



## FINAL REPORT



# Evaluation/ Study of Plantations and Construction of Soil and Water Conservation Structures & Civil Works Executed under CAMPA during the Year 2019-20 to 2021-22 in J&K



Submitted to:

**The Chief Executive Officer (CAMPA)**  
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## ABBREVIATIONS

APO -Annual Plan of Operation

CAMPA -Compensatory Afforestation Fund Management and Planning Authority

CAF- Compensatory Afforestation Fund

CAT- Catchment Area Treatment

CUM- Cubic Meter

DRSM -Dry Rubble Soil Moisture

EPA -Entry Point Activity

FGD -Focused Group Discussion

GIS -Geographic Information System

Ha- Hectare

IGA- Income Generation Activities

JFM -Joint Forest Management

J & K- Jammu and Kashmir

M&E- Monitoring and Evaluation

NGO -Non- Government Organization

NPV -Net Present Value

NR -Natural Regeneration

PA -Protected Area

PRA -Participatory Rural Appraisal

RFA -Recorded Forest Area

RFP- Request For Proposal

RFT- Running Feet

RMT -Running Meter

Sq km -Square Kilometer

SHG -Self Help Group

SLMC -State Level Management Committee

SLSC- State Level Steering Committee

SMC- Soil Moisture Conservation

TOR- Terms Of Reference

UT- Union Territory

VFMC -Village Forest Management Committee

VFPMC -Village Forest Protection Management Committee

WHS- Water Harvesting System

WL- Wildlife

WLS- Wildlife Sanctuary



## Executive Summary

### A. State CAMPA:

Ministry of Environment, Forests & Climate Change (MoEF&CC), Govt. of India (GoI) had issued guidelines on 2nd July 2009 for establishing State Compensatory Afforestation Fund Management and Planning Authority (CAMPA) in the States/UTs for utilising funds received towards Compensatory Afforestation (CA) and Net Present Value (NPV), etc.

In accordance with the guidelines issued by Adhoc CAMPA, MoEF & CC, GoI on 2.7.2009, J&K CAMPA was set up vide SRO-354 dated 11.11.2009. The execution of CAMPA works in J&K started from the year 2010-11.

Later, based on the orders and directions of Hon'ble Supreme Court in the T.N. Godavarman Thirumulpad vs. Union of India and Others [Writ Petition (Civil) No. 202 of 1995] dated the 30 October 2002, the Compensatory Afforestation Fund (CAF) Act, 2016 was notified by the MoEF&CC, GoI on 03.08.2016 and the CAF Rules, 2018 were notified on 10.8.2018; and both came into force with effect from 30.9.2018 in the whole of India except the erstwhile State of Jammu and Kashmir.

**With coming into force of the Compensatory Afforestation Fund Act 2016, the Adhoc CAMPA was dissolved and National Compensatory Afforestation Fund Management and Planning Authority (National Authority) was constituted.**

**With the reorganization of the erstwhile State of Jammu and Kashmir, the CAF Act, 2016 and the CAF Rules, 2018 were extended to the UT of J&K w.e.f. 31 October 2019.**

### A.1. Project Management Authority:

The National Authority was constituted to manage and utilize the National Fund for the purpose of the CAF Act, 2016. The National Authority consists of a governing body headed by Minister for Environment, Forest and Climate Change, GOI, and is assisted by an executive committee, monitoring group and support mechanism. The executive committee of the National Authority is headed by the Director General of Forests and Special Secretary, MoEF & CC, GOI.

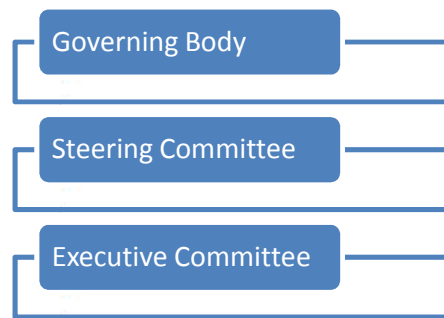
The State Authority consists of a governing body, steering committee and an executive committee.

The Governing Body of J&K UT is headed by the Chief Minister (or Lt Governor for the UT of J&K during the President's rule) and Ministers/officers as ex-officio members, and Principal Secretary (Forest) as Member Secretary (Composition: Section 10 (5) of the CAF Act 2016).

The Steering Committee of J&K UT is headed by Chief Secretary with official (ex-officio) members from various departments, and one non-official member – an expert on tribal matters/representative of tribal communities (Composition: Section 11 (2) of the CAF Act 2016).

The Executive Committee of J&K UT is headed by the Principal Chief Conservator of Forests with official (ex officio) members from various departments and following non-official members (Composition: Section 11 (3) of the CAF Act 2016):

- I. Two eminent NGOs
- II. Two representatives of district level Panchayati Raj Institutions
- III. One expert on tribal matters /representative of tribal communities



## A.2. Implementation

The implementation of J&K CAMPA was started in the year 2010-11. The major activities of J&K CAMPA include plantations, forest protection, wildlife habitat management, soil and moisture conservation, capacity building, infrastructure development and information technology, etc.

The works in J&K CAMPA were executed by Forest Department (Territorial&Non-Territorial) and the Allied Departments, namely Wildlife Protection Department, Social Forestry Department, Soil and Water Conservation Department and WUCMA of J&K UT.

## A.3. Evaluation:

The present Third Party Evaluation pertains to works carried out under J&K UT CAMPA during the years 2019-20 to 2021-22 and the objectives of evaluation were:

- a. To evaluate the survival rate including growth of plants and their impact on vegetal cover.
- b. To assess adherence to the procedures for plantation, infrastructure development and any other activity for asset creation in conformity with the guidelines and procedures laid down under the J&K UT CAMPA or defined by the government.
- c. To evaluate various plantation sites/assets created under the J&K UT CAMPA in terms of quantity and quality.



- d. To check the documentation, record keeping and reports relating to plantation units/assets created at Divisional level.
- e. To assess the overall impact of the various activities of the J&K UT CAMPA.

**B. Methodology & Approach:**

**B1. Site Selection**

The sites/assets evaluated in the present Third Party Evaluation were selected by the Evaluating Agency i.e. AFC India Ltd. in consultation with the CEO of CAMPA and concerned authority of allied departments, from the APOs (Annual Plan of Operations) of the years 2019-20 to 2021-22 as per the TOR. The sites were selected on the basis of random selection, covering 30% of all works carried out in all divisions of Forest Territorial and allied departments.

**B.2 Methodology for evaluation**

All works accomplished at all selected sites were holistically observed and assessment was made both in quality and quantity terms. Study team along with the technical support staff have visited the selected sites to assess the effectiveness of the activities implemented under CAMPA by adopting following key approaches viz.,

- a. Physical verification of interventions and making site specific observations;
- b. Short meeting with key stakeholders

GPS locations of various activities like plantation sites, soil and moisture conservation (SMC) structures, building, infrastructure etc. was taken. GPS track was created using hand handled devices by the study team to compare the plantation area. The observations/findings of the Study Team had also been supported by photographs, small video clips and GPS coordinates etc., wherever it was possible.

**B.3 Field Work**

Process Steps for undertaking the Field Work:

Day	Action	Remark
Day-1	Meeting with the DFO and concern forest staff to explain the field work;  The team members had also spent time to collect available relevant information and firm-up the sites and villages for field visit in consultation with the forest officials.	Visit time slots had been communicated to stakeholders / concern forest staff through respective DFO by the study team
Day-2 ~ Day-3	Various experts have prioritized their tasks as per requirements and made observations/reports to input into	Depending on the quantum of Work the field visits and days could be planned; Number of





	<p>reports. Each Expert had documented their observations separately for each site.</p> <p>Experts have used their experience, skills and check-list/ questionnaires to generate information and substantiate their observations/ findings.</p> <p>Efforts were also made to take photographs and/ or create small video clips of the activities observed or exercise conducted during the field work.</p>	<p>days was indicated in the Movement Plan, however this plan was flexible and as per need the stay have been reduced/ extended.</p> <p>The team members had also met the forest division/ range officials to learn about the CAMPA initiatives, annual budgets, Reports &amp; reporting about the activities, data etc. during the field work period.</p>
Day-15 or earlier/ later	Wrap-up with the DFO/ concern forest staff to brief about the visit and key observations, and proceed for next division.	At this stage the team had ensured to gather / collect all requisite information data.

