OF PILER RANGE WISE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : PILER

S.No.	Name of the compartment	5	71	77
	Name of the Beat	THAPALAPULA	ROMPICHERLA	DAMALCHERUVU
1	GPS Coordinates	CHINTHALA BYLU/N 13.43.638 E 78.57.509	ROMPICHERLA/N 13.43.896 E 79.3.475	BAPPANA KONDA/N 13.30.515 E 79.3.292
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	15Ha	15Ha	10Ha
5	Choice of Tree Species	<i>Hardwickia binata</i> , <i>Azadirachta indica</i> , <i>Albizia odoratissima</i>	<i>Hardwickia binata</i> , <i>Pterocarpus santalinus</i> , <i>Azadirachta indica</i> , <i>Syzygium cumini</i> , <i>Terminalia alata</i>	<i>Azadirachta indica</i> , <i>Syzygium cumini</i> , <i>Hardwickia binata</i> , <i>Terminalia alata</i>
6	Qualitative Assessment			
6.1	Suitability of area	highly suitable	highly suitable	Moderately Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done
6.3.1	Survival Percentage	89%	94%	90%
6.3.2	Average height/Girth	3 m/13.90 cm	4 m/13.90 cm	3 m/13.90 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Ploughing had been taken up	No	SMC works carried out
6.6	Increase in availability of Biomass for local community. Status?	Broom sticks	Broom sticks	Fodder, Broom sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved

7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure	Kuchcha fencing	No	No	No	
8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy	
9	Maintenance of Records					
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Take up inter ploughing for speedy growth of seedlings	Need to have Kuchcha fencing	Need to have Kuchcha fencing	Safe guard the plantation from grazing and biotic interference	
10	Project Constraints/Limitations					
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	NO	NO	
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow	Smooth fund flow	
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?					
11.1	Any scope for improving the project output?	YES	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Need Watch & Ward	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent	
14	Any other information about the plantation	Suitable Geography	Good Maintenance	Good Maintenance	Good Maintenance	

EVALUATION FORMAT OF PILER RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : PILER

S.No.	Name of the compartment	76	10
	Name of the Beat	DAMALCHERUVU	MARELLA
1	GPS Coordinates	NEETULAKONDA N 13.30.844 E 79.3.316	DONABAVI VANKA N 13.47.905 E 78.56.611
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	10Ha	5Ha
5	Choice of Tree Species	Dominated by <i>Hardwickia binata</i> , <i>Syzygium cumini</i> , <i>Terminalia alata</i>	<i>Azadirachta indica</i> , <i>Terminalia alata</i> , <i>Syzygium cumini</i> , <i>Hardwickia binata</i> , <i>Sterculia urens</i>
6	Qualitative Assessment		
6.1	Suitability of area	highly suitable	highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done
6.3.1	Survival Percentage	96%	80%
6.3.2	Average height/Girth	5 m/13.90 cm	4 m/13.90 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil works completed	Soil works done
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom sticks	Fodder, Broom sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved
7	Protection works like fencing etc..,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No	Fencing

8	Health of raised plantation	Healthy	Healthy	Healthy
9	Maintenance of Records	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18
9.1	Updating of plantation journal	Safeguard the plantation from grazing and biotic interference	No	No
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)			
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	NO
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	YES, Need Watch & Ward	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruitvarieties were suggested to be planted for their needs	Yes. Local fruitvarieties were suggested to be planted for their needs	Yes. Local fruitvarieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF PUTTUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : PUTTUR

S.No.	Name of the Beat	THADUKU	THADUKU	THADUKU	NANDHANAM
1	GPS Coordinates	GOPALAKRISHNA PURAM/N 13.29.221 E 79.34.473	GOPALAKRISHNA PURAM/N 13.29.257 E 79.34.297	NANDHANAM/N 13.39.214 E 79.82.152	
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	
3	Type of Plantation	Mono Culture Crops	Mono Culture Crops	Mono Culture Crops	
4	Plantation Area (in Ha)	20Ha	20Ha	20Ha	
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>	
6	Qualitative Assessment				
6.1	Suitability of area	Highly Suitable	Highly Suitable	Highly Suitable	
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	
6.3.1	Survival Percentage	98%	98%	83%	
6.3.2	Average height/Girth	5 m/9.47 cm	5 m/* .47 cm	4 m/9.47 cm	
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	SMC works carried out	SMC works carried out	Ploughing, Weeding, Pruning Done	
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom Sticks	Fodder, Broom Sticks	Fodder, Broom Sticks	
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved	
7	Protection works like fencing etc..,				
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Watch & Ward	Trenching, Watch & Ward	Brush wood Fencing	
8	Health of raised plantation	Healthy	Healthy	Healthy	

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	NO	NO	NO
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	NO
10.2	Source of funds	CAMPA. Received in Time	CAMPA. Received in Time	CAMPA. Received in Time
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	YES, Need Watch & Ward	YES, Need Watch & Ward	YES, Need Watch & Ward
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested for society	Yes. Local fruit varieties were suggested for society	Yes. Local fruit varieties were suggested for society
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued to Enhance the quality of Forest	Continued to Enhance the quality of Forest	Continued to Enhance the quality of Forest
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Suitable Geography

EVALUATION FORMAT OF PUTTUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : PUTTUR

S.No.	Name of the Beat	MANDHANAM	NAGALAPURAM
1	GPS Coordinates	NANDHANAM/N 13.39.214 E 79.82.152	RAJIVE NAGAR/N 13.40.939 E 79.79.145
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mono Culture Crops	Mono Culture Crops
4	Plantation Area (in Ha)	20Ha	10Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done
6.3.1	Survival Percentage	89%	99%
6.3.2	Average height/Girth	4 m/9.47 cm	3 m/9.47 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Ploughing, Weeding, Side Branch Cutting Done	SMC works carried out
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom Sticks	Fodder, Broom Sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved
7	Protection works like fencing etc..,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Brush wood Fencing	Trenching, Brush wood Fencing
8	Health of raised plantation	Healthy	Healthy

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2016-17	Updated up to 2015-16	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	NO	NO	
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	
10.2	Source of funds	CAMPA. Received in Time	CAMPA. Received in Time	
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	YES, Need Watch & Ward	YES, Need Watch & Ward	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	
13	Overall Grading on the basis of survival %	Excellent	Excellent	
14	Any other information about the plantation	Suitable Geography	Average Maintenance	

EVALUATION FORMAT OF SATYAVEDU RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : SATYAVEDU

S.No.	Name of the Range	B. PURAM	B. PURAM	B. PURAM	VANALLUR
1	GPS Coordinates	M.G. NAGAR/ N 13.32.173 E 79.52.707	M.G. NAGAR/ N 13.32.159 E 79.52.567	M.G. NAGAR/ N 13.32.151 E 79.52.519	RANGARAJA GUNTA/N 13.30.697 E 79.55.616
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	30Ha	30Ha	30Ha	20Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i> , <i>Dolichandrone crispera</i> , <i>Terminalia alata</i> , <i>Syzygium cumini</i>	<i>Pterocarpus santalinus</i> , <i>Dolichandrone Crispera</i> , <i>Hardwickia binata</i> , <i>Syzygium cumini</i>	<i>Pterocarpus santalinus</i> , <i>Dolichandrone crispera</i> , <i>Hardwickia binata</i> , <i>Syzygium cumini</i>	<i>Pterocarpus santalinus</i> , <i>Syzygium cumini</i> , <i>Hardwickia binata</i> , <i>Albiziaodoratissima</i>
6	Qualitative Assessment				
6.1	Suitability of area	Highly Suitable	Highly Suitable	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done
6.3.1	Survival Percentage	99%	99%	97%	100%
6.3.2	Average height/Girth	5 m/14.25 cm	4 m/14.25 cm	4 m/14.25 cm	4 m/14.25 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	SMC works were major	SMC works were major	SMC works were major	SMC works were major
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom sticks	Fodder, Broom sticks	Fodder, Broom sticks	Fodder, Broom sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved	Improved
7	Protection works like fencing etc.,,				
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Fencing, Watch & Ward	Fencing, Watch& Ward	Fencing, Watch & Ward	Trenching, Watch & Ward, Fencing

8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records					
9.1	Updating of plantation journal	Up to 2017-18	Up to 2017-18	Up to 2017-18	Up to 2017-18	Up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Gypsum can be used to leach out excess salinity in the soil- DFO	Gypsum can be used to leach out excess salinity in the soil- DFO	Gypsum can be used to leach out excess salinity in the soil- DFO	Gypsum can be used to leach out excess salinity in the soil- DFO	Instructed to complete the replacements, take measures for biotic interference-DFO
10	Project Constraints/Limitations					
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	No	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?					
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Need Watch & Ward
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF SATYAVEDU RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : SATYAVEDU

S.No.	Name of the Range	VANALLUR	PANDUR	PANDUR
1	GPS Coordinates	RANGARAJA GUNTA/N 13.30.697 E 79.55.616	NAGANANDAPURAM /N 13.32.815 E 79.53.633	NAGANANDAPURAM / N 13.32.815 E 79.53.633
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20Ha	20Ha	20Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i> , <i>Syzygium cumini</i> , <i>Hardwickia binata</i> , <i>Albiziaodoratissima</i>	<i>Azadirachta indica</i> , <i>Dolichandrone Crispa</i> , <i>Hardwickia binata</i> <i>Terminalia alata</i> , <i>R.S, Syzygium cumini</i>	<i>Azadirachta indica</i> <i>Dolichandrone Crispa</i> , <i>Hardwickia binata</i> , <i>Terminalia alata</i> , <i>Syzygium cumini</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly Suitable	Moderately suitable	Moderately suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done
6.3.1	Survival Percentage	100%	93%	79%
6.3.2	Average height/Girth	4 m/14.25 cm	3 m/14.25 cm	4 m/14.25 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	SMC works were major	soil works inter plough, weeding	soil work, water plough, weeding works done
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom sticks	Fodder, Broom sticks	Fodder, Broom sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved
7	Protection works like fencing etc..			
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Watch & Ward, Fencing	No, Watch ward	No, Watch ward

8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to complete the replacements, take measures for biotic interference-DFO	Fix plantation board & row wise enumeration to be done -DFO	Fix plantation board row wise enumeration to be done -DFO	Fix plantation board row wise enumeration to be done -DFO
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Need Watch & Ward	YES, Need Watch & Ward	YES, Need Watch & Ward	YES, Need Watch & Ward
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated, Inspection Note to be Attached	Properly Maintained	Properly Maintained	Properly Maintained
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF SATYAVEDU RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : SATYAVEDU

S.No.	Name of the Range	PANDUR	PANDUR	PANDUR
1	GPS Coordinates	SIDDESWARAPURAM/ N 13.33.009 E 79.54.223	SIDDESWARAPURAM/N 13.33.009 E 79.54.223	SIDDESWARAPURAM /N 13.33...9 E 77.54.223
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20Ha	30Ha	30Ha
5	Choice of Tree Species	<i>Syzygium cumini</i> , <i>Hardwickia binata</i> , <i>Terminalia Arjuna</i> , <i>Azadirachta indica</i> ,	<i>Syzygium cumini</i> , <i>Hardwickia binata</i> , <i>Terminalia Arjuna</i> , <i>Azadirachta indica</i> , <i>Pterocarpus santalinus</i>	<i>Syzygium cumini</i> , <i>Hardwickia binata</i> , <i>Terminalia Arjuna</i> , <i>Pterocarpus santalinus</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly Suitable	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done
6.3.1	Survival Percentage	97%	98%	93%
6.3.2	Average height/Girth	4 m/14.25 cm	3.5 m/14.25 cm	4.6 m/14.25 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Singling, Pruning)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	SMC works carried out	No	SMC works carried out
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom sticks	Fodder, Broom sticks	Fodder, Broom sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved
7	Protection works like fencing etc..			
7.1	Protection measures for Biotic pressure	No, Watch ward	No, Watch ward	No, Watch ward

8	Seedlings Health	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Calendar Operations have to be taken up	Calendar Operations have to be taken up FRO	Calendar operations have to be taken up FRO	Calendar operations have to be taken up FRO
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/ or any other issues	Properly Maintained	Properly Maintained	Properly Maintained	Properly Maintained
12.2	Whether the project should be continued/ modified/discontinued (reasons)?	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage	Continued to enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF SATYAVEDU RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : SATYAVEDU

S.No.	Name of the Beat:	KADUR	KADUR
1	GPS Coordinates	CHALAMATHUR/N 13.33.668 E 79.59.978	CHALAMATHUR/N 13.33.668 E 79.59.959
2	Legal Status of Land	Reserve forest	Reserve forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20Ha	20Ha
5	Choice of Tree Species	<i>Syzygium cumini</i> , <i>Azadirachta indica</i> , <i>Pterocarpus Santalinus</i> , <i>Albizia odoratissima</i> , <i>Dalbergia latifolia</i>	<i>Syzygium cumini</i> , <i>Azadirachta indica</i> , <i>Pterocarpus Santalinus</i> , <i>Dalbergia latifolia</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	97%	96%
6.3.2	Average height/Girth	5 m/14.25 cm	5 m/14.25 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Singling, Pruning)	Tending operations are carried out (Singling, Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	No	No
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom sticks	Fodder, Broom sticks
6.7	Improvement in quality of life of people due to risen plantation	No	No
7	Protection works like fencing etc..,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Kuchcha fencing	Kuchcha fencing, Watch ward
8	Health of raised plantation	Healthy	Healthy

9	Maintenance of Records		
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No observation record	No observations recorded
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?	No	No
10.2	Source of funds	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?	YES, Adequate Funds	YES, Adequate Funds
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated, Inspection Note to be Attached	Journal should be updated, Inspection Note to be Attached
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance

EVALUATION FORMAT OF SRIKALAHASTHI RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : SRIKALAHASTHI

S.No.	Name of the Beat	Thimmasamudram	Thimmasamudram	Thimmasamudram	Thimmasamudram
1	GPS Coordinates	KOTHUR ST COLONY/N 13.37.390 E 79.43.076	KOTHUR ST COLONY/N 13.37.239 E 79.43.053	KOTHUR ST COLONY/N 13.37.069 E 79.43.017	
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	
3	Type of Plantation	Mono Culture crop	Mono Culture crop	Mono Culture crop	
4	Plantation Area (in Ha)	20Ha	20Ha	10Ha	
5	Choice of Tree Species	<i>Pterocarpus Santalinus</i>	<i>Pterocarpus Santalinus</i>	<i>Pterocarpus Santalinus</i>	
6	Qualitative Assessment				
6.1	Suitability of area	Highly suitable	Highly suitable	Highly suitable	
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	
6.3.1	Survival Percentage	96 %	99 %	99 %	
6.3.2	Average height/Girth	6 m/16.11 cm	5 m/16.11 cm	4 m/16.11 cm	
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)	Tending operations are carried out (Singling and Pruning)	
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Works done	Soil Works Done	NO	
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom sticks	Fodder, Broom sticks	Fodder, Broom sticks	
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved	
7	Protection works like fencing etc..,				
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Watch & Ward	Trenching, Watch & Ward	Fencing	
8	Health of raised plantation	Healthy	Healthy	Healthy	

9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	NO	NO	NO	NO
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Need Watch & Ward	YES, Need Watch & Ward	YES, Need Watch & Ward	YES, Need Watch & Ward
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be updated, Inspection Note to be Attached
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance

EVALUATION FORMAT OF SRIKALAHASTHI RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : SRIKALAHASTHI

S.No.	Name of the Beat	KATUR	KUKKUMBAKAM	CHINTHALPALEM
1	GPS Coordinates	LAKSHMIPURAM ST COLONY/N 13.42.203 E 79.49.927	KARNAMITTA/N 13.38.358 E 79.51.987	MUCHUVOLU/N 13.47.490 E 79.36.657
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mono Culture crop	Mono Culture crop	Mono Culture crop
4	Plantation Area (in Ha)	10Ha	10Ha	6.5 (7) Ha
5	Choice of Tree Species	<i>Pterocarpus Santalinus</i>	<i>Pterocarpus Santalinus</i>	<i>Pterocarpus Santalinus</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly suitable	Highly suitable	Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	97%	93%	99%
6.3.2	Average height/Girth	6 m/16.11 cm	7 m/16.11 cm	5 m/16.11 cm
6.4	Tending Operations (Singling & operations)	Singling, Pruning	Singling, Pruning	Singling, Pruning
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	SMC works carried out	SMC works carried out	SMC works carried out
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom sticks	Fodder, Broom sticks	Broom sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved
7	Protection works like fencing etc..,			
7.1	Protection measures against Biotic Pressure	Trenching, Kuchcha fencing	Fencing	No
8	Health of raised plantation	Healthy	Healthy	Healthy

9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to complete row wise enumeration and fix stones- SDFO	One sector closer to Telegu ganga canal, growth is poor, casualty replacement by FRO	Inter ploughing is completed	
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Need Watch & Ward	YES, Need Watch & Ward	YES, Need Watch & Ward	YES, Need Watch & Ward
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated, Inspection Note Attached	Journal should be Updated, Inspection Note Attached	Journal should be Updated, Inspection Note Attached	Journal should be Updated, Inspection Note Attached
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest	Continued to Enhance the quality of Forest	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance

EVALUATION FORMAT OF SRIKALAHASTHI RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : SRIKALAHASTHI

S.No.	Name of the Beat:	KUKKUMBAKAM	KUKKUMBAKAM	KUKKUMBAKAM
1	GPS Coordinates	KARNAMITTA/N 13.38.344 E 79.52.450	KARNAMITTA/N 13.38.240 E 79.52.471	KARNAMITTA/N 13.38.769 E 79.52.628
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mono Culture	Mono Culture	Mono Culture
4	Plantation Area (in Ha)	20 Ha	20 Ha	10 Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly suitable	Highly suitable	Highly suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	98%	100%	96%
6.3.2	Average height/Girth	4 m/16.11 cm	4 m/16.11 cm	7 m/16.11 cm
6.4	Tending Operations (Singling/pruning & other operations)	Singling, Pruning	Singling, Pruning	Singling, Pruning
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	SMC works carried out	SMC works carried out	PPT'S works done
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom sticks	Fodder, Broom sticks	Fodder, Broom sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved
7	Protection works like fencing etc..,			
7.1	Protection measures against Biotic Pressure (Cattles)	Trenching, Watch & Ward	Trenching, Watch & Ward	Trenching
8	Health of raised plantation	Healthy	Healthy	Healthy

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Tall Plants of Hardwickia binata Should Be Planted in These Patches During Casualty Replacement	Plants Are Growing Well. Tall Plants of Hardwickia binata Should Be Planted in These Patches During Casualty Replacement	FRO Maintained the Plantation Well, Very Healthy Seedlings
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	YES, Need Watch & Ward	YES, need Watch & Ward	YES, need Watch & Ward
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall, Good Maintenance	Lowest Rainfall, Good Maintenance	Good Maintenance

EVALUATION FORMAT OF TIRUPATHI RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

NAME OF THE RANGE : TIRUPATHI

S.No.	Name of the Beat	YERPEDU	YERPEDU
1	GPS Coordinates	KRISHNAMPALLE/N 13.73.946 E 79.57.861	KRISHNAMPALLE/N 13.73.911 E 79.57.885
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mono Culture Crops	Mono Culture crops
4	Plantation Area (in Ha)	20Ha	20Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ Pitting, 3X3 m ² spaced planting was done	45 cm ³ Pitting, 3X3 m ² spaced planting was done
6.3.1	Survival Percentage	96%	95%
6.3.2	Average height/Girth	6 m/13.68 cm	6 m/13.68 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	SMC works were done	SMC works were done
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom Sticks	Fodder, Broom Sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved
7	Protection works like fencing etc..,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Watch & Ward	Watch & Ward
8	Health of raised plantation	Healthy	Healthy

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18	Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Branch Pruning – SDFO	Branch Pruning – SDFO	Side Branch Pruning - SDFO
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	NO
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	YES, Need Watch & Ward	YES, Need Watch & Ward	YES, Need Watch & Ward
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated, Inspection Note to be Attached
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF TIRUPATHI RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHITTOOR EAST

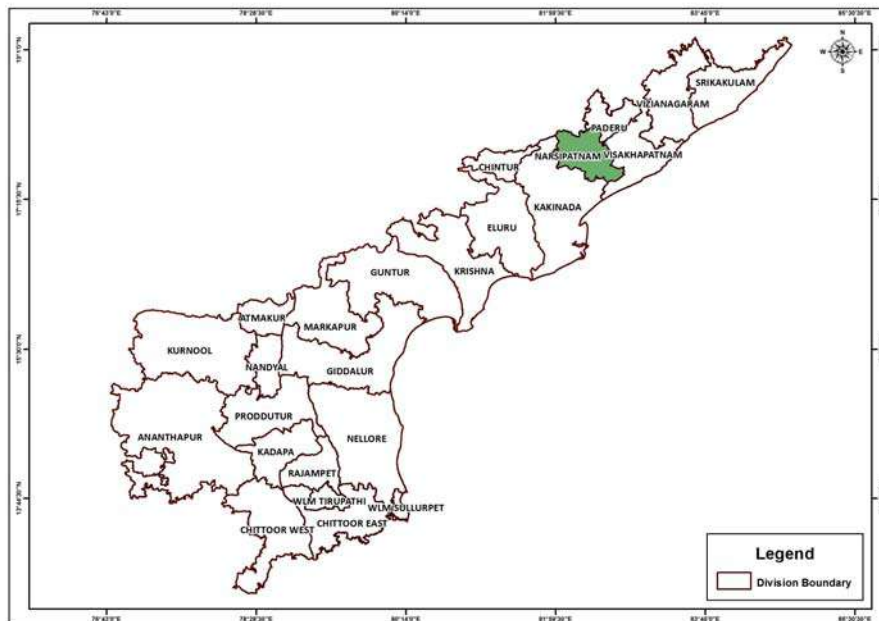
NAME OF THE RANGE : TIRUPATHI

S.No.	Name of the Beat	YERPEDU	YERPEDU
1	GPS Coordinates	POTHUMANUGUNTA/N 13.69.896 E 79.56.602	POTHUMANUGUNTA/N 13.69.119 E 79.56.817
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mono Culture crops	Mono Culture crops
4	Plantation Area (in Ha)	20Ha	20Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done
6.3.1	Survival Percentage	86%	92%
6.3.2	Average height/Girth	4 m/13.68 cm	5 m/13.68 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	SMC works were done	SMC works carried out
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom Sticks	Fodder, Broom Sticks
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Watch & Ward	Trenching, Watch & Ward

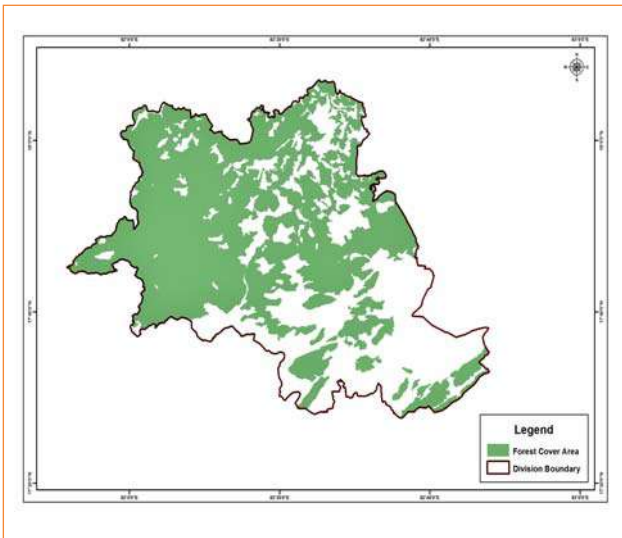
8	Health of raised plantation	Healthy	Healthy
9	Maintenance of Records		
9.1	Updating of plantation journal	Updated up to 2017-18	Updated up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Pruning & Unwanted Weeding Growth in Plantation-SDFO	Pruning & Unwanted Weeding Growth in Plantation-SDFO
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO
10.2	Source of funds	CAMPA, Received in time	CAMPA, Received in time
10.3	If flow of funds wasn't smooth, where did the delay arise?		
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated, Inspection Note to be Attached	Journal should be Updated
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance

MONITORING REPORT

NARSIPATNAM FOREST DIVISION

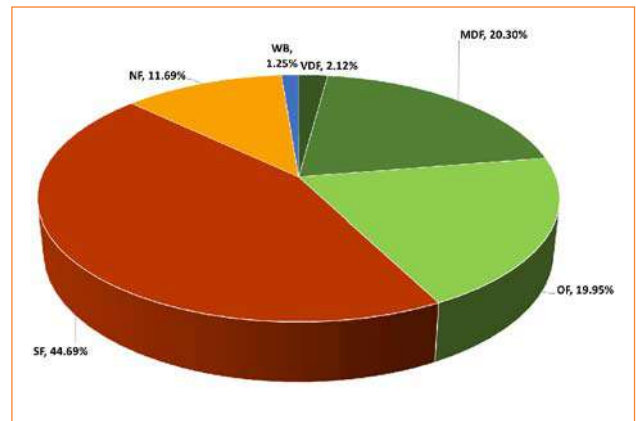


NARSIPATNAM FOREST DIVISION



Narsipatnam is a town in Visakhapatnam district of Andhra Pradesh. The area of Visakhapatnam district is 11,161 km² and population of the district is 4.2 million (2011 census). Narsipatnam Forest Division lies in the north-eastern part of Andhra Pradesh between latitudes 17° 27' 33" and 18° 07' 02" N and longitudes 81° 51' 47" and 82° 47' 59" E. Geographical area of the division is 3754.99 Km² which is 30.95% of the geographical area of the district.

Figure 1: Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

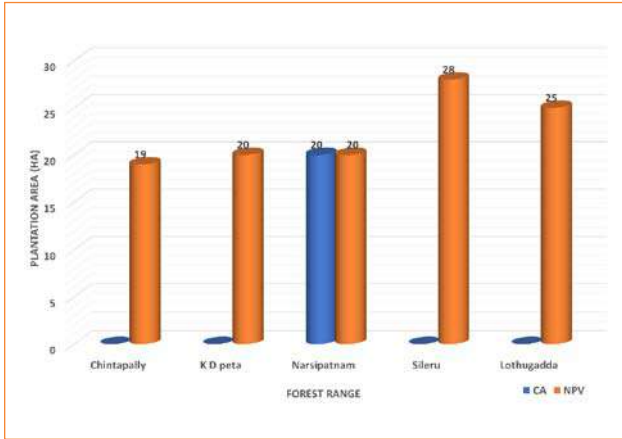
Narsipatnam Division comprises eight forest ranges namely Narsipatnam, K.D.Peta. Slier, Chintapalli, Lothugadda, Marripakala, R.V Nagar and Peddavalasala. For the year of 2015-16, Proddutur Division has taken up plantation work over an area of 132 ha covering five out of eight ranges namely Narsipatnam (40ha), K.D. Peta (20 ha), Sileru (28 ha), Chintapalli (19 ha), Lothugadda (25 ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling method, the total area was partially in 11 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Chintapally	Mixed	<i>Dalbergia latifolia</i> <i>Syzygium cumini</i> <i>Pterocarpus marsupium</i> <i>Magnoliachampaca</i> <i>Tamarindus indica</i> <i>Acrocarpus spp.</i>	-	19	Poor	-	40	1.65	3.189
K D peta	Monoculture	<i>Tectona grandis</i>	-	20	Moderate	-	82	3	4.235
Narsipatnam	Mixed	<i>Dalbergia latifolia</i> <i>Pongamia pinnata</i> <i>Albizia odoratissima</i> <i>Syzygium cumini</i>	20	20	Moderate	76	74	4	6.54
Sileru	Mixed	<i>Tectona grandis</i> <i>Acrocarpus spp.</i> <i>Pterocarpus marsupium</i>	-	28	Moderate	-	70	0.85	17.882
Lothugadda	Mixed	<i>Tectona grandis</i>	-	25	Poor	-	35	1.82	3.624

Plantation area

In the division, maximum was planted in Narsipatnam forest range and minimum was planted in Chintapally forest range.

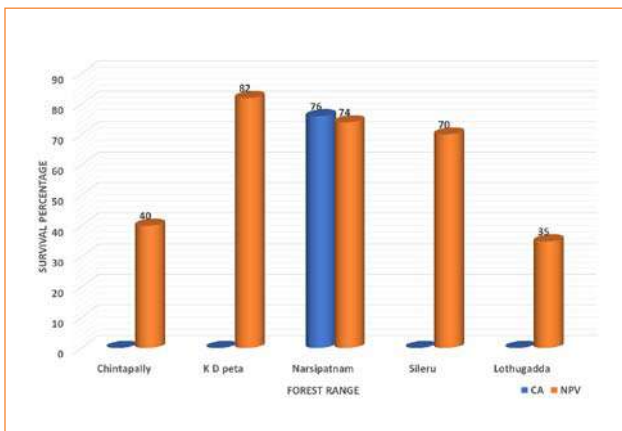
Figure 2: Plantation area in Narsipatnam forest division



Survival percentage

The survival percentage is maximum in K D Peta which is having 82% and minimum in Chintapally range which is having 40%.

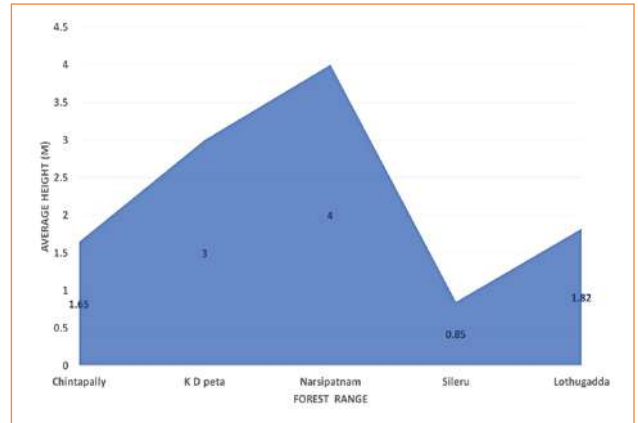
Figure 3: Survival percentage of the plantations



Average height

In the division, most of the plantations were healthy and maximum growth was observed in Narsipatnam with an average height of 4m and minimum growth was observed in Sileru range with an average height of 0.85m.

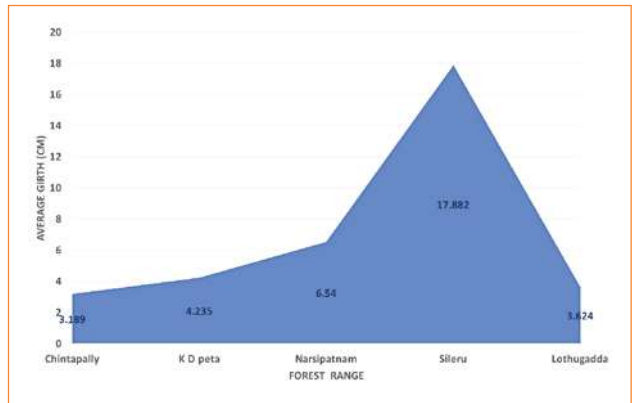
Figure 4 : Average height of the plantations



Average girth

In the division, maximum girth was observed in Narsipatnam with an average of 17.88cm and minimum was observed in Chintapally range with an average of 3.189 cm.

Figure 5: Average girth of the plantations



Observations

In the division, Duppulawada compartment No.1074 of Sileru Forest range plantation was observed the best plantations.