#### **B.4 Stakeholder Consultancy:**

For undertaking rapid assessment survey, the technical and participatory techniques were adopted for making observations as well as eliciting information from the randomly identified stakeholder/ target group and key informants to provide relevance in context of the present assessment.

The key stakeholders identified under the study were:

- 1) Office of the PCCF (HoFF)/ CEO, CAMPA – the client
- 2) DFOs and concern divisional staff managing/supervising the CAMPA Plans
- 3) Forest Ranges and field staff coordinating and implementing the CAMPA Plans
- 4) Gram Panchayats, office bearers/ members

#### **C. Procurement of Secondary Data**

Secondary information pertaining to physical targets achieved during the years 2019-20 to 2021-22 under the J&K CAMPA was obtained from the O/O Chief Executive Officer, J&K CAMPA, Jammu and the concerned Divisional and Range Officers and analyzed.

#### **D. Third Party Evaluation**

##### **D.1 Plantations**

The quantum of plantation work carried out during the years of 2019-20 to 2021-22 under CAMPA by the Implementing Agencies and evaluated by the Evaluating Agency was as given in table-1 and table-2 respectively.



**Table-1: Plantation sites development carried out during the years of 2019-20 to 2021-22 under CAMPA by Implementing Agency and Evaluated by Evaluating Agency**

Particulars	Number of Closures (unit)	Area of treatment (ha)	Fencing (Rft)
Total number of units created by Implementing agencies from 2019-20 to 2021-22	2537	29700	96.44 Lakh Rft
30% of total work	762	8911	28.93 Lakh Rft
Work evaluated by Evaluating agency –AFC India Ltd.	*851	8963	28.95 Lakh rft

\*836 plantation units and 15 nurseries

**Table-2: Year wise plantation works and others evaluated by the Evaluating Agency**

Sr. No.	Activity	Year	No. of Selected Sites	Area of Selected Sites (ha)	Fence Length of Selected Sites (Rft)
1.	Plantations	2019-2020	265	2129.05	737461
		2020-2021	292	3508.5	1232314
		2021-2022	279	3325.6	925984
		<b>Total</b>	<b>836</b>	<b>8963.1</b>	<b>2895759</b>

The department wise number of plantation units evaluated by the Evaluating Agency was as given in table-3.

**Table-3: Department wise number of plantation units evaluated by the Evaluating Agency**

Sr. no.	Name of Department	Divisions		Number of Plantation Sites/ Closures Evaluated
1	Forest Department	Forest Territorial	Territorial	448
		Non Territorial	Agrostology	34
			ETF	10
			MFP	7
			NH1A	12



			Urban Forestry	117
			Planning & Publicity	4
2	Social Forestry			131
3	Wildlife			26
4	Soil & Water Conservation (DSCO)			45
5	WUCMA			2
	<b>Total</b>			<b>836</b>

## D.2 Infrastructure (Civil) works

The year wise number of infrastructure work sites randomly selected for evaluation were as given in table-4

**Table-4:** Year wise number of infrastructure work evaluated by the Evaluating Agency

Sr. No.	Year of construction	No. of Civil Works Sites Selected
1.	2019-2020	8
2	2020-2021	8
3	2021-2022	40
<b>Total</b>		<b>56</b>

## D.3 Equipments

The year wise number of implementing agencies randomly selected for evaluation of equipments purchased are given in table-5.

**Table-5:** Year wise number of equipments purchased evaluated by the Evaluating Agency

Sr. No.	Year of purchasing	No. of Implementing Agencies
1.	2019-2020	11
2	2020-2021	07
3	2021-2022	20
<b>Total</b>		<b>38</b>

## D.4 Nurseries

Fifteen existing nurseries of various departments were selected for evaluation.

## E. Field Survey

### E.1 Plantations

Detailed field survey of all the selected plantation units was conducted by the AFC evaluation team. The process followed was as given below:



At the gate of every selected plantation site, instructions were given to the evaluation team, frontline staff of forest and allied departments and the local labourers on the following aspects:

- Briefing of work (Panchnama).
- Measurement of planted area by using GPS.
- Counting of species wise planted live trees and shrubs
- Measurement of height and collar diameter of planted live plants on random sample basis.
- Estimation of plants of natural regeneration, existing main plant species.
- Estimation of plants of root stock.
- Evaluation of Soil and Water Conservation works.
- Measurement and assessment of fencing surrounding the plantation area.
- On sample basis, digging of the pits of dried plants to check whether the plants were planted by removing the plastic bag or not.
- Impact of plantation on local vegetal cover, biodiversity and other related aspects.
- Quantification of tangible benefits such as collection of grasses from the closure by local community.
- Assessment of likely increase of carbon sequestration and forest biomass
- Re-survey of plantation site.
- Recording of field observations in Plantation Format.
- Checking of record keeping.
- Meeting with Stake Holders and village panchayat.
- Recommendations of Evaluators.

## **E.2 Infrastructure Works**

Every selected site of construction activities was visited by the evaluation team. The sites were photographed and their GPS readings, present condition and utilization were recorded in the concerned evaluation format.

## **E.3 Equipments**

Equipments purchased under CAMPA fund in various divisions were evaluated and photographed. Equipments purchasing bills were also checked during the visit.

## **E.4 Nurseries**

Fifteen existing nurseries of various departments were visited, photographed and the record was checked. Infrastructure, condition as well as record keeping system were evaluated during field visit.

## **F. Results of Qualitative Evaluation**

### **F.1. Plantations Evaluation**

#### **F.1.1 General Observations**

##### **a. No. of Plantation Units**

Total 836 randomly selected plantation units (table-3) were evaluated by the team of AFC India Ltd.



## **b. Advance work at Plantation sites**

- Advance work at plantation sites was done in the previous year. It includes:
- Survey of plantation site,
- Preparation of treatment plan
- Raising of saplings in the nearby nursery

## **c. Planting of Saplings at Plantation Sites**

The works include:

- Fencing (barbed wire or chain link) of plantation site,
- Cutting of weeds for providing space for plants to be planted,
- Earth work (digging of pits of 45cm x 45cm x 45cm size), and

Plantation in subtropical zone (lower reaches of Jammu) carried out during Monsoon and in temperate zone (higher reaches of Jammu region and whole of Kashmir region) during winter.

## **d. Village Panchayats Consultancy**

People participation is a very important tool for raising successful plantations. Keeping this factor in view, village panchayats were actively involved in the preparation of treatment plan of every plantation site/closure.

- The village panchayat consultancy includes:
- Species to be planted
- Type of fencing to be done
- Location and type of soil and moisture conservation works to be done
- Regulation of collection of grasses, fodder, fuelwood and medicinal plants
- Employment of local people for watch and ward of plantations

## **e. Species Planting at Plantation Units**

During evaluation, it was observed that conifers as well as broad leaved species were planted depending on the edaphic and climatic condition of sites. The conifer species planted includes chir, pine, deodar and fir, etc. The broad leaved species planted includes majorly oak, ulmus, HC nut, robinia, salix; timber species (acacia, sissou, siris and ailanthus) bamboo, fruit species (guava, mango, wild apple, akhrot, apricot, prunus and pomegranate, etc), trees of medicinal importance (arjun, amla, behda, melia, bel, jamun etc.) and ornamental species (bauhinia, tecoma, gulmohor, bottle brush, kaner, sukhchain, alstonia, palash etc.). Grass slips were also found planted along with the main species.

It was observed that the species plantation was different with different department.

- Forest territorial department had given emphasis on planting conifers, broad leaved along with timber species, plants of medicinal value and wild fruit plants.
- Social forestry department planted conifers and ornamental plants majorly.



- Department such as wildlife gave more focus on planting conifers, broad leaved and wild fruit plants.
- Other allied department planted both conifers and broad leaved plants.
- Agrostology department mainly focused on planting grass slips along with some conifers, broad leaved and timber species.

#### **f. Pattern of Planting**

Planting of seedlings was done wherever space were available inside the closure. Mixed type plantations were carried out both in the strip and block areas.