- Survival percentage was rated good (average 66.75 %) ranging from 40% - 82% at all the CAMPA plantations.
- Due to the presence undulated hills and plains, the selected species were moderately suitable for the soil type. The species planted were *Dalbergia latifolia*, *Syzygium cumini* *Pterocarpus marsupium*, *Acrocarpus* and *Tectona grandis* which are suitable for dry ever green vegetation.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with spacing 3m x 3m & 2m x 2m resulted into mixed crop plantations. Cultural operations (cleaning, weeding & climber cutting) were taken up at the initial stages.
- Average height of important tree species was 2.3m which is ranging from 0.65 to 4 m. Tending operations (pruning, singling and thinning) were carried out. No protection measures lesser infestation of pest and diseases (rust and powdery mildew) were witnessed and health of the plantations over all was good.

- There is moderate temperatures and good rainfall and climatic conditions had impact on the growth of the plantations, hence the good survival percentage was observed. It appears that the best plantations were established with favourable climatic conditions along with proper protection measures.
- Local communities were benefited by gathering fuel wood, fodder and other intangible benefits like water level increase in their wells due to the plantation activities
- Plantation journals were maintained in most of the sites and inspection notes were noticed only at a few plantation sites.
- No major constrains were observed for raising the plantations. CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during initial period of the plantation works and most of the plantations received funds timely without any delay.
- Plantation journals were maintained in most of the sites and inspection notes were observed only at a few plantation sites.
- Absence of funds for subsequent maintenance (after third year maintenance) led to less protection against grazing and damages by animals and human beings.

EVALUATION FORMAT OF MARSIPATNAM DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : MARSIPATNAM						
S.No.	Name of the Range	CHINTAPALLY	K D PETA	MARSIPATNAM	SILERU	
1	GPS Coordinates	N 17.90 E 82.43	N 17.58 E 82.39	N 17.55 E 82.78	N 18.02' E 82.13'	
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	RESERVE FOREST	
3	Type of Plantation	Mixed crop plantation	Monoculture crops	Mixed plantation	Mixed crop plantation	
4	Plantation Area (in Ha)	19 Ha	20 Ha	40 Ha	28 Ha	
5	Choice of Tree Species	<i>Dalbergia latifolia</i> , <i>Syzygium cumini</i> <i>Pterocarpus marsupium</i> , <i>Acrocarpus</i>	<i>Tectona grandis</i>	<i>Dalbergia latifolia</i> , <i>Syzygium cumini</i>	<i>Tectona grandis</i> , <i>Acrocarpus</i> , <i>Pterocarpus marsupium</i>	
6	Qualitative Assessment					
6.1	Suitability of area	Moderately suitable	Moderate	Average	Moderately suitable	
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 2X2 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	
6.3.1	Survival Percentage	40%	82%	75%	70%	
6.3.2	Average height /Girth	1.65 m / 3.18 cm	3 m / 4.23 cm	4 m / 6.54 cm	0.85 m / 17.88 cm	
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Singling)	Tending operations carried out. (Singling)	Tending operations were not carried out	Tending operations carried out (Singling, Pruning & weeding)	
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	SMC works	SMC works	CCTs	CCT	
6.6	Increase in availability of Biomass for local community. Status?	Fodder	Fodder	Fuel wood, small timber	Fuel wood, Fodder available	
6.7	Improvement in quality of life of people due to risen plantation	Not much observed	Not much observed	Not much observed	They are getting some income	
7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Little fencing done	Little fencing done	Little fencing done	Little fencing done	

8	Health of raised plantation	Moderate	Moderate	Moderate	Moderate	Moderate
9	Maintenance of Records					
9.1	Updating of plantation journal	Updated up to 2018	Updated up to 2018	Updated up to 2018	Updated up to 2018	Updated up to 2018
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Sub-DFO	No special indications	No special indications	No special indications	Sub-DFO, Good plantation
10	Project Constraints/Limitations					
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	No	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow	Smooth fund flow	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?					
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	Good, maintain Watch guard for protection
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs	Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance/or any other issues	Good	Good	Good	Good	Good
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Discontinued due to maintenance period is over	Discontinued due to maintenance period is over	Discontinued due to maintenance period is over	Discontinued due to maintenance period is over	Discontinued due to funding period is over
13	Overall Grading on the basis of survival %	Good	Average	Average	Average	Average
14	Any other information about the plantation	plantation laid on hilly area survival and growth are good	Good growth	Good growth	Good growth	NTSH plantation has less growth

EVALUATION FORMAT OF CHINTAPALLY RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : NARSIPATNAM		1006 & 1007	
NAME OF THE DIVISION : NARSIPATNAM		1013	
S.No.	Name of the Compartment	1013	1006 & 1007
	Name of the Beat	WANGASARA	KRISHNAPURAM
1	GPS Coordinates	Komullabanda/ N 17.85 E 82.415	Chikumbanda/ N 17.96 E 82.448
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20Ha	10Ha
5	Choice of Tree Species	<i>Syzygium cumini</i> , <i>Pterocarpus marsupium</i> , <i>Dalbergia latifolia</i> , <i>Magnoliachampaca</i>	<i>Acrocarpus</i> , <i>Tamarindus indica</i>
6	Qualitative Assessment		
6.1	Suitability of area	Poor	Moderately suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3 m ² spaced planting was done
6.3.1	Survival Percentage	20 %	60 %
6.3.2	Average height/Girth	80 cm/3.18 cm	2.5 m/3.18 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations were not carried out	Tending operations carried out. (Singling)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	No	No
6.6	Increase in availability of Biomass for local community. Status?	Fodder	Fodder
6.7	Improvement in quality of life of people due to risen plantation	They are getting some income	They are getting some income
7	Protection works like fencing etc..		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No	No
8	Health of raised plantation	Moderate	Moderate

9	Maintenance of Records		
9.1	Updating of plantation journal	No	Updated up to 2018
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No	Sub-DFO
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?	No	No
10.2	Source of funds	CAMPA Smooth flow of funds	Smooth flow of funds
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?	No	Weeding
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes. Local fruit varieties were suggested	Yes. Local fruit varieties were suggested
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues	Good	Good
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Discontinued due to maintenance period is over	Discontinued due to maintenance period is over
13	Overall Grading on the basis of survival %	Poor	Good
14	Any other information about the plantation	Plantation is 20% of survival	plantation laid on hilly area survival and growth are good

EVALUATION FORMAT OF K D PETA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : NARSIPATNAM

NAME OF THE RANGE : K D PETA

S.No.	Name of the Beat	BALARAM
1	GPS Coordinates	Chinabalaram/ N 17.58 E 82.39
2	Legal Status of Land	Reserve Forest
3	Type of Plantation	Monoculture Crops
4	Plantation Area (in Ha)	10ha
5	Choice of Tree Species	<i>Tectona grandis</i>
6	Qualitative Assessment	
6.1	Suitability of area	Moderate
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 2X2m ² spaced planting was done
6.3.1	Survival Percentage	49%
6.3.2	Average height/Girth	5 m/4.23 cm
6.4	Tending Operations (Singling/ pruning & other operations)	Tending operations carried out. (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	NO
6.6	Increase in availability of Biomass for local community. Status?	Fodder
6.7	Improvement in quality of life of people due to risen plantation	They are getting some income
7	Protection works like fencing etc.,	
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No
8	Health of raised plantation	Moderate

9	Maintenance of Records		
9.1	Updating of plantation journal		Updated up to 2018
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		Sub-DFO
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?		NO
10.2	Source of funds		Smooth flow of funds, funding period over
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?		Weeding
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes. Local fruit varieties were suggested to be planted for their needs
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues		Good
12.2	Whether the project should be continued/modified/discontinued (reasons)?		Discontinued due to maintenance period is over
13	Overall Grading on the basis of survival %		Good
14	Any other information about the plantation		plantation laid on hilly area survival and growth are good

EVALUATION FORMAT OF NARSIPATNAM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : NARSIPATNAM	
NAME OF THE RANGE : NARSIPATNAM	
S.No.	1165
Name of the Compartment:	G. KODURU
Name of the Beat:	Panduru (Banda)/ N 17.55 E 82.78
1	GPS Coordinates
2	Legal Status of Land
3	Type of Plantation
4	Plantation Area (in Ha)
5	Choice of Tree Species
6	Qualitative Assessment
6.1	Suitability of area
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)
6.3.1	Survival Percentage
6.3.2	Average height/Girth
6.4	Tending Operations (Singling/pruning & other operations)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments
6.6	Increase in availability of Biomass for local community. Status?
6.7	Improvement in quality of life of people due to risen plantation
7	Protection works like fencing etc.,
7.1	Protection measures against Biotic Pressure (Cattles etc.)

8	Health of raised plantation		Good
9	Maintenance of Records		
9.1	Updating of plantation journal		Updated up to 2018
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		NO
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?		NO
10.2	Source of funds		CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?		Good, maintain watch guard for protection
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues		Good
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?		Discontinued due to maintenance period is over
13	Overall Grading on the basis of survival %		Very good
14	Any other information about the plantation		Good growth

EVALUATION FORMAT OF SILERU RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : NARSIPATNAM

NAME OF THE RANGE : SILERU

S.No.	Name of the Compartment:	1074	1080
	Name of the Beat:	DUPPULAWADA	A DHARAKONDA
1	GPS Coordinates	Komarapalli/N 18.03 E 82.117	China Gangavaram/N 18.015 E 82.15
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Monoculture crop	Mixed crop plantation
4	Plantation Area (in Ha)	10Ha	10Ha
5	Choice of Tree Species	<i>Tectona grandis</i>	<i>Acrocarpus, Pterocarpus marsupium</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly suitable	Moderately suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 2x2m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	90%	50%
6.3.2	Average height/Girth	1 m/17.88 cm	1 m/17.88 cm
6.4	Tending Operations (Singling/pruning & other operations)	Weeding	NO
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	CCT	NO
6.6	Increase in availability of Biomass for local community. Status?	Fodder	Fuel wood, Fodder
6.7	Improvement in quality of life of people due to risen plantation	They are getting some income	They are getting some income
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	NO	NO

8	Health of raised plantation		Good	Moderate
9	Maintenance of Records			
9.1	Updating of plantation journal		Updated up to 2018	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		Sub-DFO, Good plantation	Sub-DFO, Good plantation
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?		NO	NO
10.2	Source of funds		CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?		Good, maintain watch guard for protection	Good, maintain watch guard for protection
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues		Good	Good
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?		Continued	Discontinued due to funding period is over
13	Overall Grading on the basis of survival %		Excellent	Average
14	Any other information about the plantation		Good	NTSH plantation has less growth

EVALUATION FORMAT OF SILERU RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

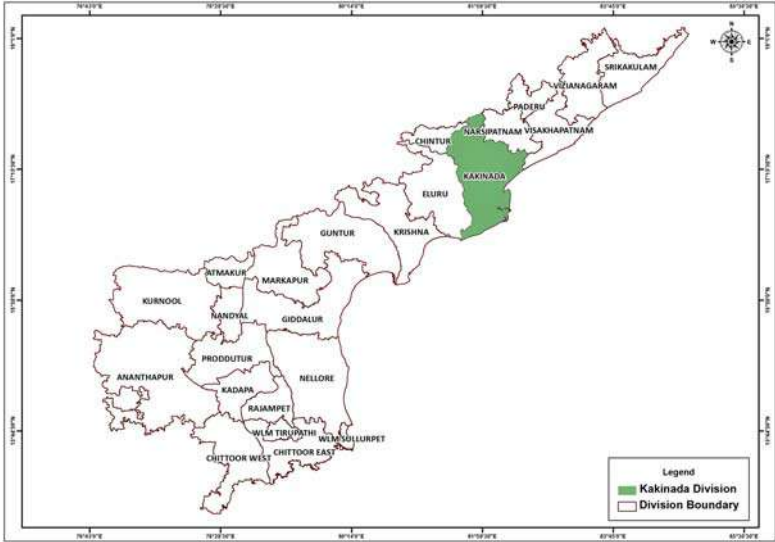
NAME OF THE DIVISION : NARSIPATNAM

NAME OF THE RANGE : SILERU

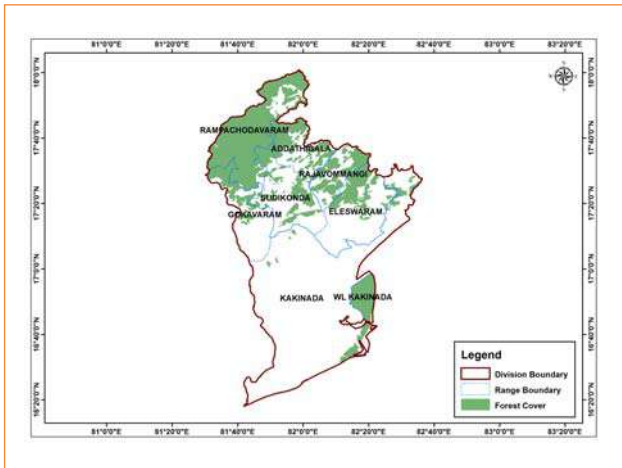
S.No.	Name of the Compartment:	1074	1080
	Name of the Beat:	DUPPULAWADA	A DHARAKONDA
1	GPS Coordinates	Komarapalli/N 18.03 E 82.117	China Gangavaram/N 18.015 E 82.15
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Monoculture crop	Mixed crop plantation
4	Plantation Area (in Ha)	10Ha	10Ha
5	Choice of Tree Species	<i>Tectona grandis</i>	<i>Acrocarpus, Pterocarpus marsupium</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly suitable	Moderately suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 2x2m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	90%	50%
6.3.2	Average height/Girth	1 m/17.88 cm	1 m/17.88 cm
6.4	Tending Operations (Singling/pruning & other operations)	Weeding	NO
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	CCT	NO
6.6	Increase in availability of Biomass for local community. Status?	Fodder	Fuel wood, Fodder
6.7	Improvement in quality of life of people due to risen plantation	They are getting some income	They are getting some income
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	NO	NO

8	Health of raised plantation		Good	Moderate
9	Maintenance of Records			
9.1	Updating of plantation journal		Updated up to 2018	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		Sub-DFO, Good plantation	Sub-DFO, Good plantation
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?		NO	NO
10.2	Source of funds		CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?		Good, maintain watch guard for protection	Good, maintain watch guard for protection
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues		Good	Good
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?		Continued	Discontinued due to funding period is over
13	Overall Grading on the basis of survival %		Excellent	Average
14	Any other information about the plantation		Good	NTSH plantation has less growth

MONITORING REPORT KAKINADA FOREST DIVISION

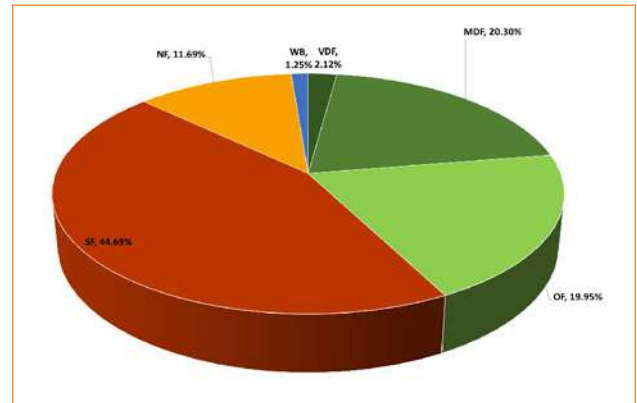


KAKINADA FOREST DIVISION



Kakinada is a town as well as a district headquarters of East Godavari district of Andhra Pradesh state. Area of the East Godavari is 12,805 km² and its population is 5.1 million (2011 census). The major rivers are the Godavari, Pampa and Yeleru. Topographical characteristics of the district are Delta, upland and Agency or hill tracts. Kakinada Forest Division comprises the entire district of East Godavari and lies in the north-eastern part of Andhra Pradesh (latitudes 16° 18' 04" and 18° 00' 54" N and longitudes 81° 30' 08" and 82° 36' 17" E). The geographical area of the Division is 10807 Km².

Figure 1: Kakinada Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

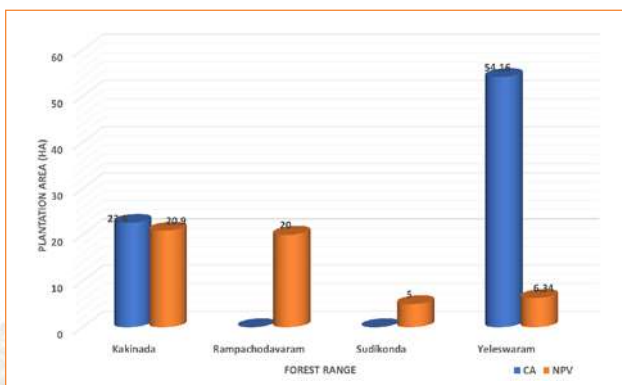
Kakinada Division comprise eight forest ranges namely Addatheegala, Kakinada, Rajavomangi, Rampachodavaram, Sudikonda, Yelleswaram, Gokavaram & WL Kakinada. For the year of 2015-16, Kakinada Division has taken up plantation work for an area of 149ha covering four out of eight ranges namely Kakinada (43.5ha), Rampachodavaram (28ha), Sudikonda (17 ha) & Yeleshwaram (60.5ha), under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling method, the total area was partially enumerated in 10 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Kakinada	Monoculture	<i>Tectona grandis</i>	22.6	20.9	High	82	82	5.5	4.523
Rampachodavaram	Monoculture	<i>Tectona grandis</i>	-	28	High	-	80	4	6.024
Sudikonda	Monoculture	<i>Tectona grandis</i>	-	17	High	-	85	6	5.59
Yeleswaram	Monoculture	<i>Tectona grandis</i>	54.16	6.34	High	79	81	5	5.124

Plantation area

In the division, maximum was planted in Rampachodavaram forest range and the minimum was planted in Sudikonda forest range.

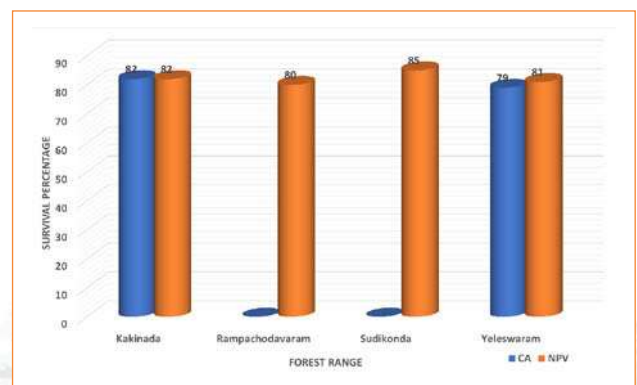
Figure 2: Plantation area in Kakinada Forest Division



Survival percentage (%)

The survival percentage is maximum in Sudikonda which is having 85% and minimum in Kakinada, Rampachodavaram and Yeleswaram which are having 82% and 80% respectively.

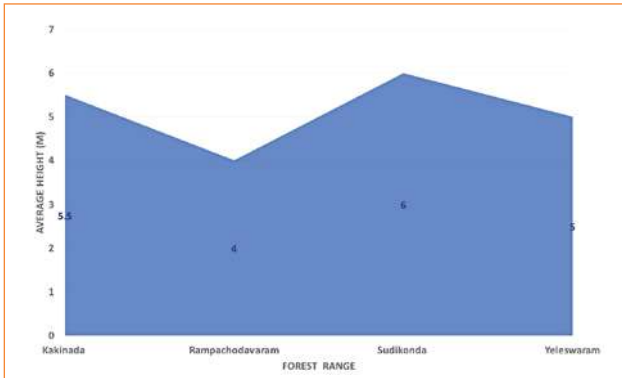
Figure 3: Survival percentage of the plantations



Average height

In the division, most of the plantations were healthy and maximum growth was observed in Sudikondawith an average height of 6 m followed by Kakinada and Yeleswaram with an average height of 5.5m and 5 m respectively and minimum growth was observed in Rampachodavaram range with an average height of 4 m.

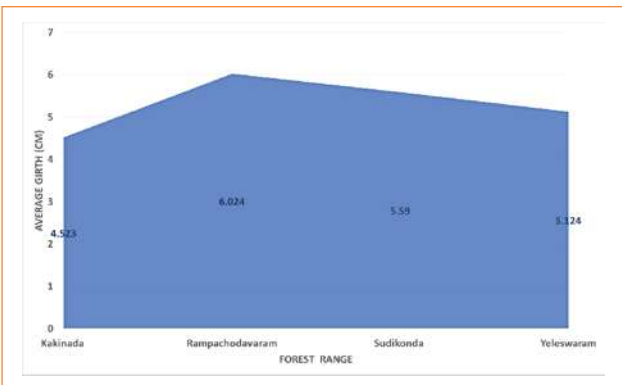
Figure 4: Average height of the plantations



Average girth

In the division, maximum girth was observed in Rampachodavaram with an average of 6.024 cm and the minimum was observed in Kakinada range with an average height of 4.523cm.

Figure 5: Average girth of the plantations (cm)



Observations

In the division, in Mallavaram East of Sudikonda Forest range plantations were observed the best plantations.

- Survival percentage was rated overall excellent (average 82%) ranging from 80% - 85% in all the CAMPA plantations.

- Based on the site quality conditions, Suitable monoculture plant species were preferred to be raised in all the plantations. The species were chosen as *Tectona grandis* which is suitable for tropical semi-evergreen vegetations.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with spacing 2mx2m resulted in monoculture crop plantations. Cultural operations (cleaning, weeding, and climber cutting) and SMC Operations (contour trenching) were taken up at the initial stages.
- The average height of important tree species was ranging from 4 to 6 m. Tending operations (pruning) were carried out. Departmental protection was provided to protect plantations from biotic pressure.
- There are moderate temperatures and good rainfall and climatic conditions had an impact on the growth of the plantations, hence the good survival percentage was observed. It appears that the best was established with favourable climatic conditions along with proper protection measures.
- Local communities got benefited by gathering fuelwood, fodder and also through other intangible benefits like groundwater level increase in their wells due to the plantation activities carried out.
- No major constrains were found for growing the plantation. Plantation journals and inspection notes were maintained in most of the sites.
- CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during the initial period of the plantation works and most of the plantations received funds timely without any delay.
- Plantation journals were maintained in certain cases, Updation is recommended for the better maintenance of plantations.

EVALUATION FORMAT OF KAKINADA DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : RAJAHMUNDRY						
NAME OF THE DIVISION : KAKINADA						
1	Name of the Range	YELESWARAM	RAMPACHODAVARAM	SUDIKONDA		
1	GPS Coordinates	N 17.724 E 81. 997	N 17.31' E 82.43'	N 17.37' E 82.45'		
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest		
3	Type of Plantation	Monoculture Crop	Mono Culture Crop	Mono Culture Crop		
4	Plantation Area (in Ha)	60.5 Ha	28 Ha	17 Ha		
5	Choice of Tree Species	<i>Tectona grandis</i>	<i>Tectona grandis</i>	<i>Tectona grandis</i>		
6	Qualitative Assessment					
6.1	Suitability of area	Suitable	Suitable	Suitable		
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 2x2m ² spaced planting was done	45 cm ³ , Pitting, 2x2m ² spaced planting was done	45 cm ³ , Pitting, 2x2m ² spaced planting was done		
6.3.1	Survival Percentage	80%	80%	85%		
6.3.2	Average height / Girth	5 m / 5.12 cm	4 m / 6.02 cm	6 m / 5.59 cm		
6.4	(Singling/pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)		
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work is done	Soil work is done	Inter ploughing		
6.6	Increase in availability of Biomass for the local community. Status?	Fuelwood	Fuelwood	Fuelwood		
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on people life.	Living standards of people got improved.	Living standards of people got improved.		
7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Department protection	Department protection	Department protection		
8	The health of raised plantation	Good	Good	Good		

9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Yes, DFO	Yes, DFO	Yes, DFO	Yes, DFO
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No constraints	No constraints	No constraints	No constraints
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	Yes	Yes	Yes	Yes
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	YES, Funds required for Maintenance work	YES, Funds required for Maintenance work	YES, Funds required for Maintenance work	YES, Funds required for Maintenance work
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated	Journal should be updated	Journal should be updated	Journal should be updated
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued	Continued	Continued	Continued
13	Overall Grading based on survival %	Excellent (>79%)	Excellent (>79%)	Excellent (>79%)	Excellent (>79%)
14	Any other information about the plantation	Good maintenance	Good maintenance	Good maintenance	Good maintenance

EVALUATION FORMAT OF RAMPACHOWDAVARAM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : KAKINADA	
NAME OF THE RANGE: RAMPACHOWDAVARAM	
S.No.	Name of the Beat
1	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432
2	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432
3	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.4317
4	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.4317
5	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.4317
6	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.4317
6.1	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432
6.2	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432
6.3.1	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432
6.3.2	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432
6.4	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432
6.5	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432
6.6	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432
6.7	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432
7	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432
7.1	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432
8	DEVARAPALLI Bokkalaboru/ N 17.319 E 82.432

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Yes, DFO	Yes, DFO	Yes, DFO
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	No constraints	No constraints	No constraints
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	YES	YES	YES
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	YES	YES	YES
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated	Journal should be updated	Journal should be updated
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued	Continued	Continued
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good maintenance	Good maintenance	Good maintenance

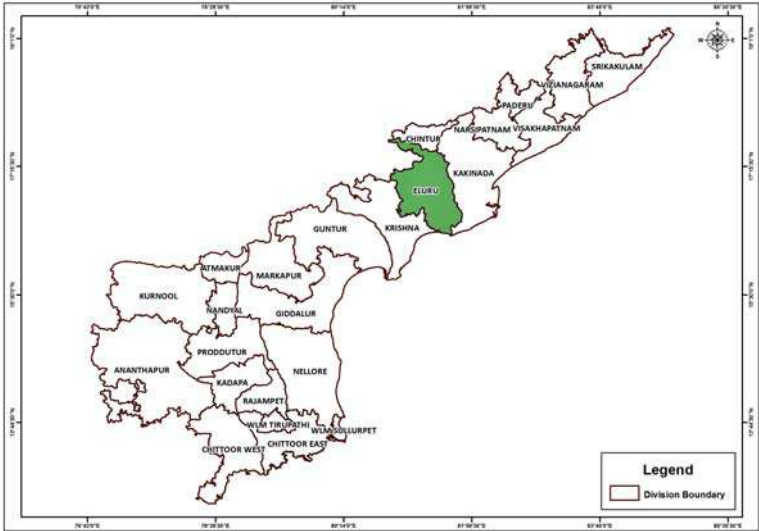
EVALUATION FORMAT OF SUDIKONDA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : KAKINADA		Mallavaram East	Koru milli
NAME OF THE RANGE : SUDIKONDA			
S.No.	Name of the Beat		
1	GPS Coordinates	Kolujolla VSS/N 17.277 E 82.075	Korumilli/ N 17.464 E 82.854
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Monoculture crop	Monoculture Crop
4	Plantation Area (in Ha)	5 Ha	5 Ha
5	Choice of Tree Species	<i>Tectona grandis</i>	<i>Tectona grandis</i>
6	Qualitative Assessment		
6.1	Suitability of area	Suitable	Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 2x2m ² spaced planting was done	45 cm ³ , Pitting, 2x2m ² spaced planting was done
6.3.1	Survival Percentage	90%	85%
6.3.2	Average height/Girth	6 m/5.59 cm	6 m/5.59 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Pruning)	Tending operations are carried out (Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work done	Soil work done
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood	Fuel wood
6.7	Improvement in quality of life of people due to risen plantation	Living standards of people got improved.	Living standards of people got improved.
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Department protection	Department protection
8	Health of raised plantation	Good	Good

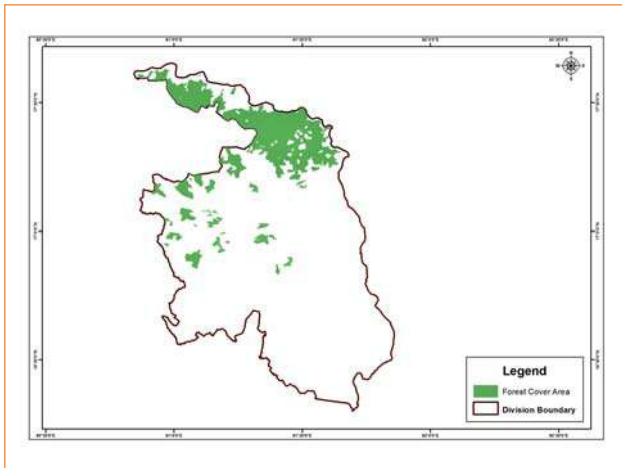
9	Maintenance of Records		
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Yes, DFO	Yes, DFO
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?	No constraints	No constraints
10.2	Source of funds	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?	YES	YES
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be updated	Journal should be updated
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued	Continued
13	Overall Grading based on survival %	Excellent	Excellent
14	Any other information about the plantation	Soil very good for any trees	Good maintenance

MONITORING REPORT

ELURU FOREST DIVISION

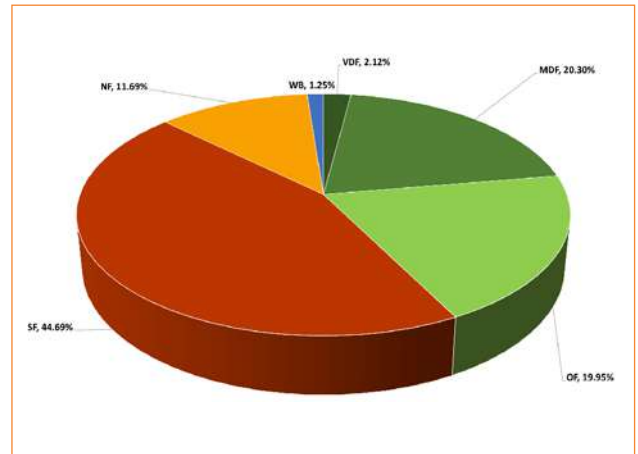


ELURU FOREST DIVISION



Eluru is a town as well as a district headquarters of West Godavari district of Andhra Pradesh state. Area of the District is 7742 Km² and its population is 3.9 million (2011 census). The river Godavari separates East and West Godavari Districts. Eluru Forest Division lies in the north-eastern part of Andhra Pradesh (latitudes 16° 18' 05" and 17° 28' 52" N and longitudes 80° 52' 04" and 81° 51' 31" E).

Figure 1: Eluru Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

Eluru Division comprises seven forest ranges namely Eluru, Jangareddy Gudem, Kannapuram, Kokunur, Jeelugumilli, Polavaram and TF Eluru. For the year of 2015-16, Eluru Division has taken up plantation work for an area of 225ha covering four out of seven ranges namely Eluru (70 ha), Jangareddygudem (70 ha) Kukunur (25ha) and Kannapuram (60 ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling method, the total area was partially enumerated in 16 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Eluru	Mixed	NTHS	-	70	High	-	74.2	1.6	14.792
Jangareddy-gudem	Mono-culture	<i>Bambusa arundinacea</i>	-	70	Poor	-	65.6	1.83	10.553
Kannapuram	Mono-culture	<i>Bambusa arundinacea</i> <i>Tectona grandis</i>	20	40	Moderate	70	66.6	2	6.19
Kukunur	Mixed	<i>Bambusa arundinacea</i> <i>Tectona grandis</i>	25	-	Moderate	65	-	2	12.621

Plantation area

In the division, maximum was planted in Eluru and Jangareddygudem forest ranges and the minimum was planted in Kukunur forest range.

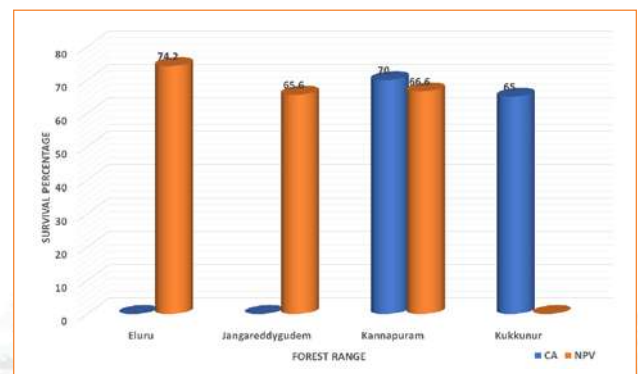
Figure 2: Plantation area of the Eluru forest division



Survival percentage

The survival percentage is maximum in Eluru which is having 74.5% and minimum in Kukunur range which is having 65%.

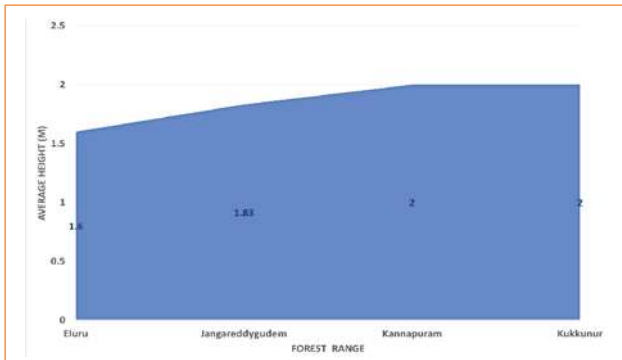
Figure 3: Survival percentage of the plantations



Average height

In the division, most of the plantations were healthy and maximum growth was observed in Kannapuram and Kukkunur ranges with an average height of 2m at both the ranges and minimum growth was observed in Eluru range which is having an average height of 1.6m.

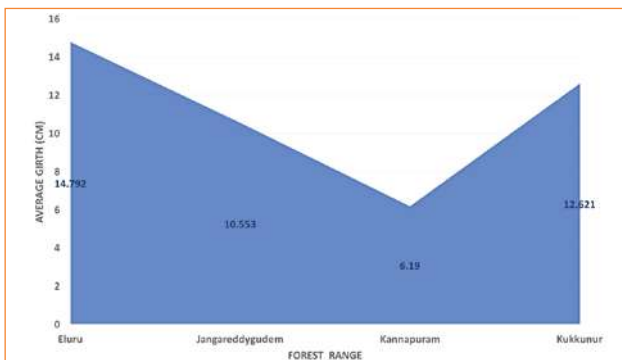
Figure 4: Average height of the Plantations



Average girth

In the division, maximum girth was observed in Eluru range with an average of 14.79cm and minimum was observed in Kannapuram range with an average of 6.19cm.

Figure 5: Average girth of the Plantations

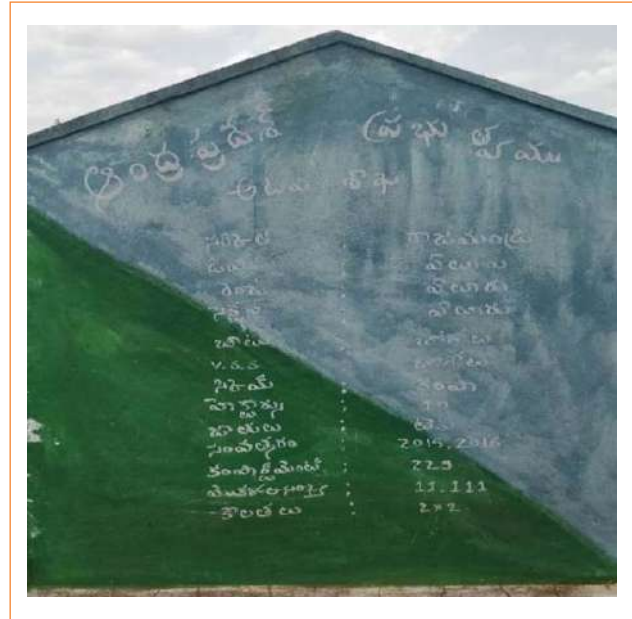


Observations

In the division, in Ramasingavaram compartment No.200 of Eluru Forest range plantations were observed to be the best plantations.

- Survival percentage was rated overall good with an average of 68.27% which is ranging from 65% - 74.2% in most of the plantations.

- Site quality was preferred to select the multiple plant species and most of the raised plantations were found suitable to the soil conditions. The species planted were *Bambusa arundinacea* and *Tectona grandis* which are suitable for tropical semi-evergreen vegetations.
- Average height of important tree species was 1.85 m which is ranging from 1.6 to 2 m. Tending operations such as pruning were carried out in most of the plantations and soil conservation works were also taken up.
- There is moderate temperatures and good rainfall and climatic conditions had impact on the growth of the plantations, hence the good survival percentage was observed. It appears that the best plantations were established with favourable climatic conditions along with proper protection measures.
- Local communities were benefited by gathering fuelwood, fodder and other intangible benefits like water level increase in their wells due to the plantation activities
- Plantation journals were maintained in most of the sites and inspection notes were observed only at a few plantation sites.
- No major constrains were found while growing the plantation. CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during initial period of the plantation works and most of the plantations received funds timely without any delay.
- Due to the rising plantations, life quality of the people got improved for instance, people living in proximity of forest areas getting increased income.



Plantation board for the year of 2015-16 in Eluru division



Eucalyptus plantations in Eluru division



Tectona grandis plantations in Eluru division

EVALUATION FORMAT OF ELURU DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : RAJAHMUNDRY						
NAME OF THE DIVISION : ELURU						
S.No.	Name of the Range	ELURU	JANGAREDDY GUEDEM	KANNAPURAM	KUKKUNUR	
1	GPS Coordinates	N 16.70' E 81.4'	N 17.15' E 81.11'	N 17.19' E 81.49'	N 17.49' E 81.82	
2	Legal Status of Land	Reserved Forest	Reserved Forest	Reserved Forest	Reserved Forest	
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	
4	Plantation Area (ha)	70 Ha	70 Ha	60 HA	25 HA	
5	Choice of Tree Species	Non-Teak	<i>Bambusa arundinacea</i>	<i>Bambusa arundinacea</i> , <i>Tectona grandis</i>	<i>Bambusa arundinacea</i> , <i>Tectona grandis</i>	
6	Qualitative Assessment					
6.1	Suitability of area	Suitable	Suitable	Suitable	Suitable	
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² , 5x5m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² 5x5m ² spaced planting was done	45 cm ³ , Pitting, 3x2m ² spaced planting was done	
6.3.1	Survival Percentage	74.2 %	65.6 %	68.3 %	65 %	
6.3.2	Average height / Girth	1.6 m / 14.79 cm	1.83 m / 10.55 cm	2 m / 6.19 cm	2 m / 12.62 cm	
6.4	Tending Operations (Singling/ pruning & other operations)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	Tending operations carried out. (Singling and Pruning)	
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work	Soil Work	Soil Work	Soil Work	
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood and Small timber	Fuel wood	Fodder and Small timber	Fuel wood and Fodder	
6.7	Improvement in quality of life of people due to risen plantation	Living standards of people got improved.	Living standards of people got improved.	Living standards of people got improved.	Living standards of people got improved.	
7	Protection works like fencing etc..,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Department Protection	Watch and guard	Department Protection	Department Protection	

	Health of raised plantation	Excellent	Good	Very Good	Good
8					
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No observation	No observation	No observation	No observation
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No Constraints	No Constraints	No Constraints	No Constraints
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth	Smooth	Smooth	Smooth
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	Yes, Funds for Maintenance	Yes, Funds for Maintenance	Yes, Funds for Maintenance	Yes, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	No	Journal should be update	NO	NO
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued	Continued	Continued	Continued
13	Overall Grading on the basis of survival %	Excellent (>79%)	Good (60-69%)	Very Good (70-79%)	Good (60-69%)
14	Any other information about the plantation	Good maintenance	Good maintenance	Good maintenance	Good maintenance

EVALUATION FORMAT OF ELURU RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : ELURU							
NAME OF THE RANGE : ELURU							
S.No.	Name of the Compartment	229	200	216			
	Name of the Beat	Bhogole	Ramasingavaram	Venkatramana Gudem			
1	GPS Coordinates	N 16.54 E 82.02	N 16.53 E 81.4	N 16.89 E 081.45			
2	Legal Status of Land	Reserved Forest	Reserved Forest	Reserved Forest			
3	Type of Plantation	Mixed crop plantation	Mono Culture Crop	Mixed crop plantation			
4	Plantation Area (ha)	10ha	10ha	10ha			
5	Choice of Tree Species	Non-Teak	<i>Tectona grandis</i>	Non-Teak			
6	Qualitative Assessment						
6.1	Suitability of area	Suitable	Suitable	Suitable			
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 2x2m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done			
6.3.1	Survival Percentage	65%	75%	73%			
6.3.2	Average height/Girth	1 m/14.79 cm	1 m/14.79 cm	2.5 m/14.79 cm			
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out (Pruning)	Tending operations carried out. (Pruning)	Tending operations carried out. (Pruning)			
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work	Soil work	Soil work			
6.6	Increase in availability of Biomass for local community. Status?	Fuel Wood	Small Timber	Fuel Wood & Fodder			
6.7	Improvement in quality of life of people due to risen plantation	Living standards of people got improved.	Living standards of people got improved.	Living standards of people got improved.			
7	Protection works like fencing etc..						
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Department Protection	Department Protection	Department Protection			
8	Health of raised plantation	Good	Very Good	Very Good			

9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No observation	No observation	No observation	No observation
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No Constraints	No Constraints	No Constraints	No Constraints
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	Yes, Funds for Maintenance	Yes, Funds for Maintenance	Yes, Funds for Maintenance	Yes, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	No	No	No	No
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued	Continued	Continued	Continued
13	Overall Grading on the basis of survival %	Good	Very Good	Very Good	Very Good
14	Any other information about the plantation	Good maintenance	Good maintenance	Good maintenance	Good maintenance

EVALUATION FORMAT OF ELURU RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : ELURU

NAME OF THE RANGE : ELURU

S.No.	Name of the Compartment	229	200
	Name of the Beat	BHOGOLE	RAMASINGAWARAM
1	GPS Coordinates	N 16.54 N 81.2	N 16.52 E 81.4
2	Legal Status of Land	Reserved Forest	Reserved Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (ha)	10ha	10ha
5	Choice of Tree Species	Non-Teak	Non-Teak
6	Qualitative Assessment		
6.1	Suitability of area	Suitable	Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	78%	80%
6.3.2	Average height/Girth	1.5 m/14.79 cm	2 m/14.79 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Pruning)	Tending operations carried out. (Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work	Soil work
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood and Small timber	Fuel wood and Small timber
6.7	Improvement in quality of life of people due to risen plantation	Living standards of people got improved.	Living standards of people got improved.
7	Protection works like fencing etc..		
	Protection measures against Biotic Pressure (Cattles etc.)	Department Protection	Department Protection
8	Health of raised plantation	Very Good	Excellent

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No observations	No observations	No observations
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	No Constraints	No Constraints	No Constraints
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	Yes, Funds for Maintenance	Yes, Funds for Maintenance	Yes, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	No	No	No
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued	Continued	Continued
13	Overall Grading on the basis of survival %	Very Good	Very Good	Excellent
14	Any other information about the plantation	Good maintenance	Good maintenance	Good maintenance

EVALUATION FORMAT OF JANGAREDDYGUEM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : ELURU

NAME OF THE RANGE : JANGAREDDY GUEM

S.No.	Name of the Compartment	161	161	155
	Name of the Beat	JEEUGUMILLY	JEEUGUMILLY	MULAGAMPALLI
1	GPS Coordinates	Chandramma colony N 17.21 E 81.10	Chandramma N 17.21 E 81.10	D.Narayanapuram N 17.13 E 81.12
2	Legal Status of Land	Reserved Forest	Reserved Forest	Reserved Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (ha)	10 Ha	20 Ha	10 Ha
5	Choice of Tree Species	<i>Bambusa arundinacea</i>	Non-Teak	Non-Teak
6	Qualitative Assessment			
6.1	Suitability of area	Suitable	Suitable	Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 5x5m ² spaced planting was done	45 cm ³ , Pitting, 5x5m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	80 %	50 %	67 %
6.3.2	Average height/Girth	3 m/10.55 cm	1 m/10.55 cm	1.5 m/10.55 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Pruning)	Tending operations carried out. (Pruning)	Tending operations carried out. (Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work	Soil Work	Soil Work
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood	Fuel wood	Fuel wood
6.7	Improvement in quality of life of people due to risen plantation	Living standards of people got improved.	Living standards of people got improved.	Living standards of people got improved.
7	Protection works like fencing etc.,			
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Department Protection	Department Protection	Watch and guard
8	Health of raised plantation	Good	Poor	Good

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Updated up to 2017 recommended for casualty replacement by authorities	Updated up to 2017 recommended for casualty replacement by authorities	Updated up to 2017 recommended for casualty replacement by authorities
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	No Constraints	No Constraints	No Constraints
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Yes, smooth funds flow	Yes, smooth funds flow	Yes, smooth funds flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	Yes, Funds for Maintenance	Yes, Funds for Maintenance	Yes, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, local people want fruit varieties	Yes, local people want fruit varieties	Yes, local people want fruit varieties
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be update	Journal should be update	No
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued	Continued	Continued
13	Overall Grading on the basis of survival %	Excellent	Poor	Good
14	Any other information about the plantation	Lesser rain fall	Lesser rain fall	Lesser rain fall

EVALUATION FORMAT OF KANNAPURAM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : ELURU							
NAME OF THE RANGE : KANNAPURAM							
S.No.	Name of the Compartment	79	106	106	106	106	106
	Name of the Beat	PR GUEDEM	KARKAPADU	KARKAPADU	KARKAPADU	KARKAPADU	KARKAPADU
1	GPS Coordinates	N 17.21' E 81.42'	N 17.18' E 81.49	N 17.19' E 81.51'	N 17.19' E 81.51'	N 17.19' E 81.51'	N 17.19' E 81.51'
2	Legal Status of Land	Reserved Forest	Reserved Forest	Reserved Forest	Reserved Forest	Reserved Forest	Reserved Forest
3	Type of Plantation	Mono Culture Crop	Mixed crop plantation Crop	Mixed crop plantation Crop	Mixed crop plantation Crop	Mixed crop plantation Crop	Mixed crop plantation Crop
4	Plantation Area (ha)	10 Ha	20 Ha	20 Ha	20 Ha	20 Ha	20 Ha
5	Choice of Tree Species	<i>Tectona grandis</i>	NTSHSW	NTSHSW	NTSHSW	NTSHSW	<i>Bambusa arundinacea</i>
6	Qualitative Assessment						
6.1	Suitability of areas selected	Suitable	Suitable	Suitable	Suitable	Suitable	Suitable
6.2	Suitability of area	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 5x5m ² spaced planting was done
6.3	Survival Percentage	65%	70%	70%	70%	70%	70%
6.4	Average height/Girth	2 m/6.19 cm	2 m/6.19 cm	2 m/6.19 cm	2 m/6.19 cm	2 m/6.19 cm	2 m/6.19 cm
6.5	Tending Operations (Singling/pruning & other operations)	Tending operations carried out. (Pruning)	Tending operations carried out. (Pruning)	Tending operations carried out. (Pruning)	Tending operations carried out. (Pruning)	Tending operations carried out. (Pruning)	Tending operations carried out. (Pruning)
6.6	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work	Soil Work	Soil Work	Soil Work	Soil Work	Soil Work
6.7	Increase in availability of Biomass for local community. Status?	Small Timber	Fuel Wood and Small Timber	Fuel Wood and Small Timber	Fuel Wood and Small Timber	Fuel Wood and Small Timber	Fodder and Small Timber
7	Protection works like fencing etc.,						
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Department protection	Department protection	Department protection	Department protection	Department protection	Department protection
8	Health of raised plantation	Good	Very Good	Very Good	Very Good	Very Good	Very good

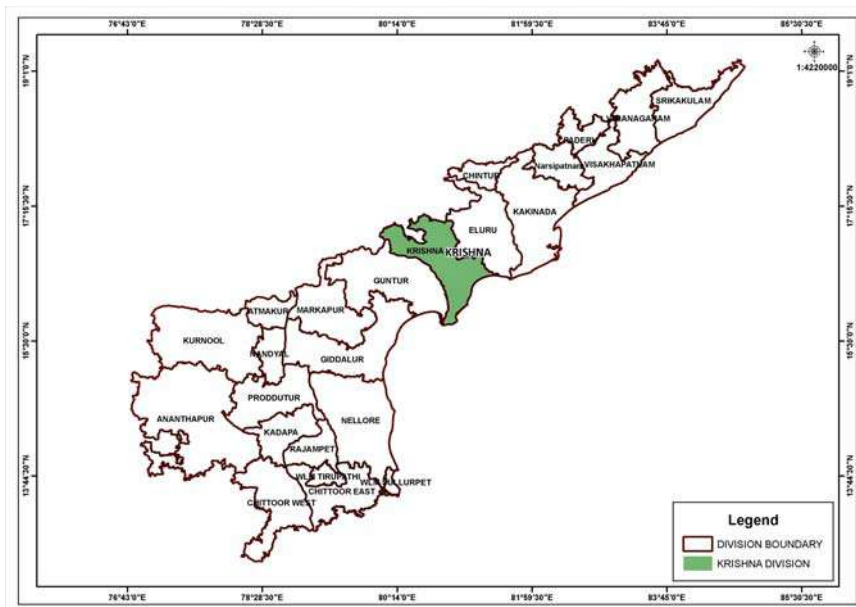
9	Maintenance of Records			
9.1	Updating of plantation journal	Updated Up to 2017	Updated Up to 2017	Updated Up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	recommended for casualty replacement by authorities	recommended for casualty replacement by authorities	recommended for casualty replacement by authorities
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	No Constraints	No Constraints	No Constraints
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth Funds flow	Smooth Funds flow	Smooth Funds flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	Yes, funds required for the maintenance	Yes, funds required for the maintenance	Yes, funds required for the maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, local fruit varieties	Yes, local fruit varieties	Yes, local fruit varieties
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Maintained well.	Journal should be Maintained well.	Journal should be Maintained well.
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Continued, to enhance the forest cover	Continued, to enhance the forest cover	Continued, to enhance the forest cover
13	Overall Grading on the basis of survival %	Good	Very Good	Very Good
14	Any other information about the plantation	Lesser rainfall	Lesser rain fall	Lesser rain fall

EVALUATION FORMAT OF KUKKUNUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

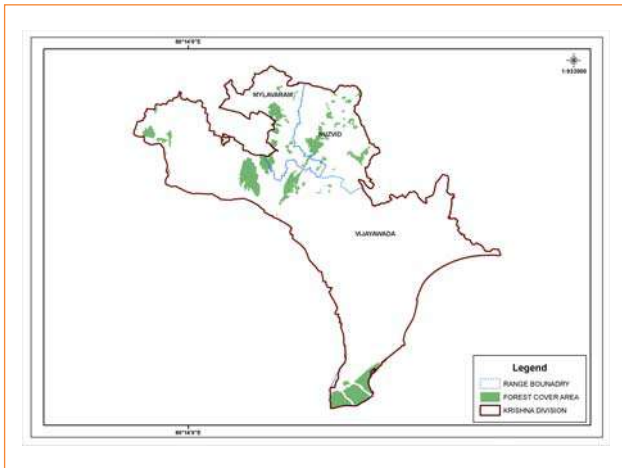
NAME OF THE DIVISION : ELURU	
NAME OF THE RANGE : KUKKUNUR	
S.No.	Name of the Compartment
	451
	Name of the Range
	Kukkunur
1	Site/Location/GPS
	N 17.49' E81.82
2	Legal Status of Land
	Reserved Forest
3	Type of Plantation
	Mixed Crop plantation
4	Plantation Area (ha)
	25HA
5	Species Planted and Planting techniques
	Gap Plantation
6	Qualitative Assessment
6.1	Suitability of area
	Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)
	45 cm ³ , Pitting, 3x2m ² spaced planting was done
6.3.1	Survival Percentage
	65%
6.3.2	Average height/Girth
	2 m/12.62 cm
6.4	Tending Operations (Singling/pruning & other operations)
	Tending operations carried out. (Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments
	Soil work
6.6	Increase in availability of Biomass for local community. Status?
	Fuel Wood and Fodder
6.7	Improvement in quality of life of people due to risen plantation
	No direct impact on the people's life
7	Protection works like fencing etc..
7.1	Protection measures against Biotic Pressure (Cattles etc.)
	Department protection
8	Health of raised plantation
	Good

9	Maintenance of Records		
9.1	Updating of plantation journal		Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		Casualty replacement
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?		No constraints
10.2	Source of funds		CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smooth funds Flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?		Yes, Funds required for the maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes, people felt local fruit varieties to be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues		Journal should be Maintained well.
12.2	Whether the project should be continued/modified/discontinued (reasons)?		Continued
13	Overall Grading on the basis of survival %		Good
14	Any other information about the plantation		Lesser rainfall

MONITORING REPORT KRISHNA FOREST DIVISION

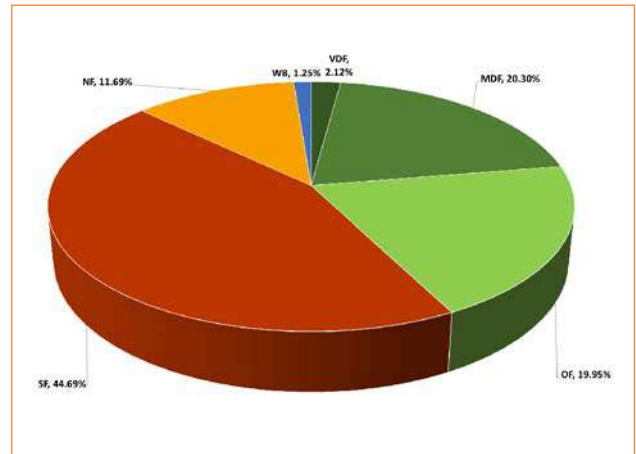


KRISHNA FOREST DIVISION



Krishna is part of the coastal region of Andhra Pradesh state. It's bound by West Godavari on the East, Bay of Bengal on the South, Guntur district in the west and a portion of it borders with the state of Telangana. Krishna Forest Division comprises the entire Krishna district that lies in the Northeastern part of Andhra Pradesh (latitudes 15°42' 19" and 17°9' 10" N and longitudes 80°00'07" and 81°33' 13"E). The geographical area of the division is 8,727 km².

Figure 1: Giddalur Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

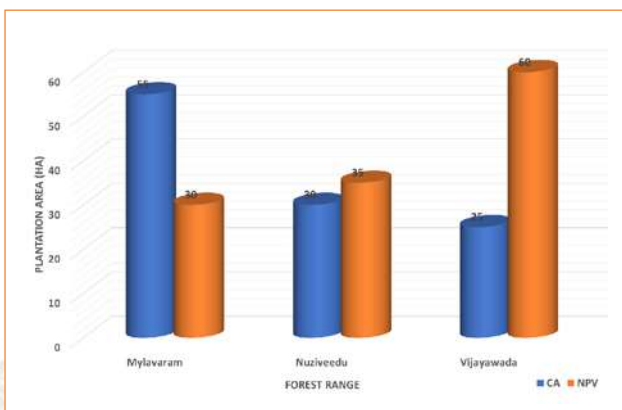
Krishna Division comprises four forest ranges namely Mylavaram, Vijayawada, Nuziveedu and Nagayilanka. For the year of 2015-16, Krishna Division has taken up plantation work over an area of 235ha covering three out of four ranges namely Mylavaram (85ha), Vijayawada (85ha), Nuziveedu (65ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling method, the total area was partially enumerated in 20 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Rudravaram	Mixed	<i>Chloroxylon swietenia</i>	-	50	High	-	87.75	5.12	24.09
Mylavaram	Mixed	<i>Tectona grandis</i>	55	30	Average	66	70	1	4.824
Nuziveedu	Mixed	NTHS	30	35	High	77	73.24	2.3	4.574
Vijayawada	Mixed	NTHS	25	60	Average	71	69	2	5.314

Plantation area

In the division, maximum was planted in Mylavaram and Vijayawada forest ranges and minimum was planted in Nuziveedu forest range.

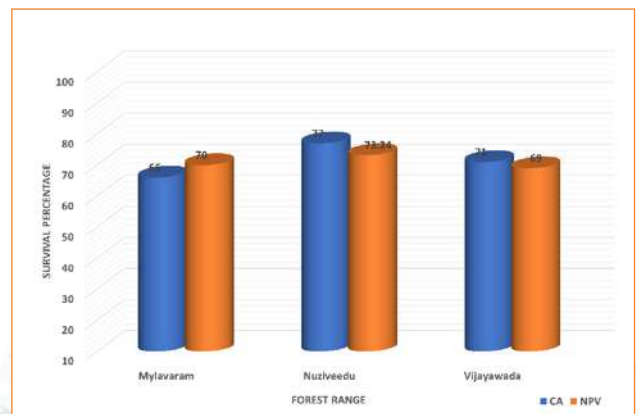
Figure 2: Plantation area of the Krishna forest Division



Survival percentage

The survival percentage is maximum in Nuziveedu range which is having 75.12% and minimum in Mylavaram range which is having 68%.

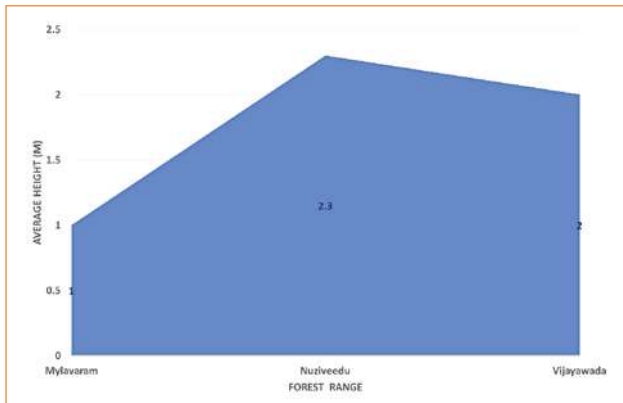
Figure 3: Survival percentage of plantations



Average height

In the division, most of the plantations were healthy and maximum growth was observed in Nuziveedu range with an average height of 2.3 m and minimum growth was observed in Mylavaram range with an average height of 1 m.

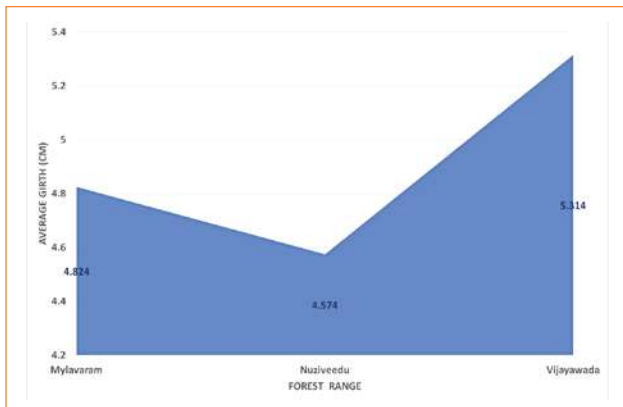
Figure 4: Average height of the Plantations



Average girth

In the division, maximum girth was observed in Vijayawada range with an average height of 5.314cm and the minimum was observed in Nuziveedurange with an average height of 4.574cm.

Figure 5: Average girth of the Plantations



Observations

In the division, in Gandari compartments, No.1 & 7 of Nuziveedu Forest Range plantations were observed to be the best plantations.

- Survival percentage was rated overall excellent with an average 71.04 % which is ranging from 68% to 75.12 % in all the CAMPA plantations.
- Site quality was the preferred criteria and multiple suitable plant species were selected for each Range. Teak (*Tectona grandis*) species were majorly planted which is suitable for tropical semi-evergreen vegetations.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with spacing of 3m x3m & 5m x5m resulted into mixed crop plantations. Cultural

operations (cleaning, weeding, climber cutting) and water harvesting structures like check dams & contour trenching were taken up in the initial stages.

- Average height of tree species was 1.76m which is ranging from 1 to 2.3 m. Tending operations (Pruning) were carried out. Live fencing, kaccha fencing and departmental protections were created to protect plantations from biotic pressure (man and animals).
- There is moderate temperatures and good rainfall and climatic conditions had impact on the growth of the plantations, hence the good survival percentage was observed. It appears that the best plantations were established with favourable climatic conditions along with proper protection measures.
- Local communities were benefited by gathering fuel wood, timber and other intangible benefits like water level increase in their wells due to the plantation activities
- Plantation journals were maintained in most of the sites but inspection notes by higher authorities were found only at some place.
- No major constrains were found for growing the plantation. CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during initial period of the plantation works and most of the plantations received funds timely without any delay.