#### **g. Important Observations**

Some of the important observations made during the field visits were as given below:

- Fencing was found to be effective. No evidence of grazing (cow dung or any livestock drooping) was seen inside the plantation sites during field visit.
- Proper planting of saplings as per norms was done with soil work around the planting area.
- Geo spatial jute mat was observed made under the fund of CAMPA at plantation sites of NH1A for the protection of areas from soil erosion and provide support for plantation at highly steep slope of hilly areas.
- Various species of birds, insects, butterflies and snakes were seen during field survey.
- In addition to first year plantation, casualty replacement was also found to have done. Along with the main tree species, other species of timber, wild fruit plants have been found planted.
- Weeding and hoeing shall enhance the growth of plants planted and need more attention.
- Inside few plantation units during field survey, collection of grasses and green leaf as fodder by the local people were noticed.
- Plantation board needs to be placed at 22 units.
- 45 units were found to be under the process of plantation activities.

#### **h. Physical Area of Plantations**

As per the RFP, total areas of plantation units were 8911 ha comprising of 836 closures and after the evaluation the total areas were found to be 8963.1 ha, a larger value than the areas mentioned in RFP.

### **F.1.2 Status of Plantations**

#### **a. Artificial Regeneration**

#### **i. Region Wise Weighted Survival % of Plantations**

There are two geographical regions, viz. (i) Jammu and (ii) Kashmir in J&K UT. The geographical region wise weighted survival % of seedlings planted at 791 plantation



sites/closures (836 sites completed- 45 sites under process of plantation= 791) was as given in table-6.

**Table-6:** Geographical Region wise weighted survival % of plantations

Sr. No.	Geographical Region	Weighted Survival %
1	Jammu	60.0
2	Kashmir	65.4
<b>Overall Weighted Survival %</b>		<b>62.7</b>

It is evident from table 6 that:

- i. The average survival % of Kashmir region (65.4%) and Jammu region (60.0%) of plantations.
- ii. Overall Weighted Survival percentage is 62.7, which is considered as good survival of plantations.

**ii. Circle Wise Weighted Survival % of Plantations**

The region/ circle wise weighted survival % of plantations was as given in table-7.

**Table-7:** Region/ circle wise weighted survival % of plantations

Sr. no.	Name of Department	Name of Division	Name of Departmental Region	Name of Circle	Departmental Circle wise weighted survival %	Departmental Region wise weighted survival %
1	Forest Department	i.Territorial	Jammu	East Circle	70.8	60.7
				West Circle	55.2	
				Chenab Circle	58.4	
			Kashmir	South Circle	71.1	67.9
				North Circle	65.8	
				Srinagar Circle	66	
		ii.ETF-Non Territorial	Jammu			64.4
iii.MFP-Non Territorial	Jammu			55.3		



		iv.NH1A-Non Territorial	Jammu		49.4
		v.Urban Forestry-Non Territorial	Jammu		63.2
			Kashmir		54.6
		vi.Planning & Publicity-Non Territorial	Kashmir		38.1
		vii.Agrostology	Jammu		60.3
			Kashmir		61.1
2	Social Forestry		Jammu		60
			Kashmir		69.7
3	Wildlife		Jammu		60.2
			Kashmir		56.7
4	Soil & Water Conservation		Jammu		63.7
			Kashmir		60.1
5	WUCMA		Kashmir		61.6
<b>Overall Weighted Survival %</b>					<b>62.7</b>

It is evident from table 7 that:

- Highest survival percentage of plantation showed by South Circle of 71.1% of Kashmir territorial region followed by East Circle of 70.8% of Jammu territorial region and Kashmir region of Social forestry of 69.7%.

### iii. Division Wise Weighted Survival % of Plantations

The division wise weighted survival % of plantations was as given in table-8.

**Table-8:** Division wise weighted survival % of plantations

Sr. no.	Name of Department	Name of Departmental Region	Name of Division	Division wise weighted survival %
1	Forest Department	Territorial- Jammu	Basohli	70.2
2			Batote	63.5
3			Bhaderwah	67.1
4			Billawar	72.9
5			Doda	44.9
6			Jammu	61.2
7			Kathua	71.9
8			Kishtwar	50.2
9			Mahore	55.2
10			Marwah	60.2
11			Nowshera	53.5





12			Poonch	50.2	
13			Rajouri	60.6	
14			Ramban	56	
15			Ramnagar	75	
16			Reasi	55.6	
17			Samba	69.9	
18			Udhampur	74.1	
19		Territorial- Kashmir	Baramulla JV	65.1	
20			Kamraj	68.1	
21			Kehmil	64.4	
22			Langate	71.9	
23			Anantnag	68.6	
24			Awantipora	71.2	
25			Kulgam	75.4	
26			Lidder	61.5	
27			Shopian	78.9	
28			Bandipora	61.3	
29			Pir Panjal		
			Budgam	73.8	
30			Sindh	58.5	
31			Tangmarg spl division	72.6	
32			Non Territorial	ETF	64.4
33				MFP	55.3
34				NH1A	49.4
35		Urban Forestry		58.9	
36		Agrostology		60.1	
37		Planning & Publicity		38.1	
38	Social Forestry		Doda	44.8	
39			Ramban	64.7	
40			Udhampur	70.6	
41			Jammu	57.7	
42			Kathua	66.7	
43			Poonch	68.1	
44			Rajouri	63.4	
45			Anantnag	67.5	
46			Baramulla	67	



47			Kupwara	69
48			Pulwama	71.5
49			Srinagar	87.6
50	Wildlife		Jammu	63.1
51			Kathua	69.1
52			Poonch	71.3
53			Rajouri	49.4
54			Chenab Kishtwar	59.9
55			Udhampur	51.1
56			Central	74.2
57			South Kashmir	37.6
58			Srinagar	44.2
59		Soil & Water Conservation		
60	WUCMA			61.6
Overall Weighted Survival %			<b>62.7</b>	

It is evident from table 8 that:

- Srinagar social forestry showed highest survival rate of plantation of 87.6% followed by Shopian territorial division of 78.9%.
- Very good survival rate of plantations were shown by Ramnagar-T (75%), Udhampur-T (74.1%), Billawar-T (72.9%), Kathua-T (71.9%), Basohli-T (70.2%) of Jammu region territorial divisions and Kulgam-T (75.4%), Pir Panjal-Budgam (73.8%), Langate-T (71.9%), Awantipora-T (71.2%), Tangmarg spl (71.2%) of Kashmir region of territorial divisions; and Social forestry divisions of Pulwama (71.6%) and Udhampur (70.6%); Divisions of wildlife of Central Wildlife (74.2%) and Poonch WL (71.3%).
- South Kashmir Wildlife (37.6%) division and Planning & Publicity department (38.1%) showed low survival rate of plantations.

#### iv. Site Wise Survival % of Plantations

The site wise survival % of plantations details was as given in **Annexure-1**.

#### v. Year Wise Weighted Survival % of Plantations

The year wise weighted survival % of plantations was as given in table- 9.

**Table-9:** Year wise weighted survival % of plantations

Year of Plantation	Survival %
2019-20	60.1
2020-21	62.4
2021-22	64.8

It is evident from table-9 that:

- i. The survival % was highest (64.8%) of 2021-22 of plantations and lowest (60.1%) of 2019-20 plantations.
- ii. Due to mortality, survival rate in older plantation units is lower compared to new plantation units.

**vi. Category wise survival percentage of plantation units**

The Category wise survival percentage of plantation units was as given in table-10.

Table- 10: Category wise survival percentage of plantation units

Categorization based on Survival Percentage of number of plantation units					
Survival %	25-40%	40-55%	55-70%	70-80%	>80%
Closures	25	139	332	134	16

It is evident from table-10 that:

- i. 16 units have plantation survival % of more than 80%
- ii. 134 units have plantation survival % varied between 70% and 80%
- iii. 332 units have plantation survival % varied between 55% and 70%
- iv. 139 units have plantation survival % varied between 40% and 55%
- v. 25 units have plantation survival % varied between 25% and 40%

**Around 50% plantation units of total evaluated plantation sites showed very good (above 60%) survival rate** and 30% units showed good (above 45%) survival of plants. 15% of total evaluated units showed average (above 35% survival rate) performance and a marginal value of 5% showed suboptimal survival (between 25-35%) survival rate of plantations.

**vii. Year and species wise overall status of Survival, Growth of Planted Plant**

Around 30-35 different species belong to coniferous and broad leaved were planted in the plantation closures. Year and Species wise, Survival%, Height and Collar Diameter of main plants species was as follows:

- i. In 2019-20 plantations, highest survival (88.6%) was of *Pinus roxburghii* followed by *Pinus wallichiana* (81.7), *Quercus incana* (81.5) and *Cedrus deodar* (80.4). As far as broad leaved were concerned, highest survival were of *Robinia pseudoacacia* (66.2) and *Ulmas* (62.3). Other trees such as toona, sissoo, amla, arjun, akhrot, H C Nut and salix showed good survival of above 55%.



- The highest growth in terms of height was of Eucalyptus (6.8 feet) followed by Bamboo (5.8ft) and *Alstonia* (5.2ft). Highest collar diameter was found in *Eucalyptus* (7.2 cm) and *Alstonia* (4.3cm) followed by Ash, Shisham and Sissoo (3.8cm).
- ii. In 2020-21 plantations, highest survival (89.3%) was of *Pinus roxburghii* followed by *Pinus wallichiana* (86.3), *Quercus incana* (84.3) and *Cedrus deodar* (83.2). As far as broad leaved were concerned, highest survival were of Ulmas (77.2) and *Robinia pseudoacacia* (71.7). Other trees such as amla, arjun, akhrot, H C Nut and salix showed good survival of above 55%.  
The highest growth in terms of height was of Eucalyptus and Bamboo (4.6 feet) followed by Ash and Sissoo (3.8ft); Salix (3.4ft). Highest collar diameter was found in Eucalyptus (4.2 cm) followed by Ash (3.4cm); Bel, *Alstonia* and Sissoo (3.1cm).
- iii. In 2021-22 plantations, highest survival (91.6%) was of *Pinus roxburghii* followed by *Quercus incana* (88.4%) and *Pinus wallichiana* (88.2). As far as broad leaved were concerned, highest survival were of *Robinia pseudoacacia* (77.4) and Ulmas (72.4). Other trees such as behda, arjun, akhrot, H C Nut, pomegranate, salix, ash, bottle brush, delonix and eucalyptus showed very good survival of above 60%.  
The highest growth in terms of height was of *Eucalyptus* sp. (3.6 feet) followed by gulmohor (3.4ft) and bottle brush (3.2ft); *alstonia*, sukhchain and sissoo (3.1ft). Highest collar diameter was found in Eucalyptus (3.3 cm) followed by gulmohor (3.1cm).

#### viii. Circlewise and species wise status of Survival, Height and Collar Diameter of Planted Plants

##### Jammu East Circle-

- In this circle, *Pinus roxburghii* showed highest survival of 95.1% followed by *Quercus incana* of 83.7% and *Pinus wallichiana* 81.2%.
- Ornamental plants such as *Alstonia*, *Bauhinia*, *Pongamia*, Bottle brush showed good survival of above 60%.
- Multipurpose tree species such as Draink, Eucalyptus and Bamboo showed good survival of above 60%.
- Lowest survival of plants showed by *Juglans regia* of 25.4%.
- The maximum height showed by plants such as Eucalyptus (6.5ft), *Alstonia* and Bamboo of 5.8ft and 5.7 ft respectively.

##### Jammu West Circle-

- In this Circle, Plant *Pinus roxburghii* showed highest survival of 79.3% followed by *Salix alba* of 71.7%.
- In this circle wild fruit plants showed good survival of above 55%.
- Lowest survival was observed in *Quercus incana* of 45.4%.



- Robinia showed highest growth in terms of height of 4.5ft followed by species such as Bauhinia, Amla, Cassia fistula, Toona of 3.8 ft.

#### **Jammu Chenab Circle-**

- In this Circle, *Quercus incana* and *Pinus wallichiana* showed highest survival of 68.9% and 68.8% respectively.
- In this region multipurpose tree species such as Ailanthus, Draink and Shisham showed average survival of above 40%.
- Wild apple showed lowest survival of 32.4%.
- Robinia and Ailanthus showed good height of 3.6 ft.

#### **Kashmir South Circle-**

- In this circle, H C Nut showed highest survival of 78.1% followed by *Cedrus deodar* of 77.5% and *Pinus wallichiana* of 76.9%.
- Wild apple and Ulmas showed lowest survival of 54.2% and 58.2% respectively.
- Maximum height of plants was observed in Robinia of 4.8ft and Ulmas of 4.6ft.

#### **Kashmir North Circle-**

- In Kashmir North Circle, all conifers showed highest survival of above 80%. *Pinus roxburghii* showed of 94.8%, *Pinus wallichiana* of 89.5% and *Cedrus deodar* of 82.3% survival.
- In this region, almost all major plants showed good survival of above 60%.
- H C Nut showed lowest survival of 52.8%.
- Robinia and wild apple showed maximum height of 4.6ft and 3.6ft respectively.

#### **Srinagar Circle-**

- In Srinagar Circle, *Pinus wallichiana* showed highest survival of 88.9% followed by *Prunus armeniaca* of 82.3% and *Pinus roxburghii* of 81.1%.
- In this region all plants showed good survival of above 55%.
- Robinia and wild apple showed maximum height of 3.9ft and 3.8ft respectively.

### **b. Status of Natural Regeneration**

Natural regeneration of principal tree species was found growing abundantly in areas of Aided Natural Regeneration plantations. The highest natural regeneration was of two conifers such as *Pinus roxburghii* (275 plants/ha) followed by *Pinus wallichiana* (263 plants/ha). Broad leaved such as Robinia, Ulmas showed good regeneration of 107 and 82 plants/ha respectively. Shrubs of medicinal importance



like *Berberis sp.*, *Murraya koengii* and *Adhatoda vasica* showed very good natural regeneration of above 100 plants per ha.

### c. Status of Regeneration through Root Stock

Trees of root stock were found growing in plantation units was very small ranging from 3 to 10 plants per ha.

### d. Total plants per ha including Artificial, Natural Regeneration and Existing trees

#### d. i. Division wise status of number of plants per ha in plantation unit

Existing trees were also counted by laid down sample plot as was done in the case of natural regeneration and root stock study in the plantation unit. Department and division wise total number of existing trees, natural regeneration and root stock plants per ha were as given in table-11.

**Table-11:** Department and division wise total number of plants per ha including artificial, existing trees, natural regeneration and root stock plants

Sr. no.	Region	Name of Division	Total No. of plants through regeneration (Artificial, Natural and Root stock) per ha	No. of Existing plants per ha	Total No. of live plants per ha (Through regeneration and existing plants)
<b>A.</b>	<b>Forest Department-Territorial</b>				
1	Jammu	Basohli-Territorial	656	202	858
2	Jammu	Batote-Territorial	765	197	962
3	Jammu	Bhaderwah-Territorial	586	183	769
4	Jammu	Billawar - Territorial	892	267	1159
5	Jammu	Doda-Territorial	520	163	683
6	Jammu	Jammu-Territorial	721	217	938
7	Jammu	Kathua-Territorial	817	223	1040
8	Jammu	Kishtwar-Territorial	635	169	804
9	Jammu	Mahore-Territorial	541	182	723



10	Jammu	Marwah-Territorial	788	191	979
11	Jammu	Nowshera-Territorial	568	161	729
12	Jammu	Poonch-Territorial	454	169	623
13	Jammu	Rajouri-Territorial	680	207	887
14	Jammu	Ramban-Territorial	690	202	892
15	Jammu	Ramnagar-Territorial	704	231	935
16	Jammu	Reasi-Territorial	543	186	729
17	Jammu	Samba-Territorial	576	211	787
18	Jammu	Udhampur-Territorial	831	274	1105
19	Kashmir	Baramulla JV	1127	254	1381
20	Kashmir	Kamraj-Territorial	1348	238	1586
21	Kashmir	Kehmil-Territorial	903	249	1152
22	Kashmir	Langate-Territorial	1131	217	1348
23	Kashmir	Anantnag-Territorial	1182	251	1433
24	Kashmir	Awantipora-Territorial	1327	262	1589
25	Kashmir	Kulgam-Territorial	1260	258	1518
26	Kashmir	Lidder-Territorial	874	209	1083
27	Kashmir	Shopian-Territorial	1055	227	1282
28	Kashmir	Bandipora-Territorial	1176	247	1423
29	Kashmir	PirPanjal Budgam-Territorial	1393	265	1658
30	Kashmir	Sindh-Territorial	854	198	1052
31	Kashmir	Tangmargspl division	1394	256	1650