Mixed plantations in Vijayawada range



EVALUATION FORMAT OF KRISHNA DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : RAJAHMUNDRY

NAME OF THE DIVISION : KRISHNA

S.No.	NAME OF THE RANGE	MYLAVARAM	NUZIVEEDU	VIJAYAWADA
1	Site/Location/GPS	N 16.45' E 80.44'	N 16.57' E 80.56'	N 16.38' E 80.50'
2	Legal Status of Land	Reserved Forest	Reserved Forest	Reserve Forest
3	Type of Plantation	Mixed Crop Plantation	Mixed Crop Plantation	Mixed Crop Plantation
4	Plantation Area (ha)	85 Ha	65 Ha	85Ha
5	Species Planted and Planting techniques	<i>Tectona grandis</i>	Non-Teak	Non-Teak
6	Qualitative Assessment			
6.1	Suitability of area	Suitable	Suitable	Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3X3 m ² spaced planting was done	45 cm ³ , Pitting, 3X3, 5X5 m ² spaced planting was done	45 cm ³ , Pitting, 5X5 m ² spaced planting was done
6.3.1	Survival Percentage	68 %	75.12 %	70 %
6.3.2	Average height / Girth	1 m / 4.82 cm	2.3 m / 2.3 cm	2 m / 5.31 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Pruning)	Tending operations are carried out (Pruning)	Tending operations are carried out (Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work	Soil Work	Soil work
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood and Small timber	Fuel wood and Small timber	Fuel wood and Small timber
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on the people	Quality of the people got improved	No direct impact on the people
7	Protection works like fencing etc.,			
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Department protection	Department protection	Department protection
8	Health of raised plantation	Good	Good	very good

9	Maintenance of Records				
9.1	Updating of plantation journal	updated up to 2016	updated up to 2016	updated up to 2016	updated up to 2016
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		Yes (FRO)		
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No Constraints	No Constraints	No constraints	
10.2	Source of funds	CAMPA	CAMPA	CAMPA	
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth Funds flow	Smooth funds flow	Smooth funds flow	
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	Yes, funds for maintenance e	Yes, funds for maintenance	Yes, funds for maintenance	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, people felt local fruit varieties has to be planted	Yes, people felt local fruit varieties has to be planted	Yes, people felt local fruit varieties has to be planted	
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	No	No	No	
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued	Continued	Continued	
13	Overall Grading on the basis of survival %	Excellent	Excellent	Very good	
14	Any other information about the plantation	Moderate rainfall	Moderate rainfall	Moderate rainfall	

EVALUATION FORMAT OF MYLAVARAM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: KRISHNA	
NAME OF THE RANGE: MYLAVARAM	
S.No.	Name of the compartment
	97
	T Gannavaram
1	Site/Location/GPS N 16.45' E 80.44'
2	Legal Status of Land Reserved Forest
3	Type of Plantation Mixed Crop Plantation
4	Plantation Area (ha) 5 HA
5	Species Planted and Planting techniques <i>Tectona grandis</i>
6	Qualitative Assessment
6.1	Suitability of area Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..) 45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage 68%
6.3.2	Average height//Girth 1 m/4.82 cm
6.4	Tending Operations (Singling/pruning & other operations) Tending operations are carried out (Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments SOIL WORK
6.6	Increase in availability of Biomass for local community. Status? Fuel Wood and Small Timber
6.7	Improvement in quality of life of people due to risen plantation No direct impact on the people
7	Protection works like fencing etc..
7.1	Protection measures against Biotic Pressure (Cattles etc.) Department Protection
8	Health of raised plantation Good

9	Maintenance of Records	
9.1	Updating of plantation journal	Update up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Casualty Replacement
10	Project Constraints/Limitations	
10.1	Constraints/Limitations faced by the authorities, if any?	No Constraints
10.2	Source of funds	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth Funds flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?	
11.1	Any scope for improving the project output?	Yes, Funds for maintenance e
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, people felt local fruit varieties to be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants	
12.1	Suggestions for improvement in record maintenance/or any other issues	No
12.2	Whether the project should be continued/modified/discontinued (reasons)?	continued
13	Overall Grading on the basis of survival %	Good
14	Any other information about the plantation	Moderate rain fall

EVALUATION FORMAT OF NIZIVEEDU RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: KRISHNA

NAME OF THE RANGE : NUZIVEEDU

S.No.	Name of the Compartment	137	137	137
	NAME OF THE BEAT	KATRENPUDA	KATRENPUDA	KATRENPUDA
1	GPS Coordinates	Katrenpuda/ N 16.46/ N 80.56	Katrenpuda/ N 16.46' N 80.56	Katrenpuda/ N 16.46' N 80.56'
2	Legal Status of Land	Reserved Forest	Reserved Forest	Reserved Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (ha)	10ha	7.50Ha	15Ha
5	Choice of Tree Species	Non-Teak	Non-Teak	Non-Teak
6	Qualitative Assessment			
6.1	Suitability of area	suitable	suitable	suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 5x5m ² spaced planting was done
6.3.1	Survival Percentage	72%	73%	65%
6.3.2	Average height/Girth	3 m/2.3 cm	1.5 m/2.3 cm	1 m/2.3 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Pruning)	Tending operations are carried out (Pruning)	Tending operations are carried out (Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work	Soil Work	Soil Work
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood and Small timber	Fuel wood	Fuel wood and Small timber
6.7	Improvement in quality of life of people due to risen plantation	They are getting some income	They are getting some income	They are getting some income
7	Protection works like fencing etc..			
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Department protection	Department protection	Department protection

8	Health of raised plantation	Very good	Very good	Good
9	Maintenance of Records			
9.1	Updating of plantation journal	2015	2016	2015
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Yes (FRO)	Yes (FRO)	Yes (FRO)
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	No Constraints	No Constraints	No Constraints
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	Yes	Yes	Yes
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	No	No	No
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued	Continued	Continued
13	Overall Grading based on survival %	Very good	Very good	Good
14	Any other information about the plantation	Good maintenance	Good maintenance	Good maintenance

EVALUATION FORMAT OF NUZIVEEDU RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: KRISHNA

NAME OF THE RANGE : NUZIVEEDU

S.No.	Name of the Compartment	100	100	100
	Name of the Beat:	CHINNAMPETA	CHINNAMPETA	CHINNAMPETA RENPUDA
1	GPS Coordinates	Chinnampeta / N 17.2' E 80.57'	Chinnampeta / N 17.1' E 80.51	Chinnampeta / N 17.9' E 80.51
2	Legal Status of Land	Reserved Forest	Reserved Forest	Reserved Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (ha)	15Ha	7.50Ha	10Ha
5	Choice of Tree Species	Non-Teak	Non-Teak	Non-Teak
6	Qualitative Assessment			
6.1	Suitability of area	suitable	suitable	suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 5x5m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	65%	68%	68%
6.3.2	Average height/Girth	1.5 m/2.3 cm	3 m/2.3 cm	3 m/2.3 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Pruning)	Tending operations are carried out(Pruning)	Tending operations are carried out(Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work	Soil Work	Soil Work
6.6	Increase in availability of Biomass for local community. Status?	Fuel Wood and Small timber	Fuel wood	Fuel wood and Small timber
6.7	Improvement in quality of life of people due to risen plantation	They are getting some income	They are getting some income	They are getting some income
7	Protection works like fencing etc..			
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Department protection	Department protection	Department protection

8	Health of raised plantation	Good	Good	Good	Good
9	Maintenance of Records				
9.1	Updating of plantation journal	2015	2015	2015	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Yes (FRO)	Yes (FRO)	Yes (FRO)	Yes (FRO)
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No Constraints	No Constraints	No Constraints	No Constraints
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	Yes	Yes	Yes	Yes
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	No	No	No	No
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued	Continued	Continued	Continued
13	Overall Grading on the basis of survival %	Good	Good	Good	Good
14	Any other information about the plantation	Lowest rainfall	Lowest rainfall	Lowest rainfall	Lowest rainfall

EVALUATION FORMAT OF RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: KRISHNA

NAME OF THE RANGE : NUZIVEEDU

S.No.	Name of the Compartment:	7	1
	Name of the Beat:	GANDARI	GANDARI
1	GPS Coordinates	Gandari/N 16.57' E 80.56	Gandari /N 16.57' E 80.5
2	Legal Status of Land	Reserved Forest	Reserved Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (ha)	5Ha	5Ha
5	Choice of Tree Species	Non-Teak	Non-Teak
6	Qualitative Assessment		
6.1	Suitability of area	suitable	suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	95%	95%
6.3.2	Average height/Girth	2.5 m/2.3 cm	3 m/2.3 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Pruning)	Tending operations are carried out (Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work	Soil Work
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood	Small timber
6.7	Improvement in quality of life of people due to risen plantation	They are getting some income	They are getting some income
7	Protection works like fencing etc..,		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Department protection	Department protection
8	Health of raised plantation	Excellent	Excellent

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2016	Updated up to 2016	Updated up to 2016
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Yes	Yes	Yes
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	No Constraints	No Constraints	No Constraints
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of fund	Smooth flow of fund	Smooth flow of fund
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	Yes	Yes	Yes
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	No	No	No
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued	Continued	Continued
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good maintenance	Good maintenance	Good maintenance

EVALUATION FORMAT OF VIJAYAWADA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

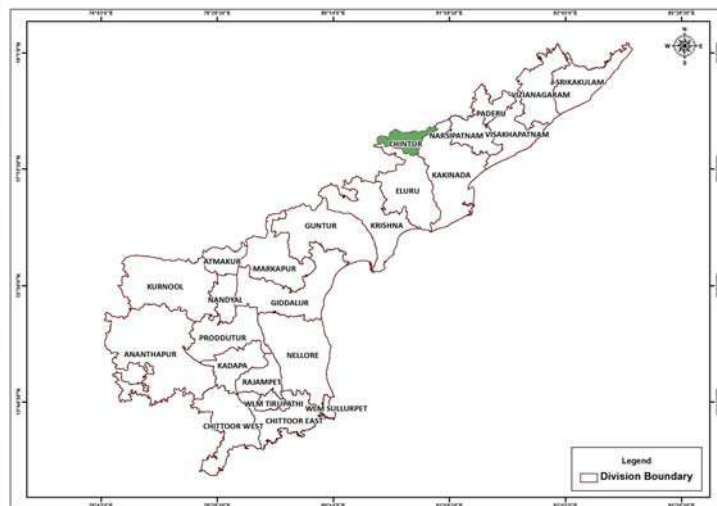
NAME OF THE DIVISION : KRISHNA

NAME OF THE RANGE : VIJAYAWADA

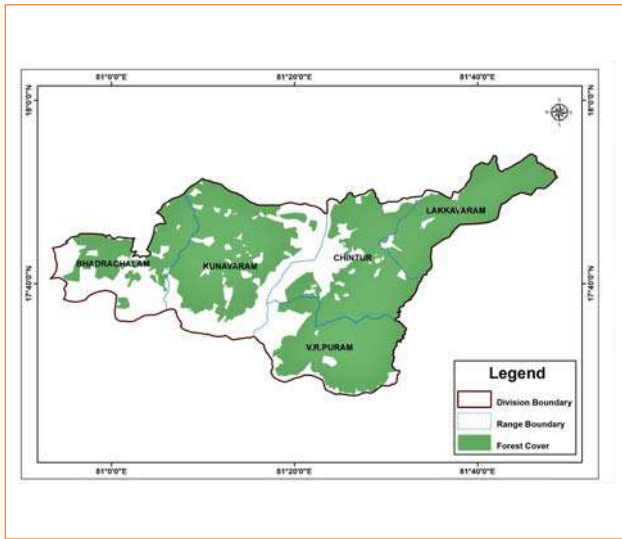
S.No.	NAME OF THE COMPARTMENT	67
	NAME OF THE BEAT	METTAPALLI
1	Site/Location/GPS	N 16.38' E 80.50'
2	Legal Status of Land	Reserve Forest
3	Type of Plantation	Mixed Crop Plantation
4	Plantation Area (ha)	20Ha
5	Species Planted and Planting techniques	Non-Teak
6	Qualitative Assessment	
6.1	Suitability of area	Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 5x5m ² spaced planting was done
6.3.1	Survival Percentage	70%
6.3.2	Average height/Girth	2 m/5.31 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood and Small timber
6.7	Improvement in quality of life of people due to risen plantation	They are getting some income
7	Protection works like fencing etc..	
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Department protection
8	Health of raised plantation	very good

9	Maintenance of Records		
9.1	Updating of plantation journal		Updating up to 2016
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		No observations
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?		No constraints
10.2	Source of funds		CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?		Yes
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues		
12.2	Whether the project should be continued/modified/discontinued (reasons)?		Continued
13	Overall Grading on the basis of survival %		very good
14	Any other information about the plantation		Lowest rainfall

MONITORING REPORT CHINTOOR FOREST DIVISION

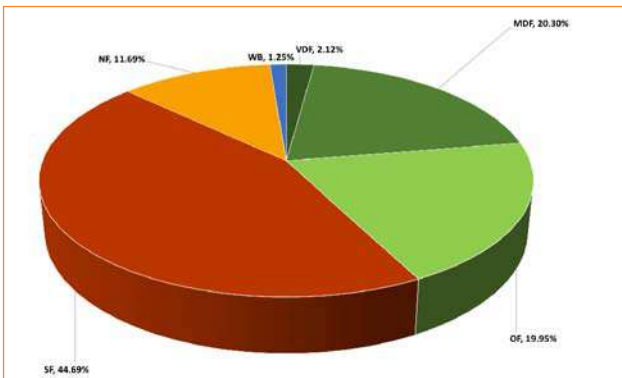


CHINTOOR FOREST DIVISION



Chintoor Division comprises five forest ranges namely Chintoor, Kunavaram, Nellipaka, V. R. Puram and Lakkavaram. For the year of 2015-16, Chintoor Division has taken up plantation work over an area of 57ha covering two out of five ranges namely Kunavaram (7 ha) & V. R. Puram (50 ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling Method, the total area was partially enumerated within 4 sampled plantations.

Figure 1: Forest Cover (%)

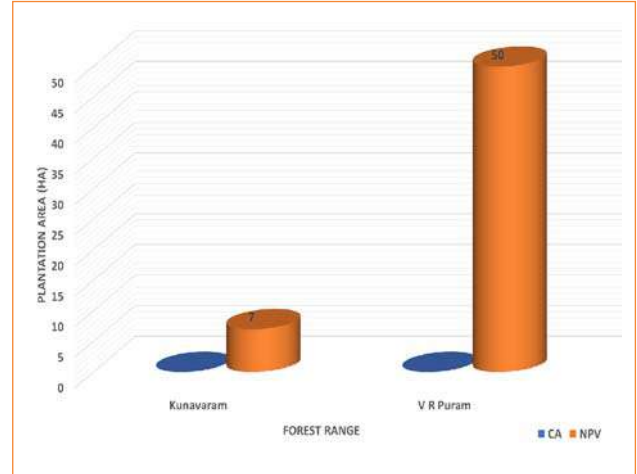


Source: Andhra Pradesh state forest department annual data 2014-15

Plantation area

In the division, maximum was planted in V R Puram forest range and minimum was planted in Kunavaram forest range.

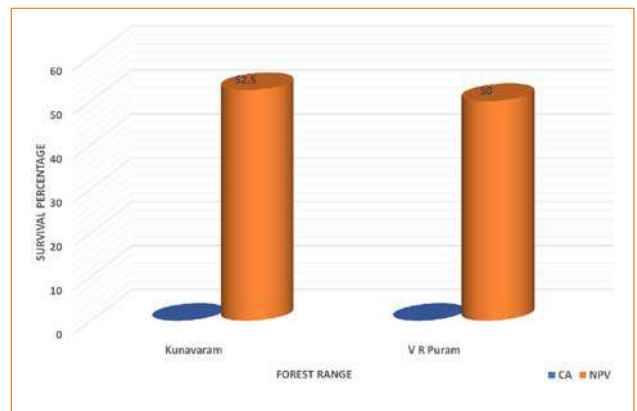
Figure 1 : Plantation area of the Chintoor forest Division



Survival percentage

The survival percentage is maximum in V R Puram range which is having 52.5% and minimum in Kunavaram range which is having 50%.

Figure 3: Survival percentage of plantations

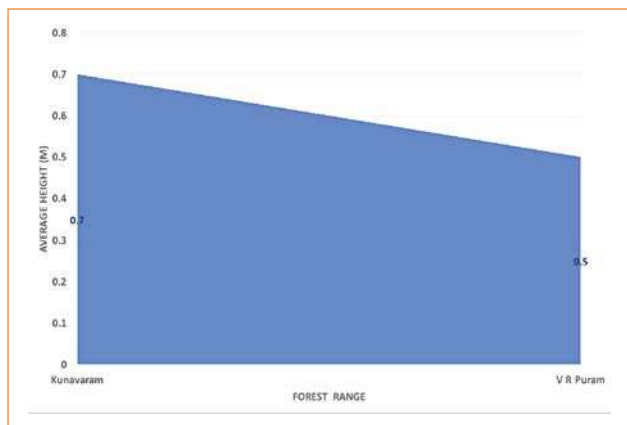


Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Kunavaram	Mixed	<i>Adina cordifolia</i> <i>Dalbergia latifolia</i> <i>Hardwickia binata</i> <i>Tectona grandis</i>	-	7	Poor	-	52.5	0.7	1.825
V R Puram	Mixed	<i>Terminalia alata</i> <i>Azadirachta indica</i> <i>Dalbergia latifolia</i> <i>Albizia odoratissima</i>	-	50	Poor	-	50	0.5	4.826

Average height

In the division, both plantations were observed to be average. VR Puram and Kunavaram plantations were having an average height of 0.7m and 0.5m respectively.

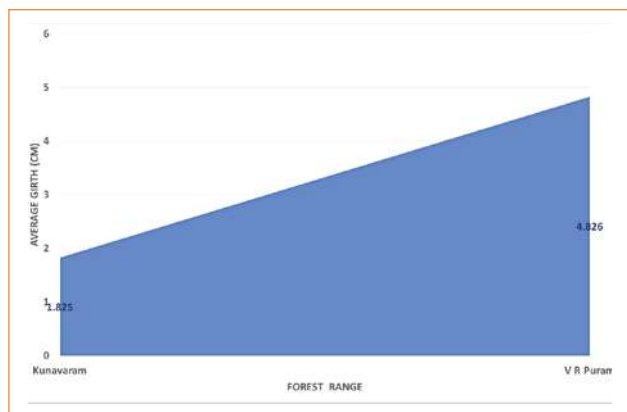
Figure 4: Average height of the plantations



Average girth

In the division, maximum girth was observed in VR Puram range with an average of 4.826 cm and minimum was observed in Kunavaram range with an average of 1.825 cm.

Figure 5 : Average girth of the plantations



Observations

Most of the plantations in this division are above average. Special care and proper measures should be taken to improve the survival percentage of the plantations.

- Survival percentage was rated overall poor with an average 51.25% ranging from 50% - 52.5% in all the CAMPA plantations.

- Even though the site quality was favourable for plantations, excessive floods created hostile environment for the planted species. The species planted were *Adina cordifolia*, *Dalbergia latifolia*, *Hardwickia binata*, *Terminalia alata*, *Albizia odoratissima* and *Azadirachta indica* which are suitable for tropical semi ever green vegetations.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with spacing of 3m x 3m resulted into mixed crop plantations. Cultural operations (cleaning, weeding, and climber cutting) and water harvesting structures like check dams & contour trenching were taken up at the initial stages.
- Average height of important tree species was with an average of 0.6 which is ranging from 0.5 m to 0.8 m. Tending operations (Pruning, singling and thinning) were carried out. Bio fencing was provided to protect plantations from biotic pressure.
- There is hot temperatures and good rainfall and climatic conditions had impact on the growth of the plantations, hence the good survival percentage was observed. It appears that the best plantations were established with favourable climatic conditions along with proper protection measures.
- Local communities were benefited by gathering fuel wood, fodder and other intangible benefits like water level increase in their wells due to the plantation activities.
- CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during initial period of the plantation works and most of the plantations received funds timely without any delay. Funds were not allotted for maintenance of plantations at the stage of establishment which is crucial.
- Absence of funds for subsequent maintenance (after third year maintenance) led to less protection against Grazing and damages caused by animals and human beings. Over growth of weeds became a big competition for food and space for the desired plants in the plantations. In some of the plantations the shapes of the trees were not proper due to lack of tending operations like pruning, singling etc.

EVALUATION FORMAT OF CHINTOOR DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : RAJAHMUNDRI		NAME OF THE DIVISION : CHINTOOR	
S.No.	NAME OF THE RANGE	KUNAVARAM	V R PURAM
1	Site/Location/GPS	N 16.45' E 80.44'	N 16.57' E 8
1	GPS Coordinates	N 17.63 E 81.20	N 17.56' E 81.36'
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (ha)	7 Ha	50 Ha
5	Species Planted and Planting techniques	<i>Adina cordifolia</i> , <i>Dalbergia latifolia</i> , <i>Hardwickia binata</i> , <i>Tectona grandis</i>	<i>Terminalia alata</i> <i>Azadirachta indica</i> <i>Dalbergia latifolia</i> , <i>Albizia odoratissima</i> ,
6	Qualitative Assessment		
6.1	Suitability of area	Moderate suitable	Poor
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	52.5%	50%
6.3.2	Average height / Girth	0.7m / 1.82 cm	0.5m / 4.82 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Pruning, Inter Ploughing)	Tending operations are carried out (Pruning, Inter Ploughing)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	No	NO
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood, Fodder	Fodder, Fuel wood
6.7	Improvement in quality of life of people due to risen plantation	They are getting some income	They are getting some income
7	Protection works like fencing etc..		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Bio fencing	NO

8	Health of raised plantation		Moderate	Moderate
9	Maintenance of Records			
9.1	Updating of plantation journal		Updating up to 2016	Updated up to 2018
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		NO	Sub-DFO, No protection
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?		Local people cutting the saplings in the plantation	NO
10.2	Source of funds		Smooth flow of funds, funding period is over	Smooth flow of funds, funding is over
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smooth fund flow	Smooth fund flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?		No	Weeding
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues		Good	Good
12.2	Whether the project should be continued/modified/discontinued (reasons)?		Discontinued due to maintenance over	Discontinued due to rainfall
13	Overall Grading on the basis of survival %		Average (50% - 59%)	Average (50% - 59%)
14	Any other information about the plantation		Average growth	Plantation is affected by insects

EVALUATION FORMAT OF KUNAVARAM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : CHINTTOOR	
NAME OF THE RANGE : KUNAVARAM	
S.No.	NAME OF THE COMPARTMENT
NAME OF THE BEAT	
1	128 C.H. PETA Bhairavapatnam/N 17.63 E 81.20
2	Reserve Forest
3	Mixed crop plantation
4	7ha
5	<i>Hardwickia binata, Dalbergia latifolia, Mitragyna parviflora</i>
Qualitative Assessment	
6.1	Moderate suitable
6.2	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	50%
6.3.2	0.7 m/1.82 cm
6.4	Tending operations are carried out (Inter ploughing)
6.5	No
6.6	Fuel wood, Fodder
6.7	Improvement in quality of life of people due to risen plantation
Protection works like fencing etc.,	
7.1	Bio fencing
8	Healthy

9	Maintenance of Records	
9.1	Updating of plantation journal	Updating up to 2016
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	NO
10	Project Constraints/Limitations	
10.1	Constraints/Limitations faced by the authorities, if any?	Local people cutting the saplings in the plantation
10.2	Source of funds	Smooth flow of funds, funding period is over
10.3	If flow of funds wasn't smooth, where did the delay arise?	
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc...?	
11.1	Any scope for improving the project output?	No
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants	
12.1	Suggestions for improvement in record maintenance/or any other issues	Good
12.2	Whether the project should be continued/modified/discontinued (reasons)?	Discontinued due to maintenance over
13	Overall Grading on the basis of survival %	Average
14	Any other information about the plantation	Average growth

EVALUATION FORMAT OF V R PURAM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

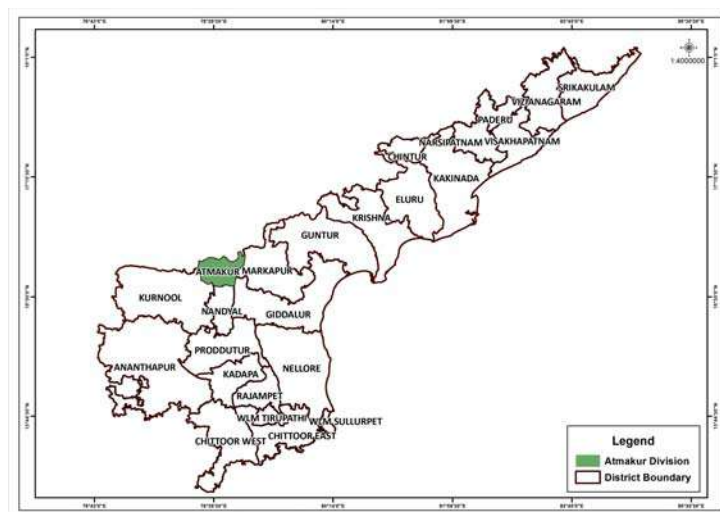
NAME OF THE DIVISION : CHINTOOR

NAME OF THE RANGE : V R PURAM

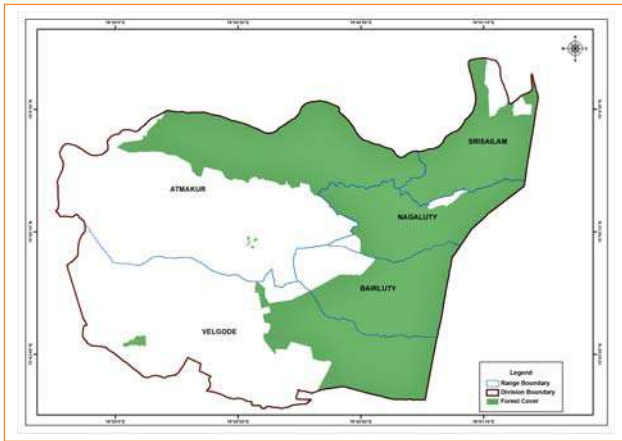
S.No.	NAME OF THE COMPARTMENT	178	62
	NAME OF THE BEAT	MATTAPALLY	DARAPALLY
1	Site/Location/GPS	Buruguwada/ N 17.56 E 81.37	Nagendrapuram/ N 17.55 E 81.36
2	Legal Status of Land	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (ha)	17ha	13ha
5	Species Planted and Planting techniques	<i>Pongamia pinnata</i> , <i>Terminalia Arjuna</i> , <i>Albizia odoratissima</i> , <i>Azadirachta indica</i>	<i>Pongamia pinnata</i> , <i>Terminalia Arjuna</i> , <i>Albizia odoratissima</i> ,
6	Qualitative Assessment		
6.1	Suitability of area	Poor	Poor
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ Pitting, 3x3m ² spaced planting was done	45 cm ³ Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	50%	55%
6.3.2	Average height	0.5 m/4.82 cm	0.5 m/4.82 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Singling)	Tending operations are carried out (Singling)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	NO	NO
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Fuel wood	Fodder
6.7	Improvement in quality of life of people due to risen plantation	They are getting some income	They are getting some income
7	Protection works like fencing etc..		
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No	No

8	Health of raised plantation		Poor, mostly died	Moderate
9	Maintenance of Records			
9.1	Updating of plantation journal		Updated up to 2018	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		Sub-DFO	Sub-DFO, No protection
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?		NO	NO
10.2	Source of funds		Smooth flow of funds, funding is over	Smooth flow of funds, funding is over
10.3	If flow of funds wasn't smooth, where did the delay arise?			
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc...?			
11.1	Any scope for improving the project output?		Weeding	NO
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes, local fruit varieties have to be planted	Yes, local fruit varieties have to be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues		Good	Good
12.2	Whether the project should be continued/modified/discontinued (reasons)?		Discontinued due to rainfall	Discontinued due to rainfall
13	Overall Grading on the basis of survival %		Average	Average
14	Any other information about the plantation		This plantation soil contains small pebbles	Plantation is affected by insects

MONITORING REPORT ATMAKUR FOREST DIVISION

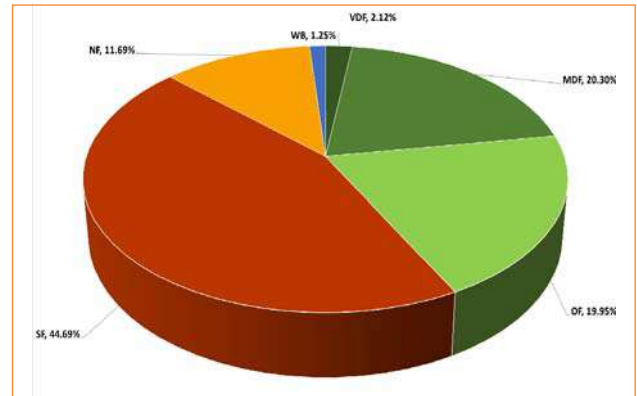


ATMAKUR FOREST DIVISION



Atmakur, a town in Kurnool district is a part of Rayalaseema region located in the west-central part of Andhra Pradesh state bordering with Telangana in the north and Maharashtra in the west. The area of the district is 17658 km² and the population is 4.04 million (2011 census). Atmakur WLM Forest Division lies in the north-eastern part of Kurnool District (latitudes 15° 39' 3.6" and 16° 8' 52.8"N and longitudes 78° 15' 1.8" and 78° 55' 57" E). The geographical area of the Division is 2154 Km² which is 12.20 % of the total area of the District.

Figure 1: Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

Atmakur Forest Division comprises eight forest ranges namely Bairluty, Nagaluty, Srisailam, Velgode, Anti-poaching Squad, Srisailam, Atmakur-FDPT, GTD-Bairluty and Nandikotkur. For the year of 2015-16, Atmakur Forest Division has taken up plantation work over an area of 112 ha covering one out of eight ranges namely Nagaluty (112 ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling method, the total area was partially enumerated within 2 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Nagaluty	Mixed	<i>Azadirachta indica</i> <i>Holoptelea integrifolia</i> <i>Hardwickia binata</i> <i>Terminalia arjuna</i> <i>Aegle marmelos</i> <i>Bambusa arundinacea</i>	115	-	High	90	-	1	8.085

Observations

- Survival percentage of the plantations was excellent with 90% in most of the plantations.
- Site Quality was taken as criteria for choice of species. The species chosen were *Azadirachta indica*, *Holoptelea integrifolia*, *Hardwickia binata*, *Terminalia arjuna*, *Aegle marmelos*, *Bambusa arundinacea* which are suitable to the dry and xerophytic conditions.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with spacing (of 3x3 m², 5x5 m²) resulted into mixed crop plantations. Cultural operations (cleaning, weeding, climber cutting), and SMC operations like Soil Work Weeding, RFD, Earthen Bonding
- Average height of tree species was 1m in most of the plantations. Tending operations (pruning & singling) were carried out. Trenching was taken up in most of the areas to protect plantations from biotic pressure.
- Though there is severe temperature and low rainfall and impact of drought on the growth of the plantations

comparatively low, hence the good survival percentage was observed. It appears that the protection measure has yielded results.

- Plantation journals were maintained in most of the sites and inspection notes were observed only at a few plantation sites.
- Local communities were benefited by gathering fuel fodder and other intangible benefits like water level increase in their wells due to the plantation activities
- No major constrains were found for growing the plantation. CAMPA fund was used for raising plantations in and around forest areas/outside forest areas and flow of funds was smooth during initial period of the plantation works and most of the plantations received funds timely without any delay.
- Absence of funds for subsequent maintenance (after third year maintenance) led to less protection against Grazing and damages caused by animals and human beings.