<b>Forest Department-Non Territorial</b>					
<b>B.</b>	<b>Agrostology</b>				
32	JnK	Agrostology Dept.	596	189	785
<b>C.</b>	<b>Eco Task Force</b>				
33	Jammu	ETF	805	204	1009
<b>D.</b>	<b>NH1A</b>				
34	Jammu	NH1A	931	214	1145
<b>E.</b>	<b>Jammu MFP</b>				
35	Jammu	MFP	833	218	1051
<b>F.</b>	<b>Planning &amp; Publicity</b>				
36	Kashmir	Plan & Pub	1905	237	2142
<b>G.</b>	<b>Urban Forestry</b>				
37	Kashmir	Srinagar- Urban Forestry	1117	179	1296
<b>H.</b>	<b>Social Forestry Dept.</b>				
38	Jammu	Jammu-Social Forestry	661	182	843
39	Kashmir	Kashmir-Social Forestry	898	183	1081
<b>I.</b>	<b>Wildlife Department</b>				
40	JnK	Wildlife Dept.	752	213	965
<b>J.</b>	<b>Soil &amp; Water Conservation Dept.</b>				
41	JnK	DSCO	798	181	979
<b>K.</b>	<b>WUCMA</b>				
42	Kashmir	WUCMA	856	228	1084
<b>Average number of plants per ha</b>					<b>1096</b>

It is evident from table-11 that

- i. The average number of plants per ha including artificial plantation, natural regeneration, existing plant species and root stock was **1096 plants per ha which is considered as very good.**
- ii. **22 divisions belonging to Forest Territorial, Social Forestry, ETF, Planning & Publicity, NH1A, Srinagar Urban Forestry, MFP and WUCMA showed more than 1000 plants per ha.**





- ii. **Highest natural regeneration of around 200 or above plants per ha were observed in most of the divisions** except few such as Doda, Kishtwar, Poonch, Nowshera divisions which showed around 160 plants per ha. grown naturally. Edaphic and biotic factors may have played an important role in growing plants naturally in these regions.

#### **d.ii. Circle wise summary sheet of status of plantations**

Circle wise summary sheet of status of plantation and its survival; per ha total number of plants including artificial plantation, natural regeneration, existing plants and root stock; were as given in table-12.



**d.ii.Table:-12: Circle wise summary sheet of status of plantations details**

A	B	C	D	E	G	H	I	J	K	L	M
Sr. no.	Year	Circle	Total number of closures	Area (Ha)	No. of plants planted	No. of survived plants	Survival %	No. of plants survived per ha	Natural regeneration, root stock and existing plants per ha	Total no. of plants (J+K)	*Remarks (Very Good/ Good/ Satisfactory/ Poor)
1	2019-20	East Circle	80	479.1	141766	98161	69.2	205	946	1151	Very good
		West Circle	43	428	162733	90611	55.7	213	734	947	Good
		Chenab Circle	38	463.9	282311	159970	56.7	346	742	1088	Very good
		Jammu Region	64	326.8	203770	117599	57.8	359	737	1096	Very good
		Srinagar Circle	11	200	273727	171926	62.8	860	1229	2089	Very good
		South Circle	6	86.8	122555	82056	66.9	945	1232	2177	Very good
		North Circle	3	34	46910	34227	72.9	1007	1171	2178	Very good
		Kashmir Region	17	108	140703	73602	52.3	681	888	1569	Very good
2	2020-21	East Circle	74	683	226746	167712	73.9	245	963	1208	Very good
		West Circle	40	475	181570	98075	54.1	207	713	920	Good
		Chenab Circle	60	1030	421986	248922	59.1	242	885	1127	Very good
		Jammu Region	61	536.7	231033	135127	58.5	252	640	892	Good



		Srinagar Circle	7	188	196250	127589	65.1	679	1041	1720	Very good
		South Circle	9	201.7	236170	170259	72.1	844	1285	2129	Very good
		North Circle	14	188.2	225318	148079	65.7	787	1353	2140	Very good
		Kashmir Region	29	356	245545	136369	55.5	383	775	1158	Very good
		East Circle	92	669.3	156886	117827	75.1	176	944	1120	Very good
		West Circle	25	320	109775	61815	56.3	193	713	906	Good
		Chenab Circle	32	547	290110	160901	55.5	294	768	1062	Very good
		Jammu Region	35	467.7	171178	103828	60.7	223	729	952	Good
		Srinagar Circle	6	151	181950	126423	69.5	837	1216	2053	Very good
		South Circle	12	313	366175	263181	71.9	841	1294	2135	Very good
		North Circle	11	157	155916	103390	66.3	1034	1141	2175	Very good
3	2021-22	Kashmir Region	22	315	273282	175529	64.2	557	920	1477	Very good

\*1001 and above plants per ha - Very Good

751 - 1000 plants per ha - Good

501-750 plants per ha- Satisfactory

<500 plants per ha - Poor



## **e. Fencing Works**

Every plantation unit was surrounded by fencing as a means of protection of plants of artificial regeneration, natural regeneration and regeneration through root stock. Mainly barbed wire fencing with angle iron of 4-5 strands of wire were found erected. Use of wooden posts was also found in the areas of West Circle and Chenab Circle of Jammu. Some plantation units were also fenced with chain link fencing. The distance between the posts was about 3m. It was observed that the quality of fencing was very good and the iron angles/ wooden posts were firmly cemented in the ground. Total 28.95 Lakh rft fencing was evaluated. Dimensions of fencing were measured, compared with record and found almost correct.

In 6 plantation units of Batote, Billawar, Doda, Ramanagar, Kishtwar areas where fencing was found damaged partially due to landslide, need to be repaired.

## **f. Soil and Water Conservation inside plantation units**

Soil and water conservation structure in the form of DRSM, Crates and WHS were found constructed inside many closures. The main purpose of constructing these structures was to break the velocity of water flowing down from the upper part of hills during rains so that the small plants and soil do not get washed away due to high velocity of water. Dimensions of DRSM, Crates and WHS were measured, compared with record and found almost correct. The total volume of DRSM or crates varied from 9.5 to 100 cum in most of the plantation unit. Number of structure of DRSM in a closure varied from 1 to 60. The size of DRSM varied 5m x 1m x 1m to 4.5m x 5.5m x 10m. The number of crates in a closure varied from 1 to 9 and the size of it was 4feet x 4feet x 16feet.

These works have played their good role in soil and water conservation and found in good condition in most of the closures. Most of the WHS were found filled up with rain water and the level of water ranges from 1.5 m to 3 m.

DRSM were found to be made with loose stones. In some plantation units, few DRSM structure were found damaged due to heavy flow of water during monsoon season. 8 closures of Jammu, Doda, Billawar, Kathua, Mahore and Ramban, where some DRSM found partially damaged due to heavy water flow during monsoon need to be repaired.

## **g. Tangible Benefits to the local inhabitants**

Local people collect the grasses and leaves from plantation sites as fodder for their lives stock. Also they collect dried log of plants as fuelwood. As per the data available with the forest divisions and also discussed with the villagers in focus group discussion, it was noted that around 45-80 kg grasses per ha was generally collected from the plantation sites by the local communities as fodder for their livestock.



## **h. Impact of Project Activities on vegetation, biodiversity and other aspects**

Due to plantation activities, the vegetative cover in the plantation sites and also the forest biomass has increased. Birds, animals, butterflies, insects and reptiles were seen in this region. Villagers shared that peacock, wild hen, wild pigeon (known as Alan), insects and butterflies were coming to the areas more frequently. They also shared that leopard was also seen in these forest areas.

During focus group discussion, the villagers shared that there was a rise in ground water table due to plantation activities resulting in increase in availability of water.

## **F.2 Civil Work Evaluation**

Total 56 Civil Works sites were evaluated and most of them were found in very good conditions. The building was found majorly in very good condition and also the purpose of serving was also good.

## **F.3 Equipments Evaluation**

Equipments of 38 divisions were evaluated and most of them were found in good and working conditions.

## **F.4 Nursery Evaluation**

Total 15 nurseries belong to different department and divisions were visited and evaluated. The infrastructure and other facilities developed under the fund of CAMPA proved to be very good and useful for developing saplings to fulfill the target of plantation at various locations.

## **F.5 Status of Record Keeping and Reporting Mechanism**

Year wise Plantation journal and nursery journal produced by the frontline staff and checked by the evaluation team were almost appropriate. Plantation map and other aspects were present in most of the cases.

Plantation journal of 19 sites need to be updated with all informations. Proper documents of plantation activities need to be updated on regular basis by the department of Jammu urban forestry.

Documents related to civil work and purchasing of equipments were found to be proper. Also the reporting mechanism of work was also found to be good.



## G. Suggestions & Recommendations:

Recommendations of AFC Evaluators for the improvement of afforestation, SMC and related activities are as given below:

1. J&K UT CAMPA works have helped in:
  - I. Increase in vegetative cover resulting in increase in number of birds, animals, butterflies, insects and reptiles; and biodiversity of the area.
  - II. Rise in ground water table resulting in increased availability of water to the local people; and augmentation of moisture regime useful for improving local ecology of the area.
  - III. Increase in forest biomass resulting in increased Carbon sequestration and storage.
  - IV. Increase in availability of grasses, leaf, fodder, fuel wood and other non-timber produce to the local people.
2. Soil work around the planted saplings must be carried out for enhancing the growth of plants planted. It helps in removal of weeds, minimizing the root competition for nutrients and soil moisture between saplings planted and the weeds. Further, it helps in providing adequate sunlight to the plants planted resulting in increased photosynthesis.
3. Selection of tree species for planting should be site specific.
4. Damaged in- situ SMC and fencing due to landslide and other natural reasons should be repaired.
5. Plantation and Nursery Journals should be updated regularly
6. Equipment's like GPS and for fire controlling should be procured more due to increasing role of technology and threat from fires.
7. Adequate manpower need to be provided for watch and ward of closures in a better way.
8. Forest fire is a major threat for success of closure. Department may conduct training sessions for field functionaries and other stakeholders to train them in fire fighting and effective protection measures.
9. Training and capacity building of local community in plantation and allied activities will help both in afforestation as well as conservation measures.
10. The contractors carry out the plantation and civil work should be given time line to complete the work within time frame. Focus should be given to carry out plantation work during favourable soil, moisture and weather conditions.



## Chapter A

# INTRODUCTION

### A.1 State CAMPA

Ministry of Environment, Forests & Climate Change (MoEF&CC), Govt. of India (GoI) had issued guidelines on 2nd July 2009 for establishing State CAMPA (Compensatory Afforestation Fund Management and Planning Authority) in the States/UTs and putting in place a funding mechanism for enhancing forest and tree cover and conservation and management of wildlife by utilising funds received towards Compensatory Afforestation (CA) and Net Present Value (NPV), etc., available with the Adhoc CAMPA, GoI.

Compensatory Afforestation (CA) is the cost of raising plantation on alternate land to compensate the loss of forest area diverted for non-forestry purposes and Net Present Value (NPV) is the monetary value of forest land diverted for non-forestry purposes.

In accordance with the guidelines issued by Adhoc CAMPA, MoEF&CC, GoI on 2.7.2009, J&K CAMPA was set up vide SRO-354 dated 11.11.2009. The execution of CAMPA works in J&K started from the year 2010-11.

Later, based on the orders and directions of Hon'ble Supreme Court in the T.N. Godavarman Thirumulpad vs. Union of India and Others [Writ Petition (Civil) No. 202 of 1995] dated the 30 October 2002, the Compensatory Afforestation Fund (CAF) Act, 2016 was notified by the MoEF&CC, GoI on 03.08.2016 and the CAF Rules, 2018 were notified on 10.8.2018; and both came into force with effect from 30.9.2018 in the whole of India except the erstwhile State of Jammu and Kashmir.

***With coming into force of the CAF Act 2016, the Adhoc CAMPA was dissolved and National Compensatory Afforestation Fund Management and Planning Authority (National Authority) was constituted.***

In order to bring J&K CAMPA rules in consonance with the CAF Act 2016 and the CAF Rules 2018, the Jammu and Kashmir Compensatory Afforestation Fund (J&K CAF) Rules, 2018, incorporating relevant provisions of the both, with some state specific modifications, were framed. These rules were notified vide SRO-628 dated 24 December 2018.

Subsequent to reorganization of the State of J&K into the UTs of J&K and Ladakh, these rules were replaced with the CAF Act 2016 and the CAF Rules 2018 with effect from 31 October 2019.

Besides, the MoEF&CC, GoI has also notified Compensatory Afforestation Fund (Accounting Procedure) Rules, 2018 vide Notification No.GSR-1133 (E) dated 20 November 2018 (under the CAF Act 2016) which are also applicable to the UT of J&K with effect from 31 October 2019.

Consequent upon extension of the CAF Act 2016 and the rules made there under to the UT of J&K, the Central Government has notified establishment of J&K Compensatory Afforestation Fund Management and Planning Authority (State Authority) and Ladakh Compensatory Afforestation Fund Management and Planning Authority in terms of Section-10 of the CAF Act, 2016, vide Notification dated 8 January 2020.

Further, in terms of Section-4 of the CAF Act 2016, the Union Territory of J&K has notified establishment of State Fund (Compensatory Afforestation Fund) under its interest-bearing



public account vide Notification dated 29 November 2019 having following heads of accounts:

**a. Major Head 8336-Civil Deposits – Minor Head – 103 – State Compensatory Afforestation Deposits (3)**

- i. 8336-103-2900-Compensatory Afforestation.
- ii. 8336-103-2901-Additional Compensatory Afforestation.
- iii. 8336-103-2902-Penal Compensatory Afforestation.
- iv. 8336-103-2903-Net Present Value of Forest Land.
- v. 8336-103-2904-Protected Areas (National Parks, Wildlife Sanctuaries) etc.

**b. MH-8121-General and other Reserve Funds-139 – State Compensatory Afforestation Fund.**

- i. 8121-129-2900-Compensatory Afforestation.
- ii. 8121-129-2901-Additional Compensatory Afforestation.
- iii. 8121-129-2902-Penal Compensatory Afforestation.
- iv. 8121-129-2903-Net Present Value of Forest Land.
- v. 8121-129-2904-Protected Areas (National Parks, Wildlife Sanctuaries) etc.
- vi. 8121-129-2905-Catchment Area Treatment Plan.
- vii. 8121-129-2906-Interest.
- viii. 8121-129-2907-Integrated Wildlife Management Plan.
- ix. 8121-129-2908-Others.

Till coming into force of the CAF Act 2016 and the CAF Rules 2018 w.e.f. 30 September 2018, the NPV amount received by J&K CAMPA from user agencies used to be transferred to *Adhoc* CAMPA, which in turn used to release money equivalent to 10% of the principal amount lying to the credit of J&K CAMPA with that Authority for execution of works as per Annual Plan of Operations.

Since notification of the **State Fund** under public account, the money received from user agencies in lieu of diversion of forest lands for non-forest purpose under the Forest (Conservation) Act, 1980 and the money received from the National Authority are being deposited in the said public account. CAMPA expenditure is also being incurred from the said account.

**A.2 Constitution of National Authority**

The National Authority has been constituted to manage and utilize the National Fund for the purpose of the CAF Act, 2016. The National Authority consists of a governing body headed by Minister for Environment, Forest and Climate Change, GOI, and is assisted by an executive committee, monitoring group and support mechanism. The executive committee of the National Authority is headed by the Director General of Forests and Special Secretary, MoEF&CC, GOI.





### **A.3 Constitution of State Authority**

The State Authority consists of a governing body, steering committee and an executive committee.

The Governing Body is headed by the Chief Minister (or Lt Governor for the UT of J&K during the President's rule) and Ministers/officers as ex-officio members, and Principal Secretary (Forest) as Member Secretary (Composition: Section 10 (5) of the CAF Act 2016). The Governing Body lays down the broad policy framework for the functioning of State CAMPA and reviews its functioning periodically. The Governing Body is assisted by a Steering Committee and an Executive Committee.