EVALUATION FORMAT OF ATMAKUR DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : FDPT, SRISAILAM	
NAME OF THE DIVISION: ATMAKUR	
S.No.	NAME OF THE RANGE
1	GPS Coordinates
2	Legal Status of Land
3	Type of Plantation
4	Plantation Area (in Ha)
5	Choice of Tree Species
6	Qualitative Assessment
6.1	Suitability of area
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)
6.3.1	Survival Percentage
6.3.2	Average height / Girth
6.4	Tending Operations (Singling/pruning & other operations)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments
6.6	Increase in availability of Biomass for local community. Status?
6.7	Improvement in quality of life of people due to risen plantation
7	Protection works like fencing etc.,
7.1	Protection measures against Biotic Pressure (Cattles etc.)
8	Health of raised plantation
	IVAGULUTY
	N 15.92' E 78.78'
	Reserve forest
	Multiple Species
	112
	<i>Azadirachta indica, Holoptelea integrifolia, Hardwickia binata, Terminalia arjuna, Aegle marmelos, Bambusa arundinacea.</i>
	Highly Suitable
	45cm3, Pitting, 3 x 3, 5 x 5 m ² spaced planting were done.
	90%
	1 m / 8.08 cm
	Singling, pruning
	Soil Work Weeding, RFD, Earthen Bonding
	Fodder
	Yes, Living Standard of the People got improved
	Trenching
	Healthy

9	Maintenance of Records	
9.1	Updating of plantation journal	Updated Upto 2016-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to Take Up Circular Weeding Soil Work as Per Calendar Operation
10	Project Constraints/Limitation	
10.1	Constraints/Limitations faced by the authorities, if any?	Labour Problem
10.2	Source of funds	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Flow of Funds was smooth
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?	
11.1	Any scope for improving the project output?	YES, if funds were provided for maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	No
12	Suggestions for improvements from the Evaluating Agency/Consultants	
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent
14	Any other information about the plantation	Lowest Rainfall, Good Maintenance

EVALUATION FORMAT OF NAGULUTY RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : ATMAKUR		833	833	833
NAME OF THE RANGE: NAGULUTY		NAGULUTY	NAGULUTY	NAGULUTY
S.No.	NAME OF THE COMPARTMENT	833	833	833
	NAME OF THE BEAT	NAGULUTY	NAGULUTY	NAGULUTY
1	GPS Coordinates	INDIRESWARAM/ N 15.92.254E 78.64.974	INDIRESWARAM/ N 15.92.439E 78.92.286	INDIRESWARAM/ N 15.92.443E 78.64.951
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Multiple Species	Multiple Species	Multiple Species
4	Plantation Area (in Ha)	75 Ha	75 Ha	75 Ha
5	Choice of Tree Species	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i> , <i>ETC-SMM</i>	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i> , <i>ETC-SMM</i>	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i> , <i>ETC-SMM</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly Suitable	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45cm ³ , Pitting, 5 x 5 m ² spaced planting were done.	45cm ³ , Pitting, 3 x 3 m ² spaced planting were done.	45cm ³ , Pitting, 5 x 5 m ² spaced planting were done.
6.3.1	Survival Percentage	90 %	90 %	90 %
6.3.2	Average height/Girth	1.5 m/8.08 cm	1.5 m/8.08 cm	1.5 m/8.08 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending Operations done Singling, pruning	Tending Operations done Singling, pruning	Tending Operations done Singling, pruning
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work Weeding, RFD, Earthen Bonding	Soil Work Weeding, RFD, Earthen Bonding	Soil Work Weeding, RFD, Earthen Bonding
6.6	Increase in availability of Biomass for local community. Status?	Fodder	Fodder	Fodder
6.7	Improvement in quality of life of people due to risen plantation	Yes	Yes	Yes

7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Fencing	Trenching, Fencing	Trenching, Fencing	Trenching	
8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy	
9	Maintenance of Records					
9.1	Updating of plantation journal	Updated Upto 2016-17	Updated Upton 2016-17	Updated Upton 2016-17	Updated Upton 2016-17	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	instructed to take up circular weeding soil work as per calendar operation	instructed to take up circular weeding soil work as per calendar operation	instructed to take up circular weeding soil work as per calendar operation	instructed to take up circular weeding soil work as per calendar operation	
10	Project Constraints/Limitation					
10.1	Constraints/Limitations faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem	Labour Problem	
10.2	Source of funds	CAMPA Received in Time	CAMPA Received in Time	CAMPA Received in Time	CAMPA Received in Time	
10.3	If flow of funds wasn't smooth, where did the delay arise?					
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.,					
11.1	Any scope for improving the project output?	Yes, Funds for Maintenance	Yes, Funds for Maintenance	Yes, Funds for Maintenance	Yes, Funds for Maintenance	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	No	No	No	No	
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent	
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	

EVALUATION FORMAT OF MAGULUTY RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : ATMAKUR

NAME OF THE RANGE: MAGULUTY

S.No.	NAME OF THE COMPARTMENT	833	833	833	833
	NAME OF THE BEAT	MAGULUTY	MAGULUTY	MAGULUTY	MAGULUTY
1	GPS Coordinates	INDIRESWARAM/ N 15.92.068E 78.63.833	INDIRESWARAM/ N 15.92.254E 78.64.974	INDIRESWARAM/ N 15.92.265E 78.65.400	INDIRESWARAM/ N 15.92.265E 78.65.400
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Multiple Species	Multiple Species	Multiple Species	Multiple Species
4	Plantation Area (in Ha)	75 Ha	75 Ha	75 Ha	75 Ha
5	Choice of Tree Species	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i> , ETC-SMM	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> , <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i> , ETC-SMM	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i> , ETC-SMM	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i> , ETC-SMM
6	Qualitative Assessment				
6.1	Suitability of area	Highly Suitable	Highly Suitable	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45cm ³ , Pitting, 3 x 3 m ² s paced planting were done.	45cm ³ , Pitting, 3 x 3 m ² spaced planting were done.	45cm ³ , Pitting, 3 x 3 m ² spaced planting were done.	45cm ³ , Pitting, 3 x 3 m ² spaced planting were done.
6.3.1	Survival Percentage	90 %	90 %	90 %	90 %
6.3.2	Average height/Girth	1.5 m/8.08 cm	1.5 m/8.08 cm	1.5 m/8.08 cm	1.5 m/8.08 cm
6.4	Tending Operations (Singling/pruning & other operations)	Singling, pruning	Singling, pruning	Singling, pruning	Singling, pruning
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work Weeding, RFD, Earthen Bonding	Soil Work Weeding, RFD, Earthen Bonding	Soil Work Weeding, RFD, Earthen Bonding	Soil Work Weeding, RFD, Earthen Bonding
6.6	Increase in availability of Biomass for local community. Status?	Fodder	Fodder	Fodder	Fodder
6.7	Improvement in quality of life of people due to risen plantation	Yes	Yes	Yes	Yes

7	Protection works like fencing etc.,				
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Fencing	Trenching, Fencing	Trenching, Fencing	Trenching, Fencing
8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated Up to 2016-17	Updated Up to 2016-17	Updated Up to 2016-17	Updated Up to 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to Take Up Circular Weeding Soil Work as Per Calendar Operation	Instructed to Take Up Circular Weeding Soil Work as Per Calendar Operation	Instructed to Take Up Circular Weeding Soil Work as Per Calendar Operation	Instructed to Take Up Circular Weeding Soil Work as Per Calendar Operation
10	Project Constraints/Limitation				
10.1	Constraints/Limitations faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem	Labour Problem
10.2	Source of funds	CAMPA Received in Time	CAMPA Received in Time	CAMPA Received in Time	CAMPA Received in Time
10.3	If flow of funds wasn't smooth, where did the delay arise?	Flow of funds was smooth.	Flow of funds was smooth.	Flow of funds was smooth.	Flow of funds was smooth.
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	No	No	No	No
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Suitable Geography
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF NAGULUTY RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : ATMAKUR		833	833	832
NAME OF THE RANGE: NAGULUTY		NAGULUTY	NAGULUTY	NAGULUTY
S.No.	NAME OF THE COMPARTMENT	INDIRESWARAM/ N 15.92.350E 78.65.148	INDIRESWARAM/ N 15.92.128E 78.65.673	INDIRESWARAM/ N 15.90.52E 78.66.113
1	GPS Coordinates	Reserve Forest	Reserve Forest	Reserve Forest
2	Legal Status of Land	Multiple Species	Multiple Species	Multiple Species
3	Type of Plantation	75 Ha	75 Ha	37 Ha
4	Plantation Area (in Ha)	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i>	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i>	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> , <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i> .
5	Choice of Tree Species	Highly Suitable	Highly Suitable	Highly Suitable
6	Qualitative Assessment	45cm ³ , Pitting, 3 x 2 m ² spaced planting were done.	45cm ³ , Pitting, 3 x 2 m ² spaced planting were done.	45cm ³ , Pitting, 3 x 2 m ² spaced planting were done.
6.1	Suitability of area	90 %	90 %	90 %
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	1.5 m/8.08 cm	1.5 m/8.08 cm	1.5 m/8.08 cm
6.3.1	Survival Percentage	Tending Operations done Singling, Pruning	Tending Operations done Singling, Pruning	Tending Operations done Singling, Pruning
6.3.2	Average height/Girth	Soil Work Weeding, RFD, Earthen Bonding	Soil Work Weeding, RFD, Earthen Bonding	Soil Work Weeding, RFD, Earthen Bonding
6.4	Tending Operations (Singling/pruning & other operations)	Fodder	Fodder	Fodder, NTFP's etc.,
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Yes	Yes	Yes
6.6	Increase in availability of Biomass for local community. Status?			
6.7	Improvement in quality of life of people due to risen plantation			

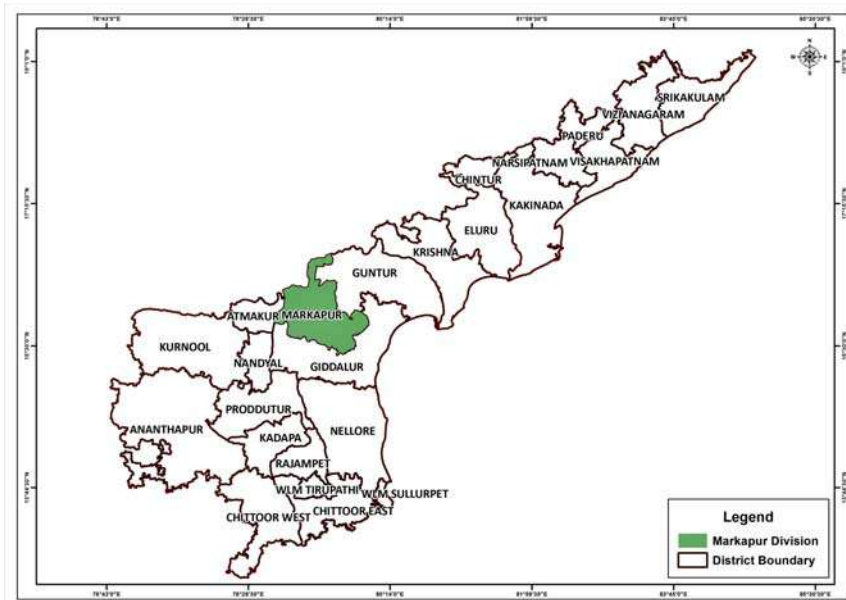
7	Protection works like fencing etc.,				
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching, Fencing	Trenching	Trenching	
8	Health of raised plantation	Healthy	Healthy	Healthy	
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated Up to 2016-17	Updated Up to 2016-17	Updated Up to 2016-17	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	
10	Project Constraints/Limitation				
10.1	Constraints/Limitations faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem	
10.2	Source of funds	CAMPA	CAMPA	CAMPA	
10.3	If flow of funds wasn't smooth, where did the delay arise?	Flow of funds was smooth.	Flow of funds was smooth.	Flow of funds was smooth.	
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	Yes, Funds for Maintenance	Yes, Funds for Maintenance	Yes, Funds for Maintenance	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	No	No	NoNo	
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	
13	Overall Grading on the basis of survival %	Excellent	Excellent	GOOD	
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Lowest Rainfall. Good Maintenance	

EVALUATION FORMAT OF NAGULUTY RANGE WISE PLANTATIONS RAISED UNDER CAMPA SCHEME

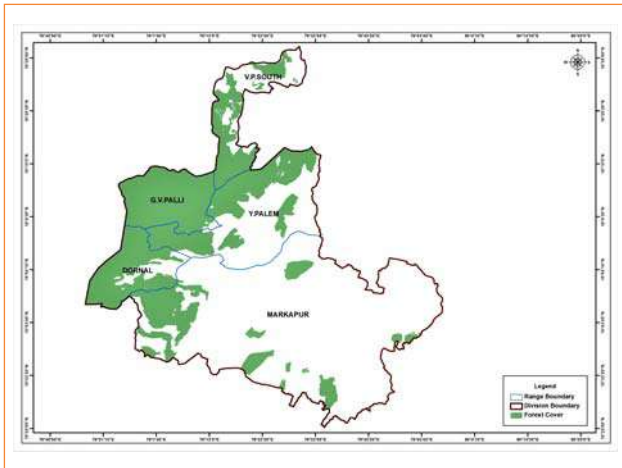
NAME OF THE DIVISION : ATMAKUR						
NAME OF THE RANGE: NAGULUTY						
S.No.	NAME OF THE COMPARTMENT	832	832	832	832	833
NAME OF THE BEAT		NAGULUTY	NAGULUTY	NAGULUTY	NAGULUTY	NAGULUTY
1	GPS Coordinates	Indireswaram/N 15.90.483E 78.66.344	Indireswaram/N 15.90.544E 78.66.953	Indireswaram/N 15.90.488E 78.66.268	Indireswaram/N 15.93.935E 78.65.029	
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Multiple Species	Multiple Species	Multiple Species	Multiple Species	Multiple Species
4	Plantation Area (in Ha)	37 Ha	37 Ha	37 Ha	3 Ha	3 Ha
5	Choice of Tree Species	<i>Holoptelea integrifolia</i> , <i>Terminalia arjuna</i> , <i>Aegle marmelos</i>	<i>Holoptelea integrifolia</i> , <i>Terminalia arjuna</i> , <i>Aegle marmelos</i>	<i>Holoptelea integrifolia</i> , <i>Terminalia arjuna</i> , <i>Aegle marmelos</i>	<i>Bambusa arundinacea</i> , <i>Thespesia populnea</i> <i>6Qualitative Assessment</i>	
6.1	Suitability of area	Highly Suitable	Highly Suitable	Highly Suitable	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45cm ³ , Pitting, 3 x 3 m ² spaced planting were done.	45cm ³ , Pitting, 3 x 3 m ² spaced planting were done.	45cm ³ , Pitting, 3 x 3 m ² spaced planting were done.	45cm ³ , Pitting, 3 x 3 m ² spaced planting were done.	
6.3.1	Survival Percentage	90 %	90 %	90 %	90 %	90 %
6.3.2	Average height/Girth	2.5 m/8.08 cm	2.5 m/8.08 cm	2.5 m/8.08 cm	1.5 m/8.08 cm	
6.4	Tending Operations (Singling/pruning & other operations)	Tending Operations done Singling, pruning	Tending Operations done Singling, pruning	Tending Operations done Singling, pruning	Tending Operations done Singling, pruning	
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work Weeding, RFD, Earthen Bonding	Soil Work Weeding, RFD, Earthen Bonding	Soil Work Weeding, RFD, Earthen Bonding	Soil Work Weeding, RFD, Earthen Bonding	
6.6	Increase in availability of Biomass for local community. Status?	Fodder	Fodder	Fodder	Fodder	Fodder
6.7	Improvement in quality of life of people due to risen plantation	Yes	Yes	Yes	Yes	Yes

7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Trenching	Trenching	Trenching	Trenching	Trenching
8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records					
9.1	Updating of plantation journal	Updated Up to 2016-17	Updated Up to 2016-17	Updated Up to 2016-17	Updated Up to 2016-17	Updated Up to 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation
10	Project Constraints/Limitation					
10.1	Constraints/Limitations faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem	Labour Problem	Labour Problem
10.2	Source of funds	CAMPA Received in Time	CAMPA Received in Time	CAMPA Received in Time	CAMPA Received in Time	CAMPA Received in Time
10.3	If flow of funds wasn't smooth, where did the delay arise?	Flow of funds was smooth.	Flow of funds was smooth.	Flow of funds was smooth.	Flow of funds was smooth.	Flow of funds was smooth.
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?					
11.1	Any scope for improving the project output?	Yes, Funds for Maintenance	Yes, Funds for Maintenance	Yes, Funds for Maintenance	Yes, Funds for Maintenance	Yes, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	No	No	No	No	No
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	GOOD	GOOD	GOOD	GOOD	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	Lowest Rainfall, Good Maintenance

MONITORING REPORT MARKAPUR FOREST DIVISION

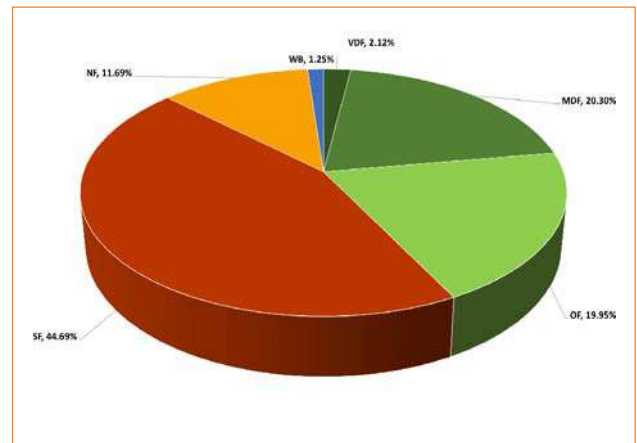


MARKAPUR FOREST DIVISION



Markapur is a town as well as revenue headquarters of Markapur Mandal in Prakasham District of Andhra Pradesh state. It is located around the Nallamala Hills. The area of Prakasham district is 17,626 km² and its population is 3.3 million (2011 census). Markapur WLM Forest Division lies in the south-eastern part of Prakasham district (latitudes 15° 23' 1" and 16° 18' 16" N and longitudes 78° 47' 48" and 79° 57' 56" E). The geographical area of the division is 7,218 Km² which is 25.1 % of the area of the district.

Figure 1: Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

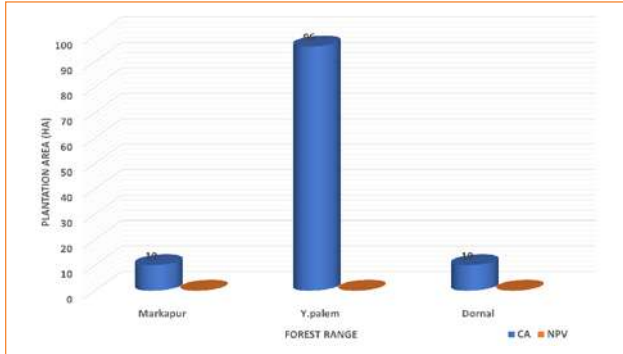
Markapur Division comprises seven forest ranges namely FDPT Srisailam, Markapur, Dornal, Ganjivaripalli, Markapur, LLM Vijayapuri South & Yerragonda Palem. For the year of 2015-16, Markapur Division has taken up plantation work over an area of 116 ha covering three out of seven ranges namely Dornal (10 ha), Markapur (10 ha) & Yerragonda Palem (96 ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling Method, the total area was partially enumerated within 6 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Markapur	Mixed	<i>Albizia odoratissima</i> <i>Pongamia pinnata</i> <i>Terminalia arjuna</i> <i>Holoptelea integrifolia</i> <i>Syzygium cumini</i> <i>Azadirachta indica</i> <i>Phyllanthus emblica</i>	10	-	High	98	-	0.75	13.2
Y. Palem	Mixed	<i>Pongamia pinnata</i> <i>Azadirachta indica</i> <i>Holoptelea integrifolia</i> <i>Ficus religiosa</i> <i>Syzygium cumini</i> <i>Hardwickia binata</i>	96	-	High	96	-	3.43	18.7125
Dornal	Mixed	<i>Hardwickia binata</i> <i>Feronia elephantum</i> <i>Ficus religiosa</i>	10	-	Poor	50.5	-	3	5.270

Plantation area

In the division, maximum was planted in Yerragondapalem forest range and the minimum was planted in Dornal and Markapur range forest ranges.

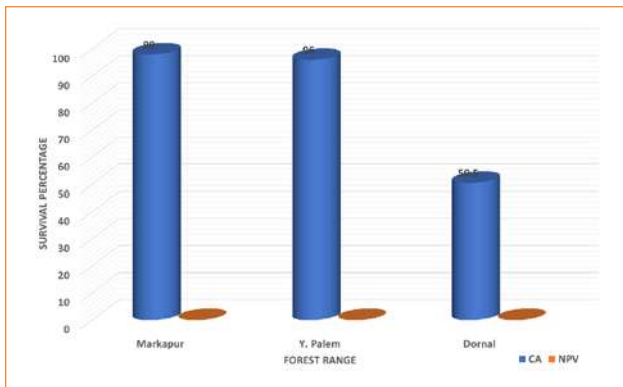
Figure 2: Area of plantations in Markapur forest division



Survival percentage

The survival percentage is maximum in Narsipatnam which is having 85% and minimum in Chintapally forest range which is having 60%

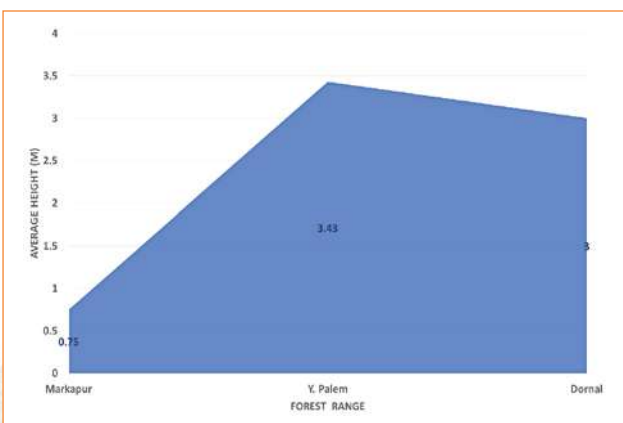
Figure 3: Survival percentage of the plantations



Average height

In the division, most of the plantations were healthy and maximum growth was observed in Yerragondapalem range with an average height of 3.43m and minimum growth was observed in Markapur range with an average height of 0.75 m.

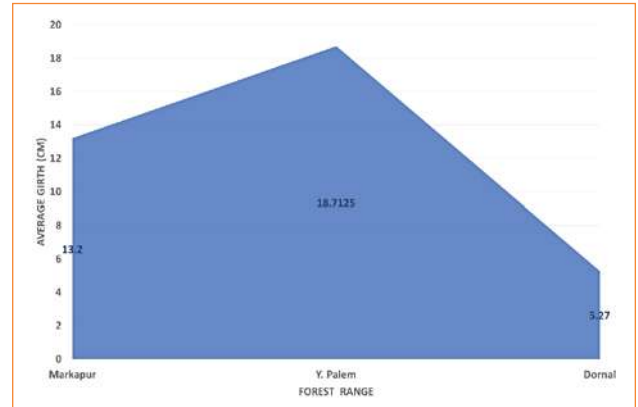
Figure 4: Average height of the plantations



Average girth

In the division, maximum girth was observed in Yerragondapalem range with an average of 18.71 cm and minimum was observed in Dornal range with an average of 5.27 cm.

Figure 5: Average girth of the plantations



Observations

In the division, in Komaralu compartment No. 168 & Naidupalem compartment No.177 of Y. Palem Forest range plantations were observed to be the best plantations.

- Survival percentage of the plantations was excellent with an average of 81.5% which is ranging from was Excellent, ranging from 50.5% - 98% in most of the plantations.
- Site Quality was taken as criteria for Choice of Species. The species chosen were *Albizia odoratissima*, *Pongamia pinnata*, *Phyllanthus emblica*, *Azadirachta indica*, *Holoptelea integrifolia*, *Hardwickia binata*, *Feronia elephantum* and *Ficus religiosa* which are suitable for tropical dry deciduous conditions.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with spacing (of 3x3 m²) resulted into mixed crop plantations. Cultural operations (cleaning, weeding, climber cutting), and SMC operations like contour trenching were taken up at the initial stages.
- Average height of tree species was 2.6 m which is ranging from 1 to 4 meters. Tending operations (Pruning & singling) were carried out. Trenching was taken up in most of the areas to protect plantations from biotic pressure.
- There is moderate temperatures and good rainfall and climatic conditions had impact on the growth of the

plantations, hence the good survival percentage was observed. It appears that the best plantations were established with favourable climatic conditions along with proper protection measures.

- Local communities were benefited by gathering fuel wood, fodder and other intangible benefits like water level increase in their wells due to the plantation activities.
- Plantation journals were maintained in most of the sites and inspecting authorities made some recommendations such as to take up circular weeding, soil work, as per calendar operation

- No major constrains were observed during the plantation activity. CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during initial period of the plantation works and most of the plantations received funds timely without any delay.
- Absence of funds for subsequent maintenance (after third year maintenance) led to less protection against Grazing and damages by animals and human beings.



Causalities replaced by *Tamarindus indica* species in Dornal range



Mixed species plantations in Markapuram division

EVALUATION FORMAT OF MARKAPUR DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : FDPT, SRISAILAM						
NAME OF THE DIVISION: MARKAPUR						
S.No.	NAME OF THE RANGE	MARKAPUR	Y. PALEM	DORNAL		
1	GPS Coordinates	N 15.70' E 79.57'	N 16.10'E 79.36'	N 15.54' E 79.59'		
2	Legal Status of Land	RESERVED FOREST	RESERVE FOREST	RESERVE FOREST		
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation		
4	Plantation Area (in Ha)	10Ha	96 Ha	10 Ha		
5	Choice of Tree Species	<i>Albizia odoratissima</i> , <i>Pongamia pinnata</i> , <i>Phyllanthus emblica</i>	<i>Pongamia pinnata</i> , <i>Azadirachta indica</i> , <i>Holoptelea integrifolia</i> , <i>Hardwickia binata</i>	<i>Hardwickia binata</i> , <i>Ficus religiosa</i> , <i>Feronia elephantum</i>		
6	Qualitative Assessment					
6.1	Suitability of area	Highly Suitable	Highly Suitable	Highly Suitable		
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done		
6.3.1	Survival Percentage	98%	96%	55.5%		
6.3.2	Average height / Girth	0.75 m / 13.2 cm	3.43 m / 18.71 cm	3 m / 5.27 cm		
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out.	Tending operations carried out (Singling and Pruning)	Tending operations carried out (Singling)		
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	(Singling, Pruning) soil work weeding, RFD, Earthen Bonding	soil work weeding, RFD, Earthen Bonding	soil work weeding, RFD, Earthen Bonding		
6.6	Increase in availability of Biomass for local community. Status?	Fodder and fuel	Fodder and fuel	Fodder and fuel		
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on peoples	No direct impact on peoples	No direct impact on peoples		

7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc)	Trenching	No	Trenching		
8	Health of raised plantation	Healthy	Healthy	Healthy		Healthy
9	Maintenance of Records					
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017	Updated up to 2017		
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to Take Up Circular Weeding, Soil Work, As Per Calendar Operation	Instructed to Take Up Circular Weeding, Soil Work, As Per Calendar Operation	Instructed to Take Up Circular Weeding, Soil Work, As Per Calendar Operation		Instructed to Take Up Circular Weeding, Soil Work, As Per Calendar Operation
10	Project Constraints/Limitations					
10.1	Constraints faced by the authorities, if any?		Labour Problem			
10.2	Source of funds	CAMPA	CAMPA	CAMPA		CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth Funds flow	Smooth Funds flow	Smooth Funds flow		Smooth Funds flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.,?					
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance		YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, local people feel to be planted local fruit varieties.	Yes, local people feel to be planted local fruit varieties.	Yes, local people feel to be planted local fruit varieties.		Yes, local people feel to be planted local fruit varieties.
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated		Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage		Continued to Enhance the quality of Forest/ Tree Coverage
13	Over all Grading/ Rating	Excellent	Excellent	Excellent		Average
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance		Average

EVALUATION FORMAT OF MARKAPUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : MARKAPUR		NAME OF THE RANGE : MARKAPUR	
S.No.	NAME OF THE COMPARTMENT	353	348
	NAME OF THE BEAT	POTLAPADU	PODILI
1	GPS Coordinates	SONAKONDA AREA N 15.95.457E 79.54.614	PODILI KONDA NARASIMHA SWAMY N 15.51.794E 79.61.240
2	Legal Status of Land	Reserved Forest	Reserved Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	9 Ha	1Ha
5	Choice of Tree Species	<i>Pongamia Pinnata</i> , <i>Terminalia arjuna</i> , <i>Syzygium cumini</i> , <i>Azadirachta indica</i>	<i>Albizia odoratissima</i> , <i>Phyllanthus emblica</i> , <i>Holoptelea Integrifolia</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done
6.3.1	Survival Percentage	100 %	96 %
6.3.2	Average height/Girth	1 m/13.2 cm	0.5 m/13.2 cm
6.4	Tending Operations (Singling/pruning & other operations)	Singling & Pruning	Singling & Pruning
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work weeding, RFD, earthen bunding	Soil work weeding, RFD, earthen bunding
6.6	Increase in availability of Biomass for local community. Status?		
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on peoples	No direct impact on peoples
7	Protection works like fencing etc..		
7.1	Protection measures against Biotic Pressure (Cattles etc..)	Trenching	Trenching
8	Health of raised plantation	Healthy	Healthy

9	Maintenance of Records		
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding, soil work, as per calendar operation	Instructed to take up circular weeding, soil work, as per calendar operation
10	Project Constraints/Limitations		
10.1	Constraints faced by the authorities, if any?	No Constrains	No Constrains
10.2	Source of funds	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc...?		
11.1	Any scope for improving the project output?	YES, Funds required for the maintenance	YES, funds required for the maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, local fruit varieties have to be planted	Yes, local fruit varieties have to be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Over all Grading/ Rating	Excellent	Very Good
14	Any other information about the plantation	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF YERRAGONDAPALEM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : MARKAPUR						
NAME OF THE RANGE : Y. PALEM						
S.No.	NAME OF THE COMPARTMENT	168	168	168	188	
	NAME OF THE BEAT	KOMARALU	KOMARALU	KOMARALU	MALLAPALEM	
1	GPS Coordinates	Porendula Konda N 16.10.79 E79.28.718	Porendula Konda N 16.11.021E 79.28.546	Siddatavagu N 16.15.397E 79.36.686		
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest	
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	
4	Plantation Area (in Ha)	26 Ha	26 Ha	26 Ha	35 Ha	
5	Choice of Tree Species	<i>Pongamia pinnata</i> , <i>Azadirachta indica</i> , <i>Holoptelea integrifolia</i> , <i>Azadirachta indica</i>	<i>Pongamia pinnata</i> , <i>Azadirachta indica</i> , <i>Holoptelea integrifolia</i> , <i>Azadirachta indica</i>	<i>Pongamia pinnata</i> , <i>Azadirachta indica</i> , <i>Holoptelea integrifolia</i> , <i>Azadirachta indica</i>	<i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Pongamia pinnata</i> , <i>Ficus religiosa</i>	
6	Qualitative Assessment					
6.1	Suitability of area	Highly Suitable	Highly Suitable	Highly Suitable	Highly Suitable	
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	
6.3.1	Survival Percentage	100 %	95 %	95 %	93 %	
6.3.2	Average height/Girth	4 m/18.71 cm	4 m/18.71 cm	4 m/18.71 cm	3 m/18.71 cm	
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out (Singling and Pruning)	Tending operations carried out (Singling and Pruning)	Tending operations carried out (Singling and Pruning)	Tending operations carried out (Singling and Pruning)	
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work, Weeding, Earthen bunding	Soil Work, Weeding, Earthen bunding	Soil Work, Weeding, Earthen bunding	Soil Work, Weeding, Earthen bunding	
6.6	Increase in availability of Biomass for local community. Status?	Yes	Yes	Yes	Yes	
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on people	No direct impact on people	No direct impact on people	No direct impact on people	

7	Protection works like fencing etc.,				
7.1	Protection measures against Biotic Pressure	NO	NO	NO	NO
8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	instructed to take up circular weeding, soil works, as per calendar operations	instructed to take up circular weeding, soil works, as per calendar operations	instructed to take up circular weeding, soil works, as per calendar operations	instructed to take up circular weeding, soil works, as per calendar operations
10	Project Constraints/Limitations				
10.1	Constraints faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem	Labour Problem
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth	Smooth	Smooth	Smooth
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES	YES	YES	YES
11.2	Whether people of the area feel the need to improve any aspect of the project?	YES	YES	YES	YES
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest cover	Continued to Enhance the quality of Forest cover	Continued to Enhance the quality of Forest cover	Continued to Enhance the quality of Forest cover
13	Over all Grading/ Rating	Very Good	Very Good	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF YERRAGONDAPALEM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : MARKAPUR						
NAME OF THE RANGE : Y. PALEM						
S.No.	NAME OF THE COMPARTMENT	188	188	188	177	
	NAME OF THE BEAT	MALLAPALEM	MALLAPALEM	MALLAPALEM	NAIDUPALEM	
1	GPS Coordinates	SIDDATAVAGU N 16.15.322E 79.36.586	SIDDATAVAGU N 16.15.787E 79.36.485	UTTASAMGAM KUNTA N 16.06.924E 79.44.125		
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST	
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	
4	Plantation Area (in Ha)	35 Ha	35 Ha	35 Ha	35 Ha	
5	Choice of Tree Species	<i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Pongamia pinnata</i> , <i>Ficus religiosa</i>	<i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Pongamia pinnata</i> , <i>Ficus religiosa</i>	<i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Pongamia pinnata</i> , <i>Ficus religiosa</i>	<i>Azadirachta indica</i> , <i>Syzygium cumini</i> , <i>Holoptelea integrifolia</i>	
6	Qualitative Assessment					
6.1	Suitability of area	Highly Suitable	Highly Suitable	Highly Suitable	Highly Suitable	
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting done	45 cm ³ , Pitting, 3x3 m ² , spaced planting done	45 cm ³ , Pitting, 3x3 m ² , spaced planting done	
6.3.1	Survival Percentage	94%	94%	94%	99%	
6.3.2	Average height/Girth	3 m/18.71 cm	3 m/18.71 cm	3 m/18.71 cm	3.5 m/18.71 cm	
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out (Singling and Pruning)	Tending operations carried out (Singling and Pruning)	Tending operations carried out (Singling and Pruning)	Tending operations carried out (Singling and Pruning)	
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work, weeding, RFD, earthen bunding	Soil work, weeding, RFD, earthen bunding	Soil work, weeding, RFD, earthen bunding	Soil work, weeding, RFD, earthen bunding	
6.6	Increase in availability of Biomass for local community. Status?	Fuel and fodder	Fuel and fodder	Fuel and fodder	Fuel and fodder	
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on peoples	No direct impact on peoples	No direct impact on peoples	No direct impact on peoples	

7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles)	NO	NO	NO	NO	
8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy	
9	Maintenance of Records					
9.1	Updating of plantation journal	Updated Up to 2017	Updated Up to 2017	Updated Up to 2017	Updated Up to 2017	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding, soil works, as per calendar operations	Instructed to take up circular weeding, soil works, as per calendar operations	Instructed to take up circular weeding, soil works, as per calendar operations	Instructed to take up circular weeding, soil works, as per calendar operations	
10	Project Constraints/Limitations					
10.1	Constraints faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem	Labour Problem	
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.,?					
11.1	Any scope for improving the project output?	YES	YES	YES	YES	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, local people feel to be planted local fruit variety plants	Yes, local people feel to be planted local fruit variety plants	Yes, local people feel to be planted local fruit variety plants	Yes, local people feel to be planted local fruit variety plants	
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	
13	Over all Grading/ Rating	Excellent	Excellent	Excellent	Excellent	
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	

EVALUATION FORMAT OF YERRAGONDAPALEM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : MARKAPUR

NAME OF THE RANGE : Y. PALEM

NAME OF THE COMPARTMENT		177	177
S.No.	NAME OF THE BEAT	NAIDUPALEM	NAIDUPALEM
1	GPS Coordinates	UTTASAMGAM KUNTA N 16.06.906E 79.44.542	UTTASAMGAM KUNTA N 16.06.924E 79.44.125
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	35 Ha	35 Ha
5	Choice of Tree Species	<i>Azadirachta indica</i> , <i>Syzygium cumini</i> <i>Holoptelea Integrifolia</i>	<i>Azadirachta indica</i> , <i>Syzygium cumini</i> <i>Holoptelea Integrifolia</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm3, Pitting, 3x3 m2, spaced planting was done	45 cm3, Pitting, 3x3 m2, spaced planting was done
6.3.1	Survival Percentage	96 %	97 %
6.3.2	Average height/Girth	3.5 m/18.71 cm	3.5 m/18.71 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out (Singling, Pruning)	Tending operations carried out (Singling and Pruning)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work, weeding, RFD, earthen bunding	Soil work, weeding, RFD, earthen bunding
6.6	Increase in availability of Biomass for local community. Status?		
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on peoples	No direct impact on peoples
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc..)	NO	NO

8	Health of raised plantation	Healthy	Healthy	Healthy
9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding, soil works, as per calendar operations	Instructed to take up circular weeding, soil works, as per calendar operations	Instructed to take up circular weeding, soil works, as per calendar operations
10	Project Constraints/Limitations			
10.1	Constraints faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow funds	Smooth flow funds	Smooth flow funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	YES	YES	YES
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Over all Grading/ Rating	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF YERRAGONDAPALEM RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

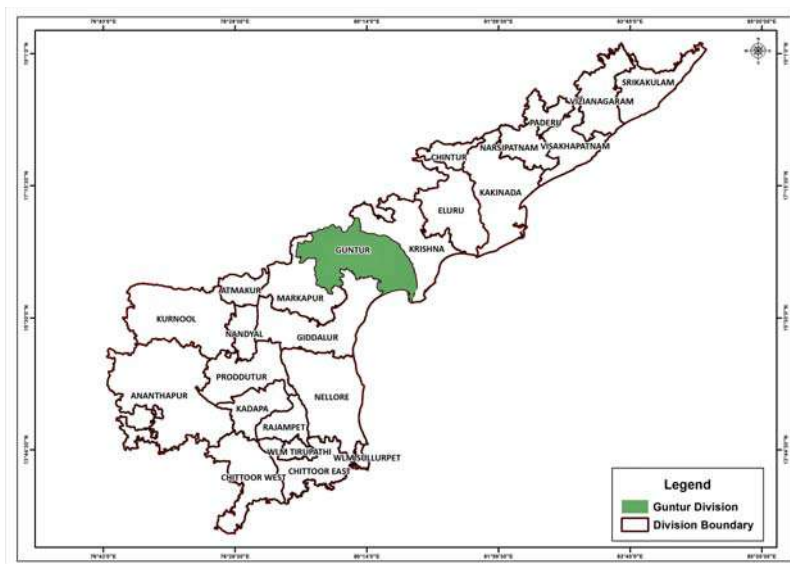
NAME OF THE DIVISION : MARKAPUR

NAME OF THE RANGE : DORNAL

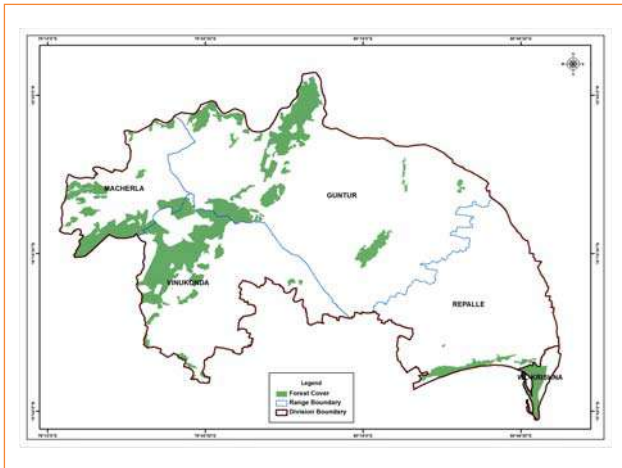
S.No.	NAME OF THE COMPARTMENT	CA	CA
	NAME OF THE BEAT	CHILAKACHERLA	CHILAKACHERLA
1	GPS Coordinates	N 15.54.000E 79.59.525	N 15.53.992E 79.59.578
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	10 Ha	10 Ha
5	Choice of Tree Species	<i>Hardwickia binata</i> , <i>Ficus religiosa</i> , <i>Feronia elephantum</i>	<i>Hardwickia binata</i> , <i>Ficus religiosa</i> , <i>Feronia elephantum</i>
6	Qualitative Assessment		
6.1	Suitability of area	Highly Suitable	Highly Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done	45 cm ³ , Pitting, 3x3 m ² , spaced planting was done
6.3.1	Survival Percentage	58 %	43 %
6.3.2	Average height/Girth	3 m/5.27 cm	3 m/5.27 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out (Singling)	Tending operations carried out (Singling)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work Weeding, Earthen Bonding	Soil Work Weeding, Earthen Bonding
6.6	Increase in availability of Biomass for local community. Status?	No	No
6.7	Improvement in quality of life of people due to risen plantation	No direct impact on peoples	No direct impact on peoples
7	Protection works like fencing etc.,		
7.1	Protection measures against Biotic Pressure (Cattles etc)	Trenching	Trenching
8	Health of raised plantation	Healthy	Healthy

9	Maintenance of Records			
9.1	Updating of plantation journal	Updated up to 2017	Updated up to 2017	Updated up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding, soil work, as per calendar operations	circular weeding, soil work, as per calendar operations	
10	Project Constraints/Limitations			
10.1	Constraints faced by the authorities, if any?	No	No	
10.2	Source of funds	CAMPA	CAMPA	
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.,?			
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local people feel to be planted local fruit varieties	Yes, Local people feel to be planted local fruit varieties	
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance & other issues	Journal should be Updated	Journal should be Updated	
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	
13	Over all Grading/ Rating	Average	Poor	
14	Any other information about the plantation	Lowest Rainfall, Average Maintenance	Lowest Rainfall, Average Maintenance	

MONITORING REPORT GUNTUR FOREST DIVISION

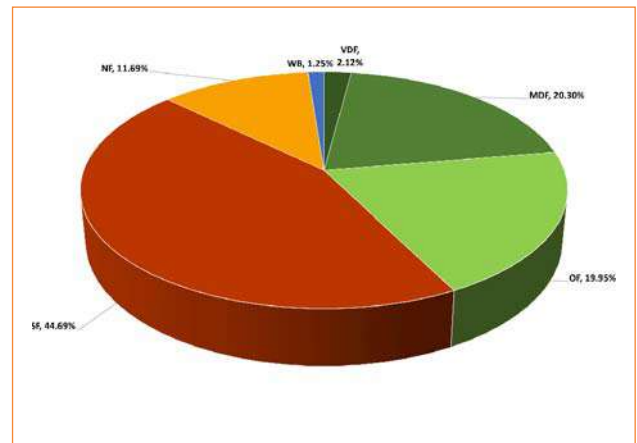


GUNTUR FOREST DIVISION



Guntur is Administrative headquarters of the district in coastal Andhra Pradesh Region, which is the largest town in terms of area and population. It has around 100 km of Bay of Bengal Coastal line and situated on the right bank of Krishna river. It is bordering with Prakasham District on the south and in the west with Telangana State. The total geographical area of the district is 11391 Km² with a population of 4,889,230 (2011 census) Guntur Forest Division comprises the entire district and lies in the south-eastern part of Prakasham district (latitudes 15° 42' 13.68" and 16° 49' 23.52" N and longitudes 79° 12' 34.56" and 80° 54' 16.92" E). The geographical area of the division is 10623.19 Km².

Figure 1: Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

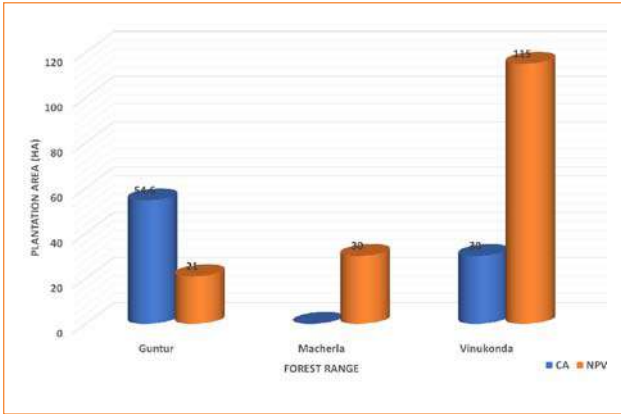
Guntur Division comprises four forest ranges namely Guntur, Macherla, Repalle & Vinukonda. For the year of 2015-16, Guntur Division has taken up plantation work for an area of 250.6 ha covering three out of four ranges namely Guntur (75.6 ha + 7 km), Macherla (30 ha)/Vinukonda (145 ha + 10 km) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling method, the total area was partially enumerated within 22 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Guntur	Mixed	<i>Azadirachta indica</i> <i>Pongamia pinnata</i> <i>Ficus benghalensis</i> <i>Terminalia arjuna</i> <i>Bauhinia racemose</i> <i>Holoptelea integrifolia</i> <i>Alstonia scholaris</i> <i>Hardwickia binata</i> <i>Anthocephalus cadamba</i> <i>Syzygium cumini</i>	54.6+7 km	21	High	81.2	84	2.39	3.771
Macherla	Mixed	<i>Holoptelea integrifolia</i> <i>Syzygium cumini</i>		30	Moderate	-	75	2	10.476
Vinukonda	Mixed	<i>Azadirachta indica</i> , <i>Syzygium cumini</i> <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i> <i>Terminalia arjuna</i> <i>Tectona grandis</i> <i>Pongamia pinnata</i>	30+10 km	115	High	87	83	3.54	11.339

Plantation area

In the division, maximum was planted in Vinukonda forest range and minimum was planted in Macherla forest range.

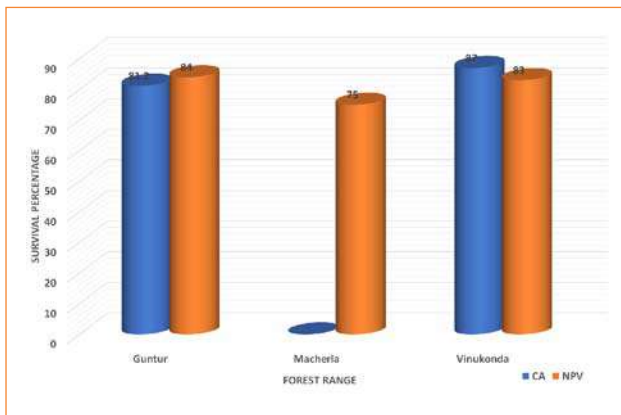
Figure 2: Plantation area of Guntur forest division.



Survival percentage

The survival percentage is maximum in Vinukonda forest range which is having 85%, minimum in Macherla range which is having 75%.

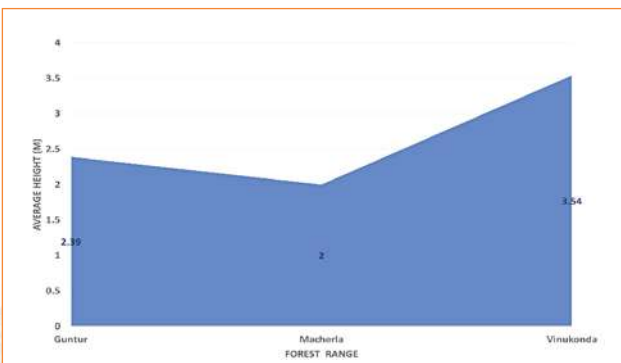
Figure 3: Survival percentage of the plantations



Average height

In the division, most of the plantations were healthy and maximum growth was observed in Vinukonda range with an average height of 3.54m and minimum growth was observed in Macherla range with an average height of 2 m.

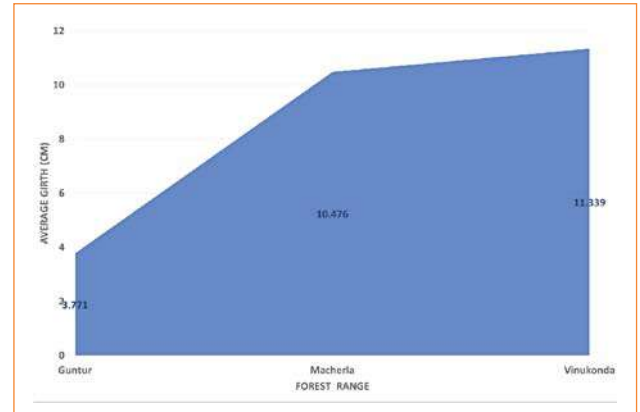
Figure 4: Average Height of the plantations



Average girth

In the division, maximum girth was observed in Vinukonda range with an average of 11.34 cm and minimum was observed in Guntur range with an average of 3.77 cm.

Figure 5: Average girth of the plantations



Observations

In the division, in compartment No.128 in Enamadala of Guntur Forest range plantations were observed to be the best plantations.

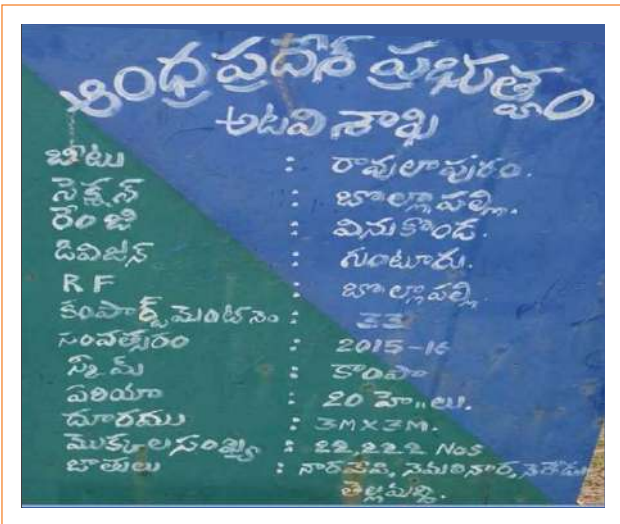
- Survival percentage was rated overall very good with an average of 80.86% which is ranging from 75% - 85% in all the CAMPA plantations.
- Site quality was taken as criteria for choice of species and was suitable to the conditions. The species planted were *Azadirachta indica*, *Syzygium cumini*, *Hardwickia binata*, *Holoptelea integrifolia*, *Pongamia pinnata* which are suitable for coastal and inland vegetations.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with spacing of 3m x 3m & 5m x 5m resulted into mixed crop plantations. Cultural operations (cleaning, weeding, and climber cutting) and water harvesting structures like check dams & contour trenching were taken up at the initial stages.
- Average height of important tree species was good with an average of 2.64 m which is ranging from 2 to 3.54m. Tending operations (pruning, singling and thinning) were carried out.
- There is moderate temperatures and good rainfall and climatic conditions had impact on the growth of the plantations, hence the good survival percentage was

observed. It appears that the best plantations were established with favourable climatic conditions along with proper protection measures.

- Plantation journals were maintained in most of the sites and inspection notes were made only at some places.
- Local communities were benefited by gathering fuel wood, fodder and other intangible benefits like water level increase in their wells due to the plantation activities.
- In some plantation sites expected growth conditions were not observed because lack of proper protection

measures. Watch and ward services are suggested for improved the growth.

- CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during initial period of the plantation works and most of the plantations received funds timely without any delay.
- Absence of funds for subsequent maintenance (after third year maintenance) led to less protection against Grazing and damages by animals and human beings.



Plantation board for the year of 2015-16 in Vinukonda range, Guntur division



Mixed species plantation in Vinukonda range, Guntur division



Collar girth measurement of *Syzygium cumini*

EVALUATION FORMAT OF GUNTUR DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE: NELLORE					
NAME OF THE DIVISION : GUNTUR					
S.No.	NAME OF THE RANGE	GUNTUR	MACHERLA	VINUKONDA	
1	GPS Coordinates	N 16.25' E 80.08'	N 16.33 E 79.46	N 16.15' E 79.30'	
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	
4	Plantation Area (in Ha)	75.6Ha+7Kms	30ha	145Ha+10Kms	
5	Choice of Tree Species	<i>Azadirachta indica</i> , <i>Pongamiapinnata</i> , <i>Ficus benghalensis</i> , <i>Terminalia arjuna</i> , <i>Anthocephalus cadamba</i> , <i>Syzygium cumini</i>	<i>Holoptelea integrifolia</i> , <i>Syzygium cumini</i>	<i>Azadirachta indica</i> , <i>Syzygium cumini</i> , <i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Pongamia pinnata</i>	
6	Qualitative Assessment				
6.1	Suitability of area	Highly	Moderate	Highly	
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² , 4x4m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² , 5x5m ² spaced planting was done	
6.3.1	Survival Percentage	82.6%	75%	85%	
6.3.2	Average height / Girth	2.39m / 3.77 cm	2 m / 10.47 cm	3.54 m / 11.33 cm	
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Pruning, Inter ploughing)	Tending operations are carried out (Pruning, Singling)	Tending operations are carried out (Pruning, Singling)	
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work	CCT	Soil Work done	
6.6	Increase in availability of Biomass for the local community. Status?	Fuelwood, Fodder	Fodder	Fodder, Fuel Wood	
6.7	Improvement in quality of life of people due to raising plantation	Indirect benefits	Indirect benefits	No Difference	

7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No change in the quality of life, Watch & Ward only for two years	Watch and ward	Kuchcha fencing, Watch & Ward		
8	The health of raised plantation	Good	Good	Healthy		
9	Maintenance of Records					
9.1	Updating of plantation journal	2017	16-03-2017	Updated up to 2018		
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Yes (DFO)	DFO exactly replaced	Journal was not updated		
10	Project Constraints/Limitations					
10.1	Constraints/Limitations faced by the authorities, if any?	Watch and ward not Available since April-2017	No	NO		
10.2	Source of funds	CAMPA	CAMPA	CAMPA		
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth Flow of funds	Smooth Flow of funds	Smooth Flow of funds		
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?					
11.1	Any scope for improving the project output?	Yes, by improving the maintenance	Improving soil fertility	YES, Funds for Maintenance		
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted		
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance/or any other issues	Watch & ward should be continued Journal Should be update	Good	Journal should be Updated		
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued	Continued	Continued to enhance the quality of Forest/ Tree Coverage		
13	Overall Grading based on survival %	Excellent	Very good	GOOD		
14	Any other information about the plantation	Maintenance Satisfactory	The plantation geology contains rock shells	Good Maintenance		

EVALUATION FORMAT OF GUNTUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : GUNTUR						
NAME OF THE RANGE : GUNTUR						
S.No.	NAME OF THE COMPARTMENT:	115	115	115	115	115
	NAME OF THE BEAT:	ACHAMPET	ACHAMPET	ACHAMPET	ACHAMPET	ACHAMPET
1	GPS Coordinates	Yellareddygunta/ N 16.38 E 80.04	Yellareddygunta/ N 16.38 E 80.04	Yellareddygunta/ N 16.38 E 80.04	Yellareddygunta/ N 16.38 E 80.04	Yellareddygunta/ N 16.38 E 80.04
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	11.1ha	11.1ha	11.1ha	11.1ha	11.1ha
5	Choice of Tree Species	<i>Holoptelea integrifolia</i>	<i>Holoptelea integrifolia</i> <i>Hardwickia binata</i>	<i>Holoptelea integrifolia</i> <i>Hardwickia binata</i>	<i>Holoptelea integrifolia</i> <i>Hardwickia binata</i>	<i>Holoptelea integrifolia</i> <i>Hardwickia binata</i>
6	Qualitative Assessment					
6.1	Suitability of area	Moderately Suitable	Moderately Suitable	Moderately Suitable	Moderately Suitable	Moderately Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	83%	87%	87%	87%	61%
6.3.2	Average height/Girth	2 m/3.77 cm	2.1 m/3.77 cm	2.1 m/3.77 cm	2.1 m/3.77 cm	1.5 m/3.77 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Pruning, Inter Ploughing)	Tending operations are carried out (Pruning, Inter Ploughing)	Tending operations are carried out (Pruning, Inter Ploughing)	Tending operations are carried out (Pruning, Inter Ploughing)	Tending operations are carried out (Pruning, Inter Ploughing)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	one percolation tanks	one percolation tanks	one percolation tanks	one percolation tanks	one percolation tanks
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood, Fodder	Fuel wood, Fodder	Fuel wood, Fodder	Fuel wood, Fodder	Fuel wood, Fodder
6.7	Improvement in quality of life of people due to risen plantation	Life standard got improved	Life standard got improved	Life standard got improved	Life standard got improved	Life standard got improved
7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No improvement in quality no watch & ward at all of life	No improvement in quality no watch & ward at all of life	No improvement in quality no watch & ward at all of life	No improvement in quality no watch & ward at all of life	No improvement in quality no watch & ward at all of life

8	Health of raised plantation	Good	Good	Good	Good
9	Maintenance of Records				
9.1	Updating of plantation journal	Up to 2017	Up to 2017	Up to 2017	Up to 2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Yes(DFO, CF)	Yes(DFO, CF)	Yes(DFO, CF)	Yes(DFO, CF)
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	No constraints	No constraints	No constraints	No constraints
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	Yes, by improving the maintenance	Yes, by improving the maintenance	Yes, by improving the maintenance	Yes, by improving the maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Update the plantation Journal	Update the plantation Journal	Update the plantation Journal	Update the plantation Journal
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued	Continued	Continued	Continued
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Good
14	Any other information about the plantation	Weeding has to be carried out	Weeding has to be carried out	Weeding has to be carried out	Weeding has to be carried out

EVALUATION FORMAT OF GUNTUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : GUNTUR						
NAME OF THE RANGE : GUNTUR						
S.No.	NAME OF THE COMPARTMENT	115	115	128		
	NAME OF THE BEAT	ACHAMPET	ACHAMPET	ENAMADALA		
1	GPS Coordinates	Yellareddygunta/ N 16.38 E 80.04	Yellareddygunta/ N 16.38 E 80.04	Fongafale/ N 16.16 E 080.19		
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest		
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation		
4	Plantation Area (in Ha)	11.1ha	11.1ha	20ha		
5	Choice of Tree Species	<i>Holoptelea integrifolia</i> <i>Hardwickia binata</i>	<i>Holoptelea integrifolia</i> <i>Hardwickia binata</i>	<i>Holoptelea integrifolia</i> <i>Alistonia scholaris (died)</i>		
6	Qualitative Assessment					
6.1	Suitability of area	Moderately Suitable	Moderately Suitable	Moderately Suitable		
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done		
6.3.1	Survival Percentage	96%	77%	98%		
6.3.2	Average height/Girth	2 m/3.77 cm	1.9 m/3.77 cm	2.2 m/3.77 cm		
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Pruning, interploughing)	Tending operations are carried out (Pruning, interploughing)	Tending operations are carried out (Pruning, interploughing)		
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	one percolation tank	one percolation tank	percolation tank		
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood, Fodder	Fuel wood, Fodder	Fuel wood, Fodder		
6.7	Improvement in quality of life of people due to risen plantation	2 Villages, 1200 House Holds	2 Villages, 1200 House Holds	2 Villages, 1200 House Holds		
7	Protection works like fencing etc..,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No improvement in quality no watch & ward at all of life	No improvement in quality no watch & ward at all of life	No difference in quality of life Watch & Ward only for two years		

8	Health of raised plantation	Good	Good	Healthy
9	Maintenance of Records	Good	Good	Healthy
9.1	Updating of plantation journal	up to 2017	up to 2017	up to 2015
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Yes (DFO, CF)	Yes (DFO, CF)	Yes (DFO)
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?	No constraints	No constraints	Watch and ward not Available since april-2017
10.2	Source of funds	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?	Yes, by improving the maintenance	Yes, by improving the maintenance	Yes, by improving the maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues	Update the plantation Journal	Update the plantation Journal	Watch & ward should be continued Journal Should be update
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued	Continued	Continued
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent
14	Any other information about the plantation	Weeding has to be carried out	Weeding has to be carried out	Weeding has to be carried out

EVALUATION FORMAT OF GUNTUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : GUNTUR						
NAME OF THE RANGE : GUNTUR						
S.No.	NAME OF THE COMPARTMENT	128	128	128	128	128
	NAME OF THE BEAT:	ENAMADALA	ENAMADALA	ENAMADALA	ENAMADALA	ENAMADALA
1	GPS Coordinates	Bongaralu/ N 16.16 E 080.19	Bongaralu/ N 16.16 E 080.19	Bongaralu/ N 16.16 E 080.19	Bongaralu/ N 16.16 E 080.19	Bongaralu/ N 16.16 E 080.19
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20ha	20ha	20ha	20ha	20ha
5	Choice of Tree Species	<i>Holoptelea integrifolia</i>	<i>Holoptelea integrifolia</i>	<i>Holoptelea integrifolia</i>	<i>Holoptelea integrifolia</i>	<i>Holoptelea integrifolia</i>
6	Qualitative Assessment					
6.1	Suitability of area	Highly	Highly	Highly	Highly	Highly
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	99%	94%	94%	97%	97%
6.3.2	Average height/Girth	2 m/3.77 cm	2.2 m/3.77 cm	2.2 m/3.77 cm	2.4 m/3.77 cm	2.4 m/3.77 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Pruning, interploughing)	Tending operations are carried out (Pruning, inter ploughing)	Tending operations are carried out (Pruning, inter ploughing)	Tending operations are carried out (Pruning, interploughing)	Tending operations are carried out (Pruning, interploughing)
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	percolation tanks	percolation tanks	percolation tanks	percolation tanks	2 percolation tanks
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood, Fodder	Fuel wood, Fodder	Fuel wood, Fodder	Fuel wood, Fodder	Fuel wood, Fodder
6.7	Improvement in quality of life of people due to risen plantation	3 Villages, 1200 House holds	3 Villages, 1200 House holds	3 Villages, 1200 House holds	3 Villages, 1200 House holds	3 Villages, 1200 House holds
7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No difference in quality of life Watch & Ward only for two years	No difference in quality of life Watch & Ward only for two years	No difference in quality of life Watch & Ward only for two years	No difference in quality of life Watch & Ward only for two years	No difference in quality of life Watch & Ward only for two years

8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Nov-15	Nov-15	Nov-15	Nov-15
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Yes (DFO)	Yes (DFO)	Yes (DFO)	Yes (DFO)
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	Watch and ward not Available since april-2017	Watch and ward not Available since april-2017	Watch and ward not Available since april-2017	Watch and ward not Available since april-2017
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc				
11.1	Any scope for improving the project output?	Yes, by improving the maintenance	Yes, by improving the maintenance	Yes, by improving the maintenance	Yes, by improving the maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, local fruit varieties should be planted	Yes, local fruit varieties should be planted	Yes, local fruit varieties should be planted	Yes, local fruit varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Watch & ward should be continued Journal Should be update	Watch & ward should be continued Journal Should be update	Watch & ward should be continued Journal Should be update	Watch & ward should be continued Journal Should be update
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued	Continued	Continued	Continued
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Improve the Maintenance of plantation	Improve the Maintenance of plantation	Improve the Maintenance of plantation	Improve the Maintenance of plantation

EVALUATION FORMAT OF GUNTUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : GUNTUR						
NAME OF THE RANGE : GUNTUR						
S.No.	NAME OF THE COMPARTMENT:	128	128	128	128	128
	NAME OF THE BEAT:	ENAMADALA	ENAMADALA	ENAMADALA	ENAMADALA	ENAMADALA
1	GPS Coordinates	Bongaralu/ N 16.16 E 080.19	Bongaralu/ N 16.16 E 080.19	Bongaralu/ N 16.16 E 080.19	Bongaralu/ N 16.16 E 080.19	Back side of river college nallavagu/ 16.15 E 080.19
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20ha	20ha	20ha	14ha	14ha
5	Choice of Tree Species	<i>Terminaliaarjuna</i> <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i>	<i>Eucalyptus tereticornis</i>		<i>Azadirachta indica</i> , <i>Bauhinia racemosa</i> , <i>Ficus benghalensis</i> , <i>Syzygium cumini</i> <i>Terminalia arjuna</i>	
6	Qualitative Assessment					
6.1	Suitability of area	Highly	Highly	Highly	Moderately Suitable	
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	
6.3.1	Survival Percentage	85%	100%	100%	93%	
6.3.2	Average height/Girth	1.7 m/3.77 cm	5.5 m/3.77 cm	5.5 m/3.77 cm	4.5 m/3.77 cm	
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out (Pruning, interploughing)	Tending operations are carried out (Pruning, interploughing)	Tending operations are carried out (Pruning, interploughing)	Tending operations are carried out (Pruning)	
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	2 percolation tanks	2 percolation tanks	2 percolation tanks	Soil work	
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood, Fodder	Fuel wood, Fodder	Fuel wood, Fodder	Fuel wood, Fodder	
6.7	Improvement in quality of life of people due to risen plantation	Life standard got improved	Life standard got improved	Life standard got improved	Life standard got improved	

7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No difference in quality of life Watch & Ward only for two years	No difference in quality of life Watch & Ward only for two years	No difference in quality of life Watch & Ward only for two years	No difference in quality of life Watch & Ward only for two years	No difference in quality of life Watch & Ward only for two years
8	Health of raised plantation	Good	Good	Good	Good	Good
9	Maintenance of Records					
9.1	Updating of plantation journal	Updated up to 2016-17	Updated up to 2016-17	Updated up to 2016-17	Updated up to 2016-17	Updated up to 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Suggested for causalities replacement -DFO	Suggested for causalities replacement -DFO	Suggested for causalities replacement -DFO	Suggested for causalities replacement -DFO	Suggested for causalities replacement -DFO
10	Project Constraints/Limitations					
10.1	Constraints/Limitations faced by the authorities, if any?	Watch and ward not available since april-2017	Watch and ward not available since april-2017	Watch and ward not available since april-2017	Watch and ward not available since april-2017	Watch and ward not available since april-2017
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where the delay arises?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?					
11.1	Any scope for improving the project output?	Yes, by improving the maintenance	Yes, by improving the maintenance	Yes, by improving the maintenance	Yes, by improving the maintenance	Yes
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, local fruit varieties should be planted	Yes, local fruit varieties should be planted	Yes, local fruit varieties should be planted	Yes, local fruit varieties should be planted	Yes, local fruit varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance/or any other issues	should be continued Journal Should be update	should be continued Journal Should be update	should be continued Journal Should be update	should be continued Journal Should be update	Watch & ward should be continued Journal Should be update
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued	Continued	Continued	Continued	Continued
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Improve the Maintenance of plantation	Improve the Maintenance of plantation	Improve the Maintenance of plantation	Improve the Maintenance of plantation	Maintenance Satisfactory