The Steering Committee is headed by Chief Secretary with official (ex-officio) members from various departments, and one non-official member – an expert on tribal matters/representative of tribal communities (Composition: Section 11 (2) of the CAF Act 2016). The Steering Committee is responsible to lay down and approve rules and procedures for the functioning of Executive Committee. The steering Committee (i) monitor the progress of the utilization of funds released by the State CAMPA, (ii) approve the Annual Plan of Operation (APO) prepared by the Executive Committee, (iii) approve the annual reports and audited accounts of the State CAMPA and (iv) ensure inter departmental coordination.

The Executive Committee is headed by the Principal Chief Conservator of Forests with official (ex officio) members from various departments and following non-official members (Composition: Section 11 (3) of the CAF Act 2016):

- i. Two eminent NGOs
- ii. Two representatives of district level Panchayati Raj Institutions
- iii. One expert on tribal matters /representative of tribal communities

The Executive Committee is responsible to take all steps for giving effect to the State CAMPA and overarching objectives and core principles, in accordance with rules and procedures approved by the Steering Committee and the approved APO. The Executive Committee prepare the APO of the State for various activities and submit it to the Steering Committee before end of December for each financial year to obtain the Steering Committee's concurrence, while giving break-up of the proposed activities and estimated costs. It also supervise the works being implemented in the State using the funds released from the State CAMPA; be responsible for proper auditing of both received and expenditure of funds; submit reports to the Steering Committee for review / consideration; and prepare Annual Report for each financial year.

### **A.4 Utilisation of Monies in the State Fund**

#### **A.4.1 Procedure for utilization of funds of Compensatory Afforestation (CA)**

In respect of monies received from user agencies for Compensatory Afforestation (CA) including additional & penal CA, funds are utilized as per the project-wise CA amount received and approved CA plan.

#### **A.4.2 Procedure for utilization of Net Present Value (NPV) money for Forest & Wildlife Management**

- a. As per the CAF Rules, 2018, **not less than 80% of the NPV money** is used for the forest and wildlife management activities covered under Rule 5 (2). The forest and wildlife management component includes assisted natural regeneration and artificial



regeneration, silvicultural operations, protection and maintenance of plantations and forests, pest and disease control in forest, forest fire prevention and control operations, soil conservation works in forests, improvement of wildlife habitat, management of rescue centre for wild animals and management of biological diversity & biological resources.

- b. **Not more than 20% of the NPV money** is utilized for forest and wildlife related infrastructure and capacity building activities listed under Rule 5 (3) of the CAF Rules, 2018. The activities include purchase and maintenance of equipment or devices used for communication and information technology; construction, up-gradation and maintenance of inspection paths, forest roads, fire lines, watch towers, check posts and timber depots; construction of residential and official buildings in forests for frontline staff (Range Officer and below); casual engagement of local people or labours to assist the regular staff for works for protection of forests and wildlife; independent monitoring and evaluation including third party monitoring; publicity and awareness of CAMPA programmes/ schemes; survey and mapping for preparation of APO, and capacity building of frontline staff.

#### **A.4.3 Procedure for utilization of monies received from diversion of forest lands in Protected Areas (National Parks, Wildlife Sanctuaries)**

Wildlife Protection Department utilizes funds for wildlife conservation and related infrastructure development and capacity building in accordance with the site-specific **Integrated Wildlife Management Plan** approved at the time of diversion of land in Protected Areas.

#### **A.4.4 Procedure for utilization of interest money**

Rule- 6 of CAF Rules, 2018 provides for manner in which interest accrued on the deposits in the State Fund shall be utilised. Rule 6 (a) provides that not less than 60% of the accrued interest shall be utilised on forest and wildlife conservation activities and for meeting salary and allowances of regular and contractual staff of CAMPA. Rule 6 (b) provides that not more than 40% of the interest on deposits in the State Fund shall be spent for meeting the non-recurring and recurring expenditure of the State Authority on management of office expenses, purchase of office equipment, hiring of staff car and other contingency.

### **A.5 State CAMPA in Jammu and Kashmir (J&K)**

#### **A.5.1 Establishment**

The Compensatory Afforestation Fund Management and Planning Authority (CAMPA) in the J&K was constituted vide Notification No. SRO-354 of 2009 dated 11 November 2009.

#### **A.5.2 Implementation**

The implementation of J&K CAMPA was started in the year 2010-11.

The major activities of J&K CAMPA include plantations, forest protection, wildlife habitat management, soil and moisture conservation, research, capacity building, infrastructure development, demarcation and information technology, etc.

The works in J&K CAMPA were executed by Forest Department (Territorial) and the Allied Departments, namely Wildlife Protection Department, Social Forestry Department, Soil and Water Conservation Department, J&K Forest Research Institute, Ecology, Environment and Remote Sensing Department and Forest Protection Force. Activities such as plantation, infrastructure works, soil and water conservation structures, fencing and purchasing of



equipments under the fund of CAMPA every year are carried out by all of these departments. The role of various departments in such activities is as mentioned below in brief:

- i. **Forest Territorial Department:** Majority of the works of CAMPA are being carried out by this department. The works of this department includes raising of plantations and related activities such as fencing and soil and moisture conservation (SMC) works in forest lands and infrastructure works such forest range office cum residence, inspection hut, forest path, watch tower, boundary pillars etc.

**Non-Territorial Divisions:**

- A) **Minor Forest Produce Division (MFP), a non-territorial division of Forest Territorial Department:** MFP Division carries out plantation of medicinal plants under the fund of CAMPA at various areas under its jurisdiction.
  - B) **Urban Forestry, a non-territorial division of Forest Territorial Department:** This Division carries out plantation activities under CAMPA fund in urban areas only. It raises strip plantations along roads as well as on institutional lands.
  - C) **Agrostology, a non-territorial division of Forest Territorial Department:** Basically, this Division gives focus on grass land development along with plantation and other related activities such as fencing, SMC works. Inside the closure it sowed grass slips in huge number for the purposes of grass development for distribution among local communities as fodder. Also, the Division provides grass slips to other department to plant it inside the closure for grass development which is distributed among the local people.
  - D) **Eco Task Force (ETF), Planning and Publicity and National Highway Authority 1A (NH1A), non-territorial divisions of Forest Territorial Department:** All these divisions carry out plantation and other infrastructure work activities under the fund of CAMPA at various areas under their jurisdiction.
  - E) **Department of Social Forestry:** This department carries out plantation activities under CAMPA fund in Urban as well as Rural areas. In urban areas, this department raises strip plantations along roadside as well as plantations on institutional lands. In rural areas also, this department carries out plantation and related activities.
- ii. **Wildlife Department:** This department carries out plantation and other infrastructure work activities under the fund of CAMPA in protected areas. Infrastructure works includes forest office cum residence, inspection hut, forest path, watch tower, rescue centre etc.
  - iii. **Department of Soil and Water Conservation:** This department gives focus on development of soil and water conservation structures such as DRSM, Crates and WHS inside the plantation unit of other departments as well as its own units.
  - iv. **Wullar Conservation and Management Authority (WUCMA):** This Authority carries out plantation and other civil work activities under the fund of CAMPA at various areas under their jurisdiction.



## **A.6 Present Third Party Evaluation**

### **A.6.1 Evaluation Years**

Present Third Party Evaluation pertains to works carried out during the years 2019-20 to 2021-22 under the J&K UT CAMPAs.

This evaluation/study was carried out by AFC Delhi during the year 2022-23.

### **A.6.2 Objectives**

The objectives of Third Party Evaluation were:

- a. To evaluate the survival rate including growth of plants and their impact on vegetal cover.
- b. To assess adherence to the procedures for construction, plantation and any other proceedings for asset creation in conformity with the guidelines and procedures laid down under the J&K UT CAMPAs or defined by the government.
- c. To evaluate stock taking of various assets created under the J&K UT CAMPAs in terms of quantity and quality.
- d. To check the documentation, record keeping and reports relating to assets created at Divisional level.
- e. To assess the overall impact of the various activities of the J&K UT CAMPAs.