EVALUATION FORMAT OF GUNTUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : GUNTUR

NAME OF THE RANGE : GUNTUR

S.No.	NAME OF THE COMPARTMENT	128	128	128
	NAME OF THE BEAT	ENAMADALA	ENAMADALA	ENAMADALA
1	GPS Coordinates	Back side of river college nallavagu/ 16.15 E 080.19	Back side of river college nallavagu/ 16.15 E 080.19	Back side of river college nallavagu/ 16.15 E 080.19
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	14ha	14ha	14ha
5	Choice of Tree Species	<i>Azadirachta indica</i> , <i>Bauhinia racemosa</i> , <i>Ficus benghalensis</i> , <i>Syzygium cumini</i> <i>Terminalia arjuna</i>	<i>Azadirachta indica</i> , <i>Bauhinia racemosa</i> , <i>Syzygium cumini</i> <i>Terminalia arjuna</i>	<i>Azadirachta indica</i> , <i>Bauhinia racemosa</i> , <i>Ficus benghalensis</i> , <i>Syzygium cumini</i> <i>Terminalia arjuna</i>
6	Qualitative Assessment			
6.1	Suitability of area	Moderately Suitable	Moderately Suitable	Moderately Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 4x4 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² spaced planting was done
6.3.1	Survival Percentage	35.5%	78.13%	17.187%
6.3.2	Average height/Girth	2 m/3.77 cm	2 m/3.77 cm	2 m/3.77 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work	Soil work	Soil work
6.6	Increase in availability of Biomass for local community. Status?	Fuel wood, Fodder	Fuel wood, Fodder	Fuel wood, Fodder
6.7	Improvement in quality of life of people due to risen plantation	Living standard got improved	Living standard got improved	Living standard got improved

7	Protection works like fencing etc.,				
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No difference in quality of life Watch & Ward only for two years	No difference in quality of life Watch & Ward only for two years	No difference in quality of life Watch & Ward only for two years	No difference in quality of life Watch & Ward only for two years
8	Health of raised plantation	Good	Good	Good	Good
9	Maintenance of Records				
9.1	Updating of plantation journal	Aug-2015	Aug-2015	Aug-2015	Aug-2015
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No observations	No observations	No observations	No observations
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	Watch and ward not available since april-2017	Watch and ward not available since april-2017	Watch and ward not available since april-2017	Watch and ward not available since april-2017
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	Yes	Yes	Yes	Yes
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Watch & ward should be continued Journal Should be update	Watch & ward should be continued Journal Should be update	Watch & ward should be continued Journal Should be update	Watch & ward should be continued Journal Should be update
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued	Continued	Continued	Continued
13	Overall Grading on the basis of survival %	Poor	Very good	Poor	Poor
14	Any other information about the plantation	Maintenance Satisfactory	Maintenance Satisfactory	Maintenance Satisfactory	Maintenance Satisfactory

EVALUATION FORMAT OF GUNTUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : GUNTUR	
NAME OF THE RANGE : GUNTUR	
S.No.	NAME OF THE COMPARTMENT
	128
	ENAMADALA
1	GPS Coordinates Back side of RVR college nallavagu/ 16.15 E 080.19
2	Legal Status of Land Reserve Forest
3	Type of Plantation Mixed crop plantation
4	Plantation Area (in Ha) 14ha
5	Choice of Tree Species <i>Azadirachta indica</i> , <i>Pongamia pinnata</i> , <i>Ficus benghalensis</i> , <i>Terminalia arjuna</i>
6	Qualitative Assessment
6.1	Suitability of area Moderately Suitable
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..) 45 cm ³ , Pitting, 4x4m ² spaced planting was done
6.3.1	Survival Percentage 84.35%
6.3.2	Average height/Girth 2.8 m/3.77 cm
6.4	Tending Operations (Singling/pruning & other operations) Tending operations are carried out
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments Soil work
6.6	Increase in availability of Biomass for local community. Status? Fuel wood, Fodder
6.7	Improvement in quality of life of people due to risen plantation Life standard got improved
7	Protection works like fencing etc..
7.1	Protection measures against Biotic Pressure (Cattles etc.) No difference in quality of life Watch & Ward only for two years

8	Health of raised plantation		Good	Good
9	Maintenance of Records			
9.1	Updating of plantation journal		Aug-15	Aug-15
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)			
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?		Watch and ward not available since april-2017	Watch and ward not available since april-2017
10.2	Source of funds		CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?		Yes	Yes
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues		Watch & ward should be continued Journal Should be update	Watch & ward should be continued Journal Should be update
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?		Continued	Continued
13	Overall Grading on the basis of survival %		Excellent	Excellent
14	Any other information about the plantation		Maintenance Satisfactory	Maintenance Satisfactory

EVALUATION FORMAT OF MACHERLA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : GUNTUR	
NAME OF THE RANGE: MACHERLA	
S.No.	NAME OF THE COMPARTMENT
	59
	MOTUKUR
1	GPS Coordinates N 16.33 E 79.46
2	Legal Status of Land Reserve Forest
3	Type of Plantation Mixed crop plantation
4	Plantation Area (in Ha) 20ha
5	Choice of Tree Species <i>Holoptelea integrifolia, Syzygium cumini</i>
6	Qualitative Assessment
6.1	Suitability of area Moderate
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,) 45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage 75%
6.3.2	Average height/Girth 2 m/3.77 cm
6.4	Tending Operations (Singling/pruning & other operations) Tending operations are carried out
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments CCT
6.6	Increase in availability of Biomass for local community. Status? Fodder
6.7	Improvement in quality of life of people due to risen plantation Standard of living got improved
7	Protection works like fencing etc.,
7.1	Protection measures against Biotic Pressure (Cattles etc.) Watch and ward
8	Health of raised plantation Good

9	Maintenance of Records		
9.1	Updating of plantation journal		16-03-2017
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		DFO exactly replaced
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?		No
10.2	Source of funds		CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?		Yes, Funds for the maintenance id required
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes, local fruit varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues		Good
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?		Continued
13	Overall Grading on the basis of survival %		Very good
14	Any other information about the plantation		The plantation geology contains small problems and rock shell

EVALUATION FORMAT OF VINUKONDA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : GUNTUR						
NAME OF THE RANGE: VINUKONDA						
S.No.	NAME OF THE COMPARTMENT:	29	32	25		
	NAME OF THE BEAT:	MAIDUPALEM	KANDRIKA	THANGIRALA		
1	GPS Coordinates	S.R.P. THANDA/N 16.10.08E 79.38.54	KANDRIKA/N 16.10.33E 79.34.44	NEELAGANGAVARAM/N 16.09.39E 79.35.31		
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST		
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation		
4	Plantation Area (in Ha)	20 Ha	20 Ha	20 Ha		
5	Choice of Tree Species	<i>Holoptelea integrifolia</i> , <i>Azadirachta indica</i> , <i>Hardwickia binata</i> ,	<i>Syzygium cumini</i> <i>Azadirachta indica</i> , <i>Hardwickia binata</i>	<i>Hardwickia binata</i> , <i>Terminalia arjuna</i> , <i>Azadirachta indica</i>		
6	Qualitative Assessment					
6.1	Suitability of area	Highly	Highly	Highly		
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done		
6.3.1	Survival Percentage	80 %	85 %	90 %		
6.3.2	Average height/Girth	2 m/11.33 cm	4 m/11.33 cm	3 m/11.33 cm		
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out		
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work, Ploughing Weeding	Soil Works, Weeding,	Soil Work Done		
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom Sticks	Fodder, Fuel Wood	Fodder, Broom Sticks		
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	No Difference		

7	Protection works like fencing etc.,				
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Kuchcha fencing, Watch & Ward	Healthy	Updated up to 2016-17	Kuchcha fencing, Watch & Ward
8	Health of raised plantation		Healthy		Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated up to 2016-17		Updated up to 2016-17	Updated up to 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No journal		No journal	No journal
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	NO		NO	NO
10.2	Source of funds	CAMPA		CA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds		Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc.?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance		YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, local fruit varieties should be planted		Yes, local fruit varieties should be planted	Yes, local fruit varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated		Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage		Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent		Excellent	Excellent
14	Any other information about the plantation	Good Maintenance		Good Maintenance	Good Maintenance

EVALUATION FORMAT OF VINUKONDA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : GUNTUR

NAME OF THE RANGE: VINUKONDA

S.No.	NAME OF THE COMPARTMENT:	31	31	52
	NAME OF THE BEAT:	K. CHERVU	K. CHERVU	TANGEDU MALLI
1	GPS Coordinates	BRIDGE THANDA/N 16.13.03E 79.58.89	BRIDGE THANDA/N 16.13.03E 79.58.89	GURAVAYA PALEM/N 16.15.02E 79.03.36
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20 Ha	20 Ha	20 Ha
5	Choice of Tree Species	<i>Syzygium cumini</i> , <i>Azadirachta indica</i> , <i>Hardwickia binata</i>	<i>Syzygium cumini</i> <i>Azadirachta indica</i> , <i>Hardwickia binata</i>	<i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Terminalia arjuna</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly	Highly	Highly
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	91 %	87 %	90 %
6.3.2	Average height/Girth	2 m/11.33 cm	3 m/11.33 cm	3 m/11.33 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work Done	Soil Work Done	Soil Work, Weeding, Ploughing
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Fuel Wood	Fodder, Fuel Wood	Fodder, Broom Sticks
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	No Difference

7	Protection works like fencing etc.,				
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Kuchcha fencing, Watch & Ward	Kuchcha fencing, Watch & Ward	Fencing, Watch & Ward	
8	Health of raised plantation	Healthy	Healthy	Healthy	
9	Maintenance of Records				
9.1	Updating of plantation journal			Updated up to 2017-18	
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No journal	No journal	No journal	
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	NO	
10.2	Source of funds	CAMPA	CAMPA	CAMPA	
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, people need local fruit varieties	Yes, people need local fruit varieties	Yes, people need local fruit varieties	
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Lowest Rainfall	

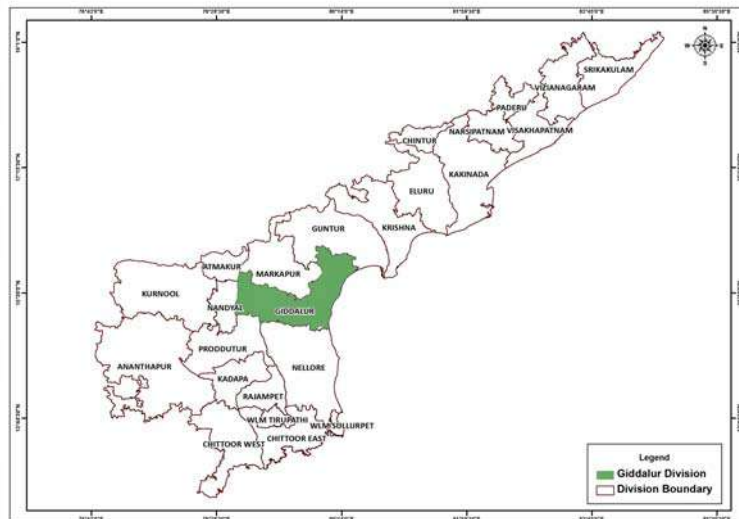
EVALUATION FORMAT OF VINUKONDA RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION : GUNTUR						
NAME OF THE RANGE: VINUKONDA						
S.No.	NAME OF THE COMPARTMENT:	52	36	36	36	36
	NAME OF THE BEAT:	TANGEDU MALLI	KAREMPUDI	KAREMPUDI	KAREMPUDI	KAREMPUDI
1	GPS Coordinates	GURAVAYA PALEM/N 16.15.02E 79.03.36	KAREMPUDI/N 16.34.35E 79.60.69	LALLIPURAM/N 16.21.22E 79.42.47	RESERVE FOREST	RESERVE FOREST
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20 Ha	10 Ha	10 Ha	10 Ha	10 Ha
5	Choice of Tree Species	<i>Hardwickia binata</i> , <i>Holoptelea integrifolia</i> , <i>Terminalia Arjuna</i>	<i>Terminalia arjuna</i> , <i>Azadirachta indica</i> , <i>Pongamia pinnata</i> , <i>Tectona grandis</i>	<i>Pongamia pinnata</i> , <i>Azadirachta indica</i> , <i>Terminalia arjuna</i> ,		
6	Qualitative Assessment					
6.1	Suitability of area	Highly	Moderately fair	Highly	Highly	Highly
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 5x5m ² spaced planting was done	45 cm ³ , Pitting, 5x5m ² spaced planting was done	45 cm ³ , Pitting, 5x5m ² spaced planting was done	45 cm ³ , Pitting, 5x5m ² spaced planting was done
6.3.1	Survival Percentage	80 %	70 %	70 %	62 %	62 %
6.3.2	Average height/Girth	3 m/11.33 cm	2 m/11.33 cm	2 m/11.33 cm	9 m/11.33 cm	9 m/11.33 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work, Weeding, Ploughing	Soil Work, Weeding, Ploughing	Soil Work, Weeding, Ploughing	Soil Work Done	Soil Work Done
6.6	Increase in availability of Biomass for local community. Status?	Fodder, Broom Sticks	Fodder, Fuel Wood	Fodder, Fuel Wood	Fodder, Fuel Wood	Fodder, Fuel Wood
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	No Difference	No Difference	No Difference

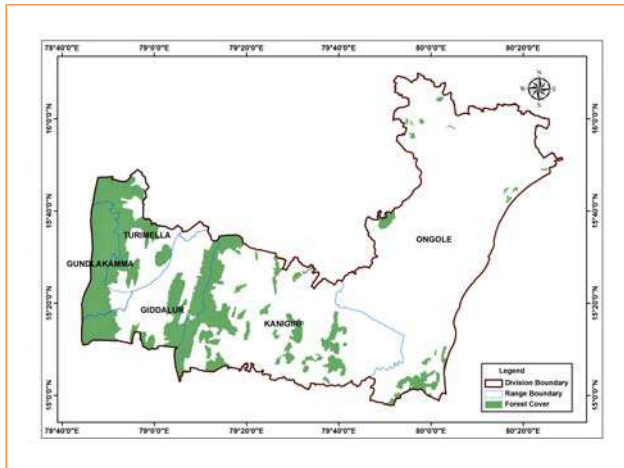
7	Protection works like fencing etc..				
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Kuchcha fencing, Watch & Ward	Kuchcha fencing, Watch & Ward	Kuchcha fencing, Watch & Ward	Kuchcha fencing, Watch & Ward
8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated Up To 2017-18	Updated Up To 2017-18	Updated Up To 2017-18	Updated Up To 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	No Journal	No Journal	No Journal	No Journal
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	NO	NO
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest	Continued to Enhance the quality of Forest	Continued to Enhance the quality of Forest
13	Overall Grading on the basis of survival %	Excellent	Very Good	GOOD	GOOD
14	Any other information about the plantation	Lowest Rainfall	Lowest Rainfall	Lowest Rainfall	Good Maintenance

MONITORING REPORT

GIDDALUR FOREST DIVISION

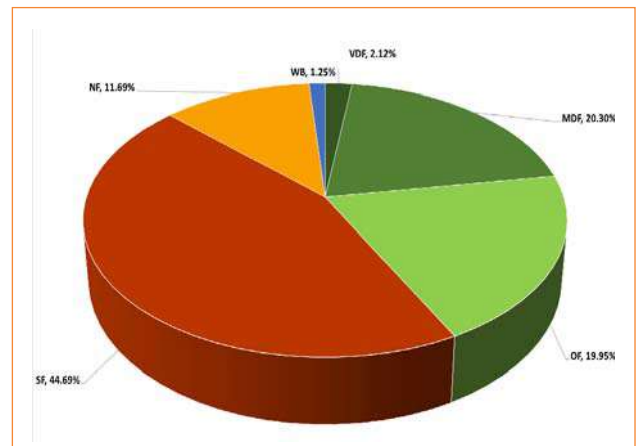


GIDDALUR FOREST DIVISION



Prakasham District is the third-largest district in Andhra Pradesh state which is part of the coastal Andhra Pradesh. It is located on the western shore of Bay of Bengal bordering with Guntur district on the North, Kurnool district on the west and Kadapa and Nellore districts on the South. The total geographical area of the district is 17,626 km² with a population of 3.39 million (2011 Census). Giddalur Forest division (Latitudes 14° 57' 46" and 16° 09' 48" N and longitudes 78° 44' 16" and 80° 28' 35" E) is part of Guntur forest circle with the total forest area of 2190.34 Km² which is 59.04% of the area of the district.

Figure 1: Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

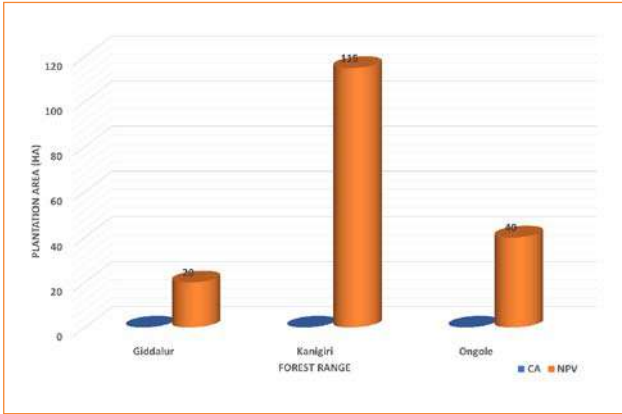
Giddalur Division comprises six forest ranges namely Giddalur, Gundlakamma, Kanigiri, Ongole, Special duty range & Turumella. For the year of 2015-16, Giddalur Division has taken up plantation work over an area of 175 ha covering three out of six ranges namely Giddalur (20 ha), Kanigiri (115 ha) & Ongole (40 ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling Method, the total area was partially in 22 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Giddalur	Mixed	<i>Chloroxylon swietenia</i> <i>Albizia odoratissima</i> <i>Holoptelea integrifolia</i> <i>Syzygium cumini</i>	-	20	Moderate	-	67.27	2	1.4551
Kanigiri	Mixed	<i>Azadirachta indica</i> <i>Albizia odoratissima</i> <i>Hardwickia binata</i> <i>Holoptelea integrifolia</i> <i>Chloroxylon swietenia</i> <i>Syzygium cumini</i>	-	115	High	-	86.59	3	1.715
Ongole	Mixed	<i>Hardwickia binata</i> <i>Syzygium cumini</i> <i>Terminalia arjuna</i>	-	40	High	-	75.5	4.6	2.177

Plantation area

In the division, maximum was planted in Kanigiri forest range and minimum was planted in Giddalur forest range.

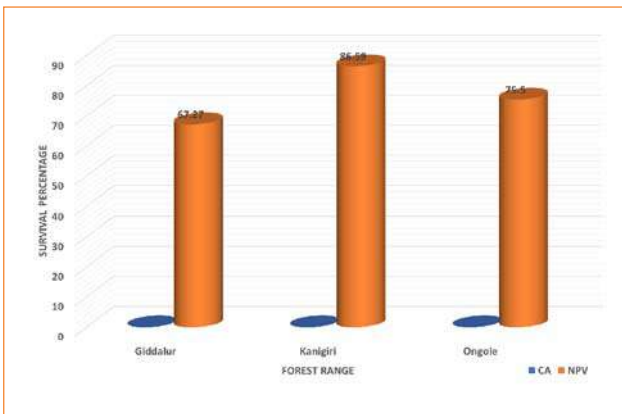
Figure 2: Planation area of the Giddalur Forest Division



Survival percentage

The survival percentage is maximum in Kanigiri which is having 86.59 % and minimum in Giddalur range which is having 67.27%.

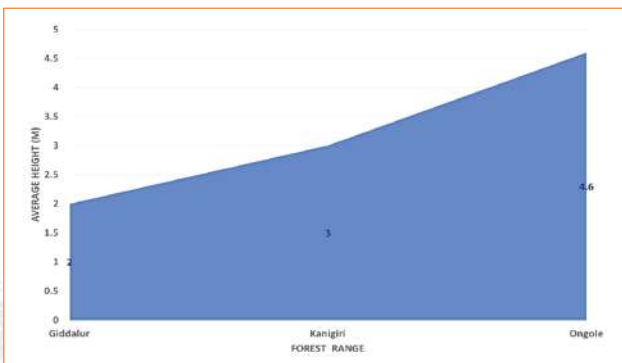
Figure 3: Survival percentage of the plantations



Average height

In the division, most of the plantations were healthy and maximum growth was observed in Ongole range with an average height of 4.6m and minimum growth was observed in Giddalur range with an average height of 2 m.

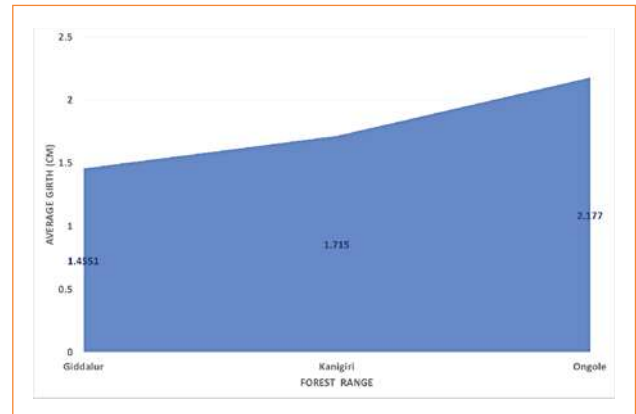
Figure 4: Average height of the plantations



Average girth

In the division, maximum girth was observed in Ongole range with an average of 2.177cm and minimum was observed in Giddalur range with an average of 1.45cm.

Figure 5: Average girth of the plantations



Observations

In the division, P C Palli compartment No.446 of Kanigiri Forest range plantations were observed to be the best plantations.

- Survival percentage was rated overall very good with an average of 76.45% ranging from 67.2% - 86.5% in most of the plantations.
- Site quality was taken as criteria for choice of species and was suitable to the conditions. The species planted were *Chloroxylon swietenia*, *Albizia odoratissima*, *Holoptelea integrifolia*, *Syzygium cumini* and *Azadirachta indica* which are suitable for tropical dry deciduous vegetations.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with a spacing of 3m x 3m resulted into mixed crop plantations. Cultural operations (cleaning, weeding, and climber cutting) and water harvesting structures like check dams & contour trenching were taken up at the initial stages.
- The average height of important tree species is 3.2 which is ranging from 2 to 4.6m. Bio fencing and social fencing were created to protect plantations from biotic pressure.

- There are moderate temperatures and good rainfall and climatic conditions had an impact on the growth of the plantations, hence the good survival percentage was observed. It appears that the best plantations were established with favourable climatic conditions along with proper protection measures.
- Local communities were benefited by gathering fodder and other intangible benefits like water level increase in their wells due to the plantation activities.
- Plantation journals were maintained in most of the sites and inspecting authorities made some

recommendations such as to take up circular weeding, soil work, as per calendar operation

- No major constrains were observed during plantation activities. CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during initial period of the plantation works and most of the plantations received funds timely without any delay.
- Absence of funds for subsequent maintenance (after third-year maintenance) led to less protection against Grazing and damages by animals and human beings.



Collar girth measurement of *Syzygium cumini*



Collar girth measuring of *Terminalia arjuna*



Hardwickia binata plantation in Kanigiri range, Giddalur division



NTHS plantation board for the year of 2015-16 Kanigiri range, Giddalur division

EVALUATION FORMAT OF GIDDALUR DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : GUNTUR						
NAME OF THE DIVISION : GIDDALUR						
S.No.	NAME OF THE RANGE	GIDDALUR	KANIGIRI	ONGOLE		
1	Site/Location/GPS	N 15.45' E 79.17'	N 15.23' E 79.58'	N 15.31' E 79.54'		
2	Legal Status of Land	Reserve Forest	Reserve Forest	RESERVE FOREST		
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation		
4	Plantation Area (in Ha)	20Ha	115ha	40Ha		
5	Species Planted and Planting techniques	<i>Chloroxylon swietenia</i> , <i>Albiziaodoratissima</i> , <i>Holopteleaintegrifolia</i> , <i>Syzygium cumini</i>	<i>Azadirachta indica</i> <i>Chloroxylon swietenia</i> , <i>Syzygium cumini</i> , <i>Albizia odoratissima</i>	<i>Hardwickia binata</i> , <i>Syzygium cumini</i>		
6	Qualitative Assessment					
6.1	Suitability of areas selected	Moderate	Highly	Highly		
6.2	Assessment of work as seen in the field space planting pit digging, ranging etc.(m)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done		
6.3.1	Survival%	67.27%	86.59%	75.5%		
6.3.2	Average height / Girth	2 m / 1.45 cm	3 m / 1.71 cm	4.6 m / 2.17 cm		
6.4	Singling /pruning/spacing of natural regeneration	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out		
6.5	Soil and Moisture conservation works if taken up and its assessments	No	No	Soil work weeding earth bunding		
6.6	Increase in availability of Biomass (fuel wood, fodder, small timber and NTFPs, etc.) for society	Fodder	Fodder, fuel wood	NTFP's Etc.,		
6.7	Improvement in quality of life of people in project area due to be plantation	There were getting small income	There were getting small income	Improved		

7	Protection works like fencing				
7.1	Protection measures for Biotic pressure	Bio-fencing, watch and ward	Bio-fencing		NO
8	Seedlings Health	Good	Good		Healthy
9	Maintenance of Records				
9.1	updating of plantation journal	2018	2018		2018
9.2	Observations/Comments of the Inspecting officials (CCF, CF, DFO)	CCF	Sub DFO		Instructed to take soil work as per the calendar operation
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the project authorities, if any?	No third maintenance is due	No		Labour Problem
10.2	Flow of funds	CAMPA	CAMPA		CAMPA
10.3	If flow of funds was not smooth, where did the delay arise?	Smoothly flow of funds	Smoothly flow of funds		Smoothly flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Whether there is any scope for improving the project output?	SMC works should be needed to improve, watch and ward	SMC works should be needed for improvement of the plantation		YES, Funds for Maintenance
11.2	Whether the people of the area feel any need to improve any particulars aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted		Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestion for improvement in record maintenance/or any other issue	Good	Good		Journal should be Updated
12.2	Whether the project should be continued/modified/discontinued reasons?	Continued to enhance the quality of forest	Continued to enhance the quality of forest		Continued to Enhance the quality of Forest Cover
13	Overall Grading based on survival %	Good	Excellent		Excellent
14	Any other information about the plantation	The plantation is observed browsing	The overall plantation having good growth and survival expected		Lowest Rainfall

EVALUATION FORMAT OF GIDDALUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: GIDDALUR

NAME OF THE RANGE: GIDDALUR

S.No.	NAME OF THE COMPARTMENT:	595
	NAME OF THE BEAT:	J P CHERVU
1	GPS Coordinates	N 15.45' E 79.17'
2	Legal Status of Land	Reserve Forest
3	Type of Plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20ha
5	Choice of Tree Species	<i>Chloroxylon swietenia</i> , <i>Albizia odoratissima</i> , <i>Holoptelea integrifolia</i> , <i>Syzygium cumini</i>
6	Qualitative Assessment	
6.1	Suitability of area	Moderate
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	67.27%
6.3.2	Average height/Girth	2 m/1.45 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	No
6.6	Increase in availability of Biomass for local community. Status?	Fodder
6.7	Improvement in quality of life of people due to risen plantation	There were getting small income
7	Protection works like fencing etc.,	
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Bio-fencing, watch and ward
8	Health of raised plantation	Good

9	Maintenance of Records		
9.1	Updating of plantation journal		2018
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		CCF
10	Project Constraints/Limitations		
10.1	Constraints/Limitations faced by the authorities, if any?		Constrains in maintenance funds
10.2	Source of funds		CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smoothly, funding period is over
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?		
11.1	Any scope for improving the project output?		SMC works should be needed to improve, watch and ward
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants		
12.1	Suggestions for improvement in record maintenance/or any other issues		Good
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?		Continued
13	Overall Grading on the basis of survival %		Good
14	Any other information about the plantation		The plantation is observed browsing

EVALUATION FORMAT OF KANIGIRI RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: GIDDALUR	
NAME OF THE RANGE: KANIGIRI	
S.No.	NAME OF THE COMPARTMENT:
	423
	MALAPADU
1	GPS Coordinates Malapadu / N 15.24 E 79.67
2	Legal Status of Land Reserve Forest
3	Type of Plantation Mixed crop plantation
4	Plantation Area (in Ha) 20ha
5	Choice of Tree Species <i>Azadirachta indica</i> , <i>Chloroxylon swietenia</i> , <i>Hardwickia binata</i>
6	Qualitative Assessment
6.1	Suitability of area Moderate
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)
6.3.1	Survival Percentage 78.18%
6.3.2	Average height/Girth 3 m/1.71 cm
6.4	Tending Operations (Singling/pruning & other operations) Tending operations are carried out
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments No
6.6	Increase in availability of Biomass for local community. Status? fuel wood
6.7	Improvement in quality of life of people due to risen plantation There were getting small income
7	Protection works like fencing etc..
7.1	Protection measures against Biotic Pressure (Cattles etc.) Bio-fencing
	446
	P.C PALLI
	P.C Palli N 15.22 E 79.49
	Reserve Forest
	Mixed crop plantation
	25ha
	<i>Azadirachta indica</i> , <i>Chloroxylon swietenia</i> , <i>Holoptelea integrifolia</i>
	Highly
	3X3 pit digging
	95%
	3 m/1.71cm
	Tending operations are carried out
	No
	Fodder
	There were getting small income
	Bio-fencing

8	Health of raised plantation		Good	Good
9	Maintenance of Records			
9.1	Updating of plantation journal		26-10-2017	23-03-2018
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)		Sub DFO	CF
10	Project Constraints/Limitations			
10.1	Constraints/Limitations faced by the authorities, if any?		No	No
10.2	Source of funds		CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?		Smoothly funding period over	Smoothly funding period over
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?			
11.1	Any scope for improving the project output?		SMC works should be needed for improvement of the plantation	SMC works should be carried
11.2	Whether people of the area feel that need to improve any particular aspect of the project?		Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants			
12.1	Suggestions for improvement in record maintenance/or any other issues		Good	Good
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?		Continued	Continued
13	Overall Grading on the basis of survival %		Very good	Excellent
14	Any other information about the plantation		The plantation having good survival but some patches have stunted growth observed	The overall plantation having good growth

EVALUATION FORMAT OF ONGOLE RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: GIDDALUR

NAME OF THE RANGE: ONGOLE

S.No.	NAME OF THE COMPARTMENT:	387	387	401
	NAME OF THE BEAT:	POTLURU	POTLURU	GUDLURU
1	GPS Coordinates	Potluru/N 15.046.7532E 79.5846.758	Potluru/N 15.043.9452E 79.5847.0568	Gudluru/N 15.318.36E 79.5345.214
2	Legal Status of Land	Reserve Forest	Reserve Forest	Reserve Forest
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20 Ha	20 Ha	20 Ha
5	Choice of Tree Species	<i>Syzygium cumini</i> <i>Terminalia arjuna</i> , <i>Hardwickia binata</i>	<i>Syzygium cumini</i> <i>Terminalia arjuna</i> , <i>Hardwickia binata</i>	<i>Syzygium cumini</i> <i>Terminalia arjuna</i> , <i>Hardwickia binata</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly	Highly	Highly
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	65 %	65 %	83 %
6.3.2	Average height/Girth	5 m/2.17 cm	5 m/2.17 cm	5 m/2.17 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work and earth bunding	Soil work and earth bunding	Soil work weeding
6.6	Increase in availability of Biomass for local community. Status?	NTPP's etc.,	NTPP's etc.,	NTPP's etc.,
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved

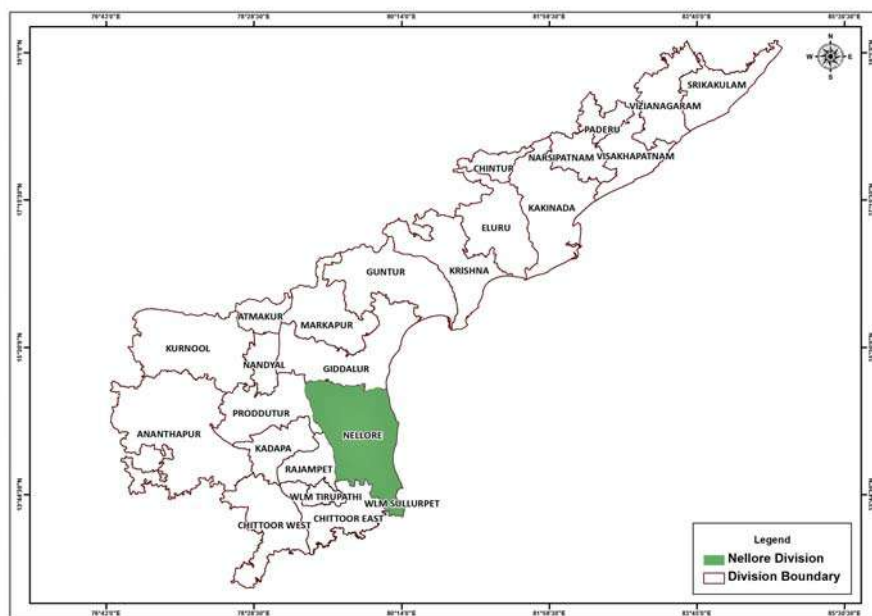
7	Protection works like fencing etc.,				
7.1	Protection measures against Biotic Pressure (Cattles etc.)	NO	NO	NO	NO
8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated Up to 2017-18	Updated Up to 2017-18	Updated Up to 2017-18	Updated Up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take soil work as per the calendar operation	Instructed to take circular weeding soil work as per the calendar operation	Instructed to take circular weeding soil work as per the calendar operation
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem	Labour Problem
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted	Yes, Local varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated, Properly Maintained	Journal should be Updated, Properly Maintained	Journal should be Updated, Properly Maintained	Journal should be Updated, Properly Maintained
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Good	Good	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall	Lowest Rainfall	Lowest Rainfall	Lowest Rainfall

EVALUATION FORMAT OF ONGOLE RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

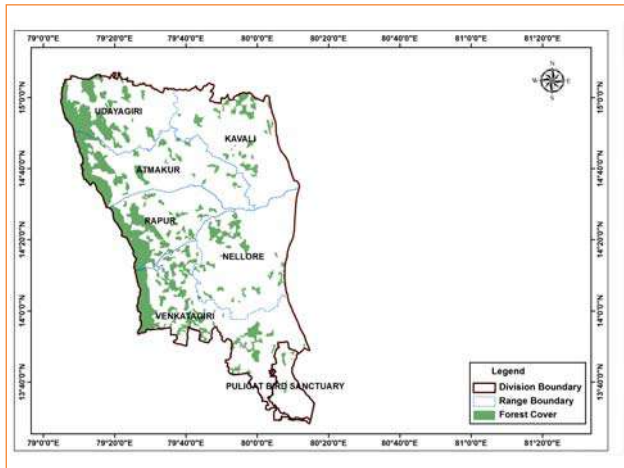
NAME OF THE DIVISION: GIDDALUR						
NAME OF THE RANGE: ONGOLE						
S.No.	NAME OF THE COMPARTMENT	401	401	401	401	401
	NAME OF THE BEAT	GUDLURU	GUDLURU	GUDLURU	GUDLURU	GUDLURU
1	GPS Coordinates	GUDLURU/N 15.31934328E 79.5348.2768	GUDLURU/N 15.415.5620E 79.54.5107	GUDLURU/N 15.320.5416E 79.5367.5268		
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST		
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation		
4	Plantation Area (in Ha)	20 Ha	20 Ha	20 Ha		
5	Choice of Tree Species	<i>Syzygium cumini</i> , <i>Terminalia arjuna</i> , <i>Hardwickia binata</i>	<i>Syzygium cumini</i> , <i>Terminalia arjuna</i> , <i>Hardwickia binata</i>	<i>Syzygium cumini</i> , <i>Terminalia arjuna</i> , <i>Hardwickia binata</i>		
6	Qualitative Assessment					
6.1	Suitability of area	Highly	Highly	Highly		
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done		
6.3.1	Survival Percentage	80 %	80 %	80 %		
6.3.2	Average height/Girth	5 m/2.17 cm	4 m/2.17 cm	4 m/2.17 cm		
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out		
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work weeding	Soil work weeding earth bunding	Soil work weeding earth bunding		
6.6	Increase in availability of Biomass for local community. Status?	NTPP's etc.,	NTPP's etc.,	NTPP's etc.,		
6.7	Improvement in quality of life of people due to risen plantation	Improved	Improved	Improved		

7	Protection works like fencing etc.,				
7.1	Protection measures against Biotic Pressure (Cattles etc.)	NO	NO	NO	NO
8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated Up to 2017-18	Updated Up to 2017-18	Updated Up to 2017-18	Updated Up to 2017-18
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take circular weeding soil work as per the calendar operation	Instructed to take soil work as per the calendar operation	Instructed to take soil work as per the calendar operation	Instructed to take soil work as per the calendar operation
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	Labour Problem	Labour Problem	Labour Problem	Labour Problem
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Local fruit varieties should be planted	Local fruit varieties should be planted	Local fruit varieties should be planted	Local fruit varieties should be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated, Properly Maintained	Journal should be Updated, Properly Maintained	Journal should be Updated, Properly Maintained	Journal should be Updated, Properly Maintained
12.2	Whether the project should be continued/ modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Lowest Rainfall	Lowest Rainfall	Lowest Rainfall	Lowest Rainfall

MONITORING REPORT NELLORE FOREST DIVISION

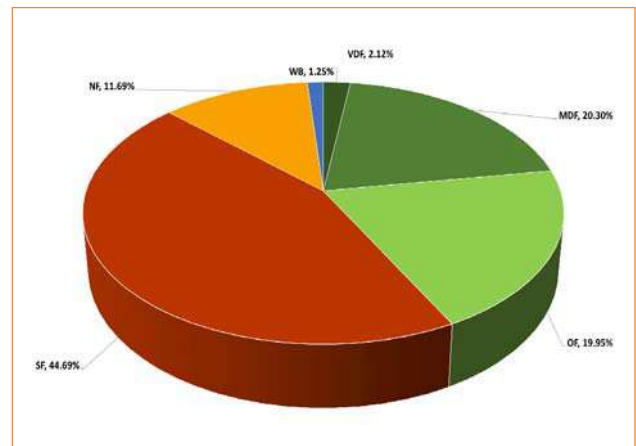


NELLORE FOREST DIVISION



Nellore district is also known as Potti Sreeramulu Nellore District located in Coastal Andhra region of the Andhra Pradesh State. It is bordering with Bay of Bengal in the east, Kadapa District on the west Prakasham District on the North, Chittoor District and Thiruvallur District of Tamilnadu on the South. Nellore Forest division (latitudes 13° 48' 49.58" and 15° 4' 58.59" N and longitudes 79° 6' 4.36" and 80° 14' 46.71" E) is a part of Guntur Forest Circle and covers the entire geographical area of the Nellore District.

Figure 1: Nellore Forest Cover (%)



Source: Andhra Pradesh state forest department annual data 2014-15

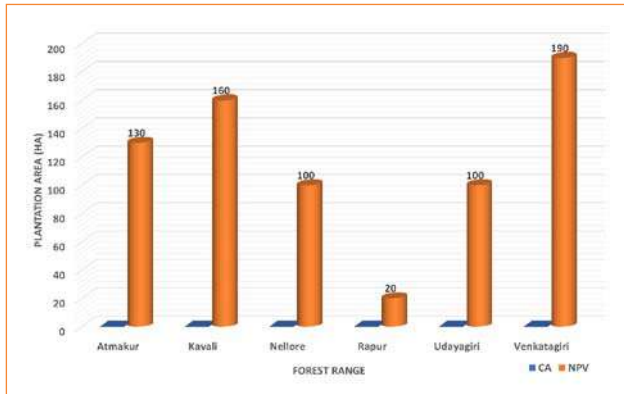
Nellore division comprises seven forest ranges namely Atmakur - Nellore, FSP. RS Rapur, Kavali, Nellore, Rapur, Udayagiri & Venkatagiri. For the year of 2015-16, Nellore division has taken up plantation work over an area of 700 ha covering six out of seven ranges namely Atmakur – Nellore (130 ha), Kavali (160 ha), Nellore (100 ha), Rapur (20 ha), Udayagiri (100 ha) & Venkatagiri (190 ha) under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) plantation activity. By Random Sampling Method, the total area was partially enumerated in 19 sampled plantations.

Range	Type of plantation	Species	Plantation area (ha)		Suitability of area	Survival %		Average height (m)	Average Girth (cm)
			CA	NPV		CA	NPV		
Atmakur	Mixed	<i>Pterocarpus santalinus</i> <i>Azadirachta indica</i> <i>Ficus religiosa</i> <i>Pongamia pinnata</i> <i>Albizia odoratissima</i> <i>Holoptelea integrifolia</i> <i>Syzygium cumini</i>	-	130	High	-	95	4	21.725
Kavali	Mixed	<i>Pterocarpus santalinus</i>	-	160	High	-	86	5	12.436
Nellore	Mixed	<i>Pterocarpus santalinus</i> <i>Syzygium cumini</i> <i>Azadirachta indica</i> <i>Holoptelea integrifolia</i>	-	100	High	-	90	4	20.527
Rapur	Mono-culture	<i>Pterocarpus santalinus</i>	-	20	High	-	89	4.5	20.125
Udayagiri	Mixed	<i>Pterocarpus santalinus</i>	-	100	High	-	86	4	21.121
Venkatagiri	Mixed	<i>Pterocarpus santalinus</i>	-	190	High	-	88	5	23.414

Plantation area

In the division, maximum was planted in Venkatagiri forest range and the minimum was planted in Rapur forest range.

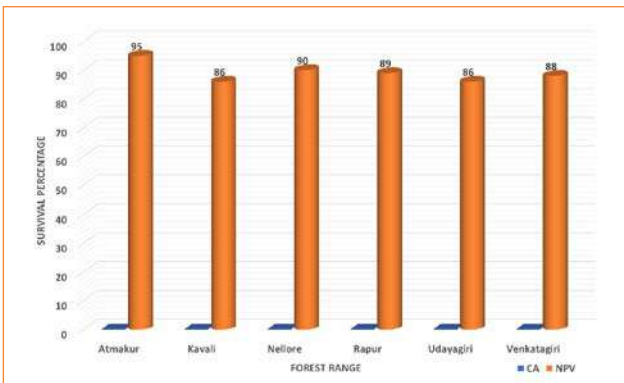
Figure 2 : Plantation area of the Nellore forest division



Survival percentage

The survival percentage is maximum in Atmakur-Nellore range which is having 95% and minimum in Kavali and Udayagiri ranges which are having 86%.

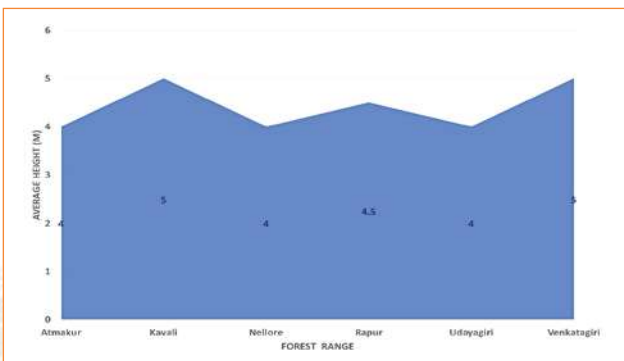
Figure 3 : Survival percentage of the plantations



Average height

In the division, most of the plantations were healthy and maximum growth was observed in Kavali and Venkatagiri ranges with an average height of 5 m and minimum growth was observed in Atmakur, Nellore and Udayagiri ranges with an average height of 4 m.

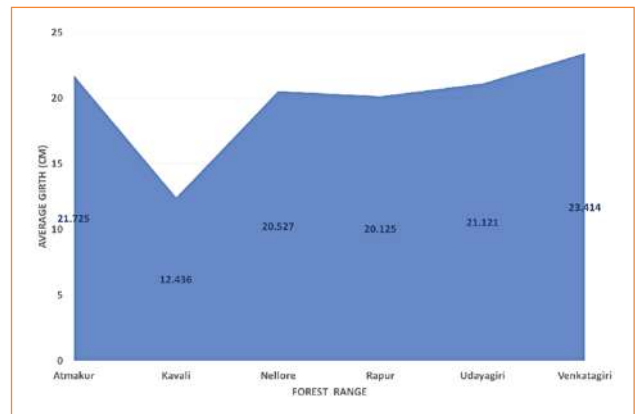
Figure 4: Average height of the plantations



Average girth

In the division, maximum girth was observed in Venkatagiri ranges with an average of 23.414 cm and minimum was observed in Kavali range with an average of 12.436 cm.

Figure 5: Average height of the plantations



Observations

In the division, Rajavolu compartment No.364 of Atmakur forest range plantations was observed to be the best plantations.

- Overall survival percentage was rated excellent (average 89%) ranging from 86% - 95% in all the CAMPA plantations.
- Site quality was taken as criteria for choice of species and was suitable to the conditions. The species planted were *Pterocarpus santalinus*, *Azadirachta indica*, *Ficus religiosa*, *Pongamia pinnata*, *Albizia odoratissima*, *Holoptelea integrifolia*, *Syzygium cumini* which are suitable for dry deciduous vegetations.
- Reserve Forest area was taken up for plantation activities. Linear- Pit planting with spacing of 3m x 3m resulted into mixed crop plantations. Cultural operations (cleaning, weeding, and climber cutting) and water harvesting structures like check dams & contour trenching were taken up at the initial stages.
- Average height of important tree species was good with an average of 4.5m. Bio fencing and social fencing were provided to protect plantations from biotic pressure.
- There is moderate temperatures and good rainfall and climatic conditions had impact on the growth of the plantations, hence the good survival percentage was observed. It appears that the best plantations were established with favourable climatic conditions along with proper protection measures.

- Lesser infestation of pest and diseases were witnessed and health of the plantations was good
- Plantation journals were maintained in most of the sites and inspecting authorities made some recommendations such as to take up circular weeding, soil work, as per calendar operation
- Local communities were benefited by gathering fodder and also by having other intangible benefits like water level increase in their wells due to the plantation activities and consequent ground water recharge.

- Plantation journals were maintained in most of the sites and inspecting authorities made some recommendations such as to take up circular weeding, soil work, as per calendar operation
- No major constrains were observed during plantation activity. CAMPA fund was used for raising plantations in and around forest areas/ outside forest areas and flow of funds was smooth during initial period of the plantation works and most of the plantations received funds timely without any delay.



Plantation board for the year 2015-16 in Nellore range

EVALUATION FORMAT OF NELLORE DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : GUNTUR						
NAME OF THE DIVISION : NELLORE						
S.No.	NAME OF THE RANGE:	ATMAKUR	KAVALI	NELLORE		
1	GPS Coordinates	N 14.75' E 79.68'		N 14.27' E 79.80'		
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST		
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation		
4	Plantation Area (in Ha)	130 Ha	160 Ha	100 Ha		
5	Choice of Tree Species	<i>Pterocarpus santalinus</i> , <i>Azadirachta indica</i> , <i>Ficus religiosa</i> , <i>Pongamia pinnata</i> , <i>Albizia odoratissima</i> , <i>Holoptelea integrifolia</i> , <i>Syzygium cumini</i>	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i> , <i>Syzygium cumini</i> , <i>Azadirachta indica</i> , <i>Holoptelea integrifolia</i>		
6	Qualitative Assessment					
6.1	Suitability of area	Highly	Highly	Highly		
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done		
6.3.1	Survival Percentage	95%	86 %	90%		
6.3.2	Average height / Girth	4 m / 21.72 cm	5 m / 12.436 cm	4 m / 20.52 cm		
6.4	Tending Operations (Singling/pruning & other operations)	Singling, Pruning	Singling, Pruning	Singling, Pruning		
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work, weeding, ploughing, CCTs, Red Earthen bunding	Soil work, weeding, ploughing, CCTs, Red Earthen bunding	Soil work, weeding, ploughing, CCTs, Red Earthen bunding		
6.6	Increase in availability of Biomass for local community. Status?	NO	NO	Fodder		
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	No Difference		

7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Watch & Ward	Watch & Ward	Watch & Ward	Watch & Ward	Watch & Ward
8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records					
9.1	Updating of plantation journal	2016-17	2016-17	2016-17	2015-16	2015-16
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	Good plantation	Good plantation
10	Project Constraints/Limitations					
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	NO	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?					
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Local fruit varieties to be planted	Local fruit varieties to be planted	Local fruit varieties to be planted	Local fruit varieties to be planted	Local fruit varieties to be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF NELLORE DIVISION PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE CIRCLE : GUNTUR

NAME OF THE DIVISION : NELLORE

S.No.	NAME OF THE RANGE:	RAPUR	UDAYAGIRI	VENKATAGIRI
1	GPS Coordinates			
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Monoculture plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20 Ha	100 Ha	190 Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>
6	Qualitative Assessment			
6.1	Suitability of area	Highly	Highly	Highly
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3m ² planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done	45 cm ³ , Pitting, 3x3m ² spaced planting was done
6.3.1	Survival Percentage	89 %	86 %	88 %
6.3.2	Average height / Girth	4.5 m / 20.125 cm	4 m / 21.121 cm	4 m / 23.414 cm
6.4	Tending Operations (Singling/pruning & other operations)	Singling, Pruning	Singling, Pruning	Singling, Pruning
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work, weeding, ploughing, CCTs, Red Earthen bunding	Soil work, weeding, ploughing, CCTs, Red Earthen bunding	Soil work, weeding, ploughing, CCTs, Red Earthen bunding
6.6	Increase in availability of Biomass for local community. Status?	NO	NO	Fodder
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	No Difference
7	Protection works like fencing etc.,			
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Watch & Ward	Watch & Ward	Watch & Ward
8	Health of raised plantation	Healthy	Healthy	Healthy

9	Maintenance of Records					
9.1	Updating of plantation journal	2016-17	2016-17	2015-16		
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	Good plantation		
10	Project Constraints/Limitations					
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	No		
10.2	Source of funds	CAMPA	CAMPA	CAMPA		
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds		
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?					
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance		
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Local fruit varieties to be planted	Local fruit varieties to be planted	Local fruit varieties to be planted		
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated		
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage		
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent		
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance		

EVALUATION FORMAT OF ATMAKUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: NELLORE						
NAME OF THE RANGE: ATMAKUR						
S.No.	NAME OF THE COMPARTMENT	361	626, 627	626, 627	626, 627	626, 627
	NAME OF THE BEAT:	SANGAM	SANGAM	SANGAM	SANGAM	SANGAM
1	GPS Coordinates	MARRIPADU EAST, TXTN RF/N 14.74.015E 79.59.627	MARRIPADU EAST, TXTN RF/N 14.67.249E 79.84.574	MARRIPADU EAST, TXTN RF/N 14.67.249E 79.84.574	MARRIPADU EAST, N 14.67.922E 79.84.664	MARRIPADU EAST, N 14.67.922E 79.84.664
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20 Ha	20 Ha	20 Ha	20 Ha	20 Ha
5	Choice of Tree Species	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> , <i>Ficus religiosa</i> <i>Pterocarpus marsupium</i> , <i>Pongamia pinnata</i> , <i>Albizia odoratissima</i>	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> , <i>Ficus religiosa</i> <i>Pterocarpus marsupium</i> , <i>Pongamia pinnata</i> , <i>Albizia odoratissima</i>	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> , <i>Ficus religiosa</i> <i>Pterocarpus marsupium</i> , <i>Pongamia pinnata</i> , <i>Albizia odoratissima</i>	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> , <i>Ficus religiosa</i> <i>Pterocarpus marsupium</i> , <i>Pongamia pinnata</i> , <i>Albizia odoratissima</i>	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> , <i>Ficus religiosa</i> <i>Pterocarpus marsupium</i> , <i>Pongamia pinnata</i> , <i>Albizia odoratissima</i>
6	Qualitative Assessment					
6.1	Suitability of area	Highly	Moderately	Moderately	Moderately	Moderately
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting 3x3 m ² spaced planting was done	45 cm ³ , Pitting 3x3 m ² spaced planting was done	45 cm ³ , Pitting 3x3 m ² spaced planting was done	45 cm ³ , Pitting 3x3 m ² spaced planting was done	45 cm ³ , Pitting 3x3 m ² spaced planting was done
6.3.1	Survival Percentage	93 %	93 %	93 %	96 %	96 %
6.3.2	Average height/Girth	6 m/21.72 cm	6 m/21.72 cm	6 m/21.72cm	6 m/21.72 cm	6 m/21.72 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil work, weeding, ploughing, CCTs, Red Earthenbunding	Soil work, weeding, ploughing, CCTs, Red Earthenbunding	Soil work, weeding, ploughing, CCTs, Red Earthenbunding	Soil work, weeding, ploughing, CCTs, Red Earthenbunding	Soil work, weeding, ploughing, CCTs, Red Earthenbunding
6.6	Increase in availability of Biomass for local community. Status?	NO	NO	NO	NO	NO
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	No Difference	No Difference	No Difference

7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Watch & Ward	Watch & Ward	Watch & Ward	Watch & Ward	Watch & Ward
8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records					
9.1	Updating of plantation journal	updated up to 2016-17	updated up to 2016-17	updated up to 2016-17	updated up to 2016-17	updated up to 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation
10	Project Constraints/Limitations					
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	NO	NO	NO
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth Funds flow	Smooth Funds flow	Smooth Funds flow	Smooth Funds flow	Smooth Funds flow
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?					
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Local fruit varieties to be planted	Local fruit varieties to be planted	Local fruit varieties to be planted	Local fruit varieties to be planted	Local fruit varieties to be planted
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF ATMAKUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: NELLORE

NAME OF THE RANGE: ATMAKUR

S.No.	NAME OF THE COMPARTMENT:	364	364	366
	NAME OF THE BEAT:	RAJAVOLU	RAJAVOLU	GUIDIPADU
1	GPS Coordinates	PALLAMANUBEDU/N 14.70.702E 79.64.116	PALLAMANUBEDU/N 14.70.625E 79.64.034	ABBASAPETA/N 14.80.069E 79.63.391
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20 Ha	20 Ha	20 Ha
5	Choice of Tree Species	Azadirachta indica, Terminalia arjuna, Ficus religiosa, Pterocarpus marsupium, Pongamia pinnata, Albizia odoratissima	Azadirachta indica, Terminalia arjuna, Ficus religiosa Pterocarpus marsupium, Pongamia pinnata, Albizia odoratissima	Azadirachta indica, Terminalia arjuna, Ficus religiosa Pterocarpus marsupium, Pongamia pinnata, Albizia odoratissima
6	Qualitative Assessment			
6.1	Suitability of area	Moderately	Moderately	Moderately
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done
6.3.1	Survival Percentage	96 %	100 %	99 %
6.3.2	Average height/Girth	5 m/21.75 cm	5 m/21.75cm	4 m/21.75 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work, Weeding, Ploughing, Red Earthen bunding	Soil Work, Weeding, Ploughing, Red Earthen bunding	Soil Work, Weeding, Ploughing, Red Earthen bunding
6.6	Increase in availability of Biomass for local community. Status?	NO	NO	NO
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	No Difference

7	Protection works like fencing etc.,					
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Watch & Ward	Healthy	Watch & Ward	Healthy	Watch & Ward
8	Health of raised plantation	Watch & Ward	Healthy	Watch & Ward	Healthy	Healthy
9	Maintenance of Records					
9.1	Updating of plantation journal	Updated Up To 2016-17	Updated Up To 2016-17	Updated Up To 2016-17	Updated Up To 2016-17	Updated Up To 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to Take Up Circular Weeding Soil Work as Per Calendar Operation	Instructed to Take Up Circular Weeding Soil Work as Per Calendar Operation	Instructed to Take Up Circular Weeding Soil Work as Per Calendar Operation	Instructed to Take Up Circular Weeding Soil Work as Per Calendar Operation	Instructed to Take Up Circular Weeding Soil Work as Per Calendar Operation
10	Project Constraints/Limitations					
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	NO	NO	NO
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?					
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties
12	Suggestions for improvements from the Evaluating Agency/Consultants					
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF ATMAKUR RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: NELLORE

NAME OF THE RANGE: ATMAKUR

S.No.	NAME OF THE COMPARTMENT	366	366	364
	NAME OF THE BEAT	PONGURU	PONGURU	RAJAVOLU
1	GPS Coordinates	JAVAMARUGATTU AREA/N 14.80.004E 79.63.348	JAVAMARUGATTU AREA/N 14.80.004E 79.63.348	YERRANELA CHELIKA/N 14.70.490E 79.63.914
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20 Ha	20 Ha	20 Ha
5	Choice of Tree Species	<i>Pterocarpus santalinus</i> , <i>Holoptelea integrifolia</i> <i>Syzygium cumini</i>	<i>Pterocarpus santalinus</i> , <i>Holoptelea integrifolia</i> <i>Syzygium cumini</i>	<i>Pterocarpus santalinus</i>
6	Qualitative Assessment			
6.1	Suitability of area	Moderately	Moderately	Moderately
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc..)	45 cm ³ , Pitting, 4x4 m ² , 5x5 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² , 5x5 m ² spaced planting was done	45 cm ³ , Pitting, 4x4 m ² , 5x5 m ² spaced planting was done
6.3.1	Survival Percentage	99 %	99 %	100 %
6.3.2	Average height/Girth	6 m/21.72 cm	6 m/21.72cm	4 m/21.72 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations are carried out	Tending operations are carried out	Tending operations are carried out
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work, Weeding, Ploughing, CCTs, PCTs, Red Earthen bunding	Soil Work, Weeding, Ploughing, CCTs, PCTs, Red Earthen bunding	Soil Work, Weeding, Ploughing, CCTs, PCTs, Red Earthen bunding
6.6	Increase in availability of Biomass for local community. Status?	NO	NO	NO
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	No Difference
7	Protection works like fencing etc..			
7.1	Protection measures against Biotic Pressure (Cattles etc.)	Watch & Ward	Watch & Ward	Watch & Ward

8	Health of raised plantation	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records				
9.1	Updating of plantation journal	Updated Up to 2016-17	Updated Up to 2016-17	Updated Up to 2016-17	Updated Up to 2016-17
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation	Instructed to take up circular weeding soil work as per calendar operation
10	Project Constraints/Limitations				
10.1	Constraints/Limitations faced by the authorities, if any?	NO	NO	NO	NO
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?				
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties
12	Suggestions for improvements from the Evaluating Agency/Consultants				
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading on the basis of survival %	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance

EVALUATION FORMAT OF NELLORE RANGE PLANTATIONS RAISED UNDER CAMPA SCHEME

NAME OF THE DIVISION: NELLORE						
NAME OF THE RANGE: NELLORE						
S.No.	NAME OF THE COMPARTMENT	112	111	56	56	56
	NAME OF THE BEAT:	SYDAPURAM	SYDAPURAM	VADLAPUDI	VADLAPUDI	VADLAPUDI
1	GPS Coordinates	MITTATMAKUR/N 14.22.148 E 79.800.03	YEDDULA JADI/N 14.215.70 E 79.793.34	AMANCHERLA/N 14.322.30 E 79.816.84	AMANCHERLA/N 14.321.43 E 79.819.45	AMANCHERLA/N 14.321.43 E 79.819.45
2	Legal Status of Land	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST	RESERVE FOREST
3	Type of Plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation	Mixed crop plantation
4	Plantation Area (in Ha)	20 Ha	20 Ha	20 Ha	20 Ha	20 Ha
5	Choice of Tree Species	<i>Azadirachta indica</i> , <i>Syzygium cumini</i> <i>Holoptelea integrifolia</i>	<i>Azadirachta indica</i> , <i>Syzygium cumini</i> <i>Holoptelea integrifolia</i>	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>	<i>Pterocarpus santalinus</i>
6	Qualitative Assessment					
6.1	Suitability of area	Highly	Highly	Highly	Highly	Highly
6.2	Assessment of work as seen in the field (Spacing, Pitting, Planting etc.,)	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done	45 cm ³ , Pitting, 3x3 m ² spaced planting was done
6.3.1	Survival Percentage	90%	90%	65%	70%	70%
6.3.2	Average height/Girth	4 m/20.52 cm	4 m/20.52 cm	3 m/20.52 cm	3 m/20.52 cm	3 m/20.52 cm
6.4	Tending Operations (Singling/pruning & other operations)	Tending operations carried out	Tending operations carried out	Tending operations carried out	Tending operations carried out	Tending operations carried out
6.5	Soil and Moisture (SMC) Conservation works if taken up and its assessments	Soil Work, Weeding, CCT'S, Earthenbundung	Soil Work, Weeding, CCT'S, Earthenbundung	Soil Work, Weeding, CCT'S, Earthenbundung	Soil Work, Weeding, CCT'S, Earthenbundung	Soil Work, Weeding, CCT'S, Earthenbundung
6.6	Increase in availability of Biomass for the local community. Status?	Fodder	Fodder	Fodder	Fodder	Fodder
6.7	Improvement in quality of life of people due to risen plantation	No Difference	No Difference	No Difference	No Difference	No Difference

7	Protection works like fencing etc.,							
7.1	Protection measures against Biotic Pressure (Cattles etc.)	No	Watch & Ward	Watch & Ward	Watch & Ward	Watch & Ward	Watch & Ward	Watch & Ward
8	The health of raised plantation	Healthy	Healthy	Healthy	Healthy	Healthy	Healthy	Healthy
9	Maintenance of Records							
9.1	Updating of plantation journal	2015-16	2015-16	2015-16	2015-16	2015-16	2015-16	2015-16
9.2	Observations/Comments of the Inspecting Authorities (CCF, CF, DFO)	Good Plantation	Good Plantation	Good Plantation	Good Plantation	Good Plantation	Good Plantation	Good Plantation
10	Project Constraints/Limitations							
10.1	Constraints/Limitations faced by the authorities, if any?	No	No	No	No	No	No	No
10.2	Source of funds	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA	CAMPA
10.3	If the flow of funds wasn't smooth, where did the delay arise?	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds	Smooth flow of funds
11	Suggestions for improvements (From Implementing/Supervising Agencies) in methodology etc?							
11.1	Any scope for improving the project output?	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance	YES, Funds for Maintenance
11.2	Whether people of the area feel that need to improve any particular aspect of the project?	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties	Yes, local people feel to be planted fruit varieties
12	Suggestions for improvements from the Evaluating Agency/Consultants							
12.1	Suggestions for improvement in record maintenance/or any other issues	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated	Journal should be Updated
12.2	Whether the project should be continued/modified/ discontinued (reasons)?	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage	Continued to Enhance the quality of Forest/ Tree Coverage
13	Overall Grading based on survival %	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
14	Any other information about the plantation	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance	Good Maintenance



INSTITUTE OF FOREST BIODIVERSITY

Indian Council of Forestry Research and Education

(An Autonomous body under Ministry of Environment, Forests and Climate Change, Government of India)

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