### **A.6.3 Broad scope**

The broad scope of Third Party Evaluation includes, but not limited to:

- i. Field verification and validation of plantations and quality of work done.
- ii. Field verification and validation of water conservation structures and eco-restoration closures.
- iii. Field verification of various assets created.
- iv. Verification and comparison of related documents such as micro-plan, plantation journal, plantation card, design and estimate for soil & water conservation structures, store register and other necessary supporting documents in relation to the field situation and periodical progress reports submitted.
- v. Assessment of the procedures/ norms of procurement, construction, plantation, payment and any other proceedings for asset creation in relation to the guidelines and procedures laid down under the J&K UTCAMPAs or defined by the government.
- vi. Compliance of official circulars/orders by the implementing authorities.
- vii. Constraints faced, if any, by the implementing authorities
- viii. Suggestions for improvements.

## **A.7 Union Territory (UT) of Jammu & Kashmir (J&K)**

The J&K UT, with 42,241 sq. km geographical area and 1.24 crore population (census 2011), came into existence on 31-10-2019 due to the bifurcation of erstwhile State of J&K into two UTs, viz. J&K UT and Ladakh UT.

The J&K UT is located in the north-western part of India (Map-1). It shares its western boundary with Pakistan. It is bounded by Ladakh UT of India in the north and east and by Himachal Pradesh and Punjab States of India in the south.

**Map-1:** Map of J&K UT



The J&K UT has two Capitals, viz. Jammu and Srinagar. For administrative purposes, it is divided into two administrative Divisions, viz. Jammu Division and Kashmir Division and each Division has 10 districts. The districts in Jammu Division are Kathua, Jammu, Samba, Udhampur, Reasi, Rajouri, Poonch, Doda, Ramban and Kishtwar. Similarly, the districts in Kashmir Division are Anantnag, Kulgam, Pulwama, Shopian, Badgam, Srinagar, Ganderbal, Bandipura, Baramulla and Kupwara.

It has three geographical zones, viz. (i) Sub-mountain and semi-mountain plain known as *kandi* or dry belt, (ii) the Shivalik ranges and (iii) the high mountain zone constituting the Kashmir valley, Pir Panchal range and its off-shoots including Doda, Poonch and Rajouri districts and part of Kathua and Udhampur districts.

The climate of J&K UT varies from sub-tropical in the Jammu plains to semi-arctic cold in Kashmir and Jammu mountainous tracts having temperate climate conditions. The annual rainfall also varies from region to region with 650 mm in Srinagar and 1116 mm in Jammu.

It has 4,155 sq. km very dense forests, 8,117 sq. km moderately dense forests and 9,115 sq. km open forests (ISFR 2021). The forest and wildlife species varies depending on the altitudes.



## Chapter-B

# METHODOLOGY & APPROACH

## B1. Site Selection

### B.1.1 Site Selection for Third Party Evaluation

The record of sites/assets evaluated in the present Third Party Evaluation was compiled by the Evaluating Agency i.e. AFC India Ltd. in consultation with the CEO of CAMPA and concerned authority of allied department, from the APOs (Annual Plan of Operations) of the years 2019-20 to 2021-22 as per the TOR. The sites had been selected on the basis of random selection, covering 30% of all work carried out in all divisions including Forest Territorial as well as Non Territorial divisions of Forest Department and other allied department such as Social Forestry, Wildlife and Soil & Water Conservation Departments under the given fund by CAMPA of J&K UT.

This Third Party Evaluation report has included (i) Introduction, (ii) Quantitative Analysis, (iii) Qualitative Analysis, (iv) Constraints faced by the Implementing Authorities and Suggestions for Improvement and (v) Suggestions/Recommendations of Evaluating Agency (AFC India Ltd.). It is supported by photographs and GPS coordinates of all the evaluated sites.

## B.2 Methodology for evaluation

Under the CAF (Compensatory Afforestation Fund) Rules and Guidelines, it is mandatory to undertake independent monitoring of the CAMPA activities. Since this exercise is undertaken in subsequent year of Annual Plan of Operation (APO) implementation, the method of the exercise is more like objective assessment of accomplishment of planned activities including quality and quantities of works.

Given the TOR the approach of undertaking the assessment of CAMPA works had been to measure effectiveness of the treatments/ interventions undertaken, identification of implementation gaps and limitations, suggestions etc.

TOR had visualized engagement of various experts. Thus, our approach considered involvement of experts with different specialty and after studying the CAMPA Plans shared by the department; accordingly, these experts had been made responsible to provide inputs based on the field visits findings, and had contributed for CAMPA assessment / monitoring report preparation.

The geographical span of the CAMPA plans is diverse and spread-out in all the forest divisions and allied department. Given time and scope, more emphasis was given on the qualitative assessment; however framework given in the TOR was adhered. **All selected sites and works accomplished were holistically observed and assessment was made both in quality and quantity terms. Study team along with the technical support staff had visited the selected sites to assess the effectiveness of the activities implemented under CAMPA Plan components by adopting following key approaches viz.,**



- a. Physical verification of interventions and making site specific observations;
- b. Short meeting with key stakeholders

GPS locations of various activities like plantation sites, soil and moisture conservation (SMC) structures, building, infrastructure etc. has been taken. GPS track was created using hand handled devices by the study team to compare the plantation area. **The observations/findings of the Study Team had also been supported by photographs, small video clips and GPS coordinates etc., wherever it was possible.**

**B.3 Process Steps for the Study:** To evolve sound strategy for undertaking survey work and develop clear understanding amongst the team on the expected outcomes from the study, several internal meeting had been organized with all the key experts and field facilitators. A presentation was made by the Core Team on the methodology, areas of exploration, sampling coverage, process steps for executing the survey work together with broad movement plan for the field. The process steps were broadly categorized into two stages – a) Preparatory Stage, and b) Survey Work. Table i and Table ii below depict the process steps defined to help the study team meet the objectives in efficient manner.

**Table i: Process Steps for Preparatory Work:**

Day	Action
Day-1	Meeting with PCCF (HoFF), APCCF/ CEO, CAMPA, and briefed about the field plan on the basis of selected sample. <b>Request was made by the study team to formally communicate to all forest divisions and ranges to support and share relevant information for accomplishing the assessment exercise.</b>
Day-2 ~ 3	Collected all relevant data – CAMPA plans, progress reports, GPS Coordinates, Base map etc. available with the division, and finalization of sample sites.

**Table ii: Process Steps for undertaking the Field Work:**

Day	Action	Remark
Day-1	Meeting with the DFO and concern forest staff to explain the field work;  The team members had also spent time to collect available relevant information and firm-up the sites and villages for field visit in consultation with the forest officials.	Visit time slots had been communicated to stakeholders / concern forest staff through respective DFO by the study team
Day-2 ~ Day-3	Various experts had prioritized their tasks as per requirements and make observations/ reports to input into reports. <b>Each Expert had documented their observations separately for each site.</b>  Experts may also use their experience, skills	Depending on the quantum of Work the field visits and days could be planned; Number of days was indicated in the Movement Plan, however this plan was flexible and as per need



	<p>and check-list/ questionnaires to generate information and substantiate their observations/ findings.</p> <p>Efforts had also been made to take photographs and/ or create small video clips of the activities observed or exercise conducted during the field work.</p>	<p>the stay had been reduced/ extended.</p> <p>The team members have also met the forest division/range officials to learn about the CAMPA initiatives, annual budgets, Reports &amp; reporting about the activities, data etc. during the field work period.</p>
Day-15 or earlier/ later	<p>Wrap-up with the DFO/ concern forest staff to brief about the visit and key observations, and proceed for next division.</p>	<p>At this stage the team had ensured to gather / collect all requisite information data.</p>

**B.4 Survey Tools:**

For undertaking rapid assessment survey, technical and participatory techniques was adopted for making observations as well as eliciting information from the randomly identified stakeholder/ target group and key informants to provide relevance in context of the present assessment.

The key stakeholders identified under the evaluation were:

- 1) Office of the PCCF (HoFF)/ CEO, CAMPA – the client
- 2) DFOs and concern divisional staff managing/supervising the CAMPA Plans
- 3) Forest Ranges and field staff coordinating and implementing the CAMPA Plans
- 4) Gram Panchayats office bearers/ members

These stakeholders have been consulted/ interacted with to get views, feedback on the CAMPA Plan implementation besides examining the plantation site, engineering structures and other activities implemented in any financial year.

The relevance, efficiency, and effectiveness have been assessed by interacting with the project officials and other stakeholders involved in the implementation, along with collecting and reviewing secondary literature/information available in relation to the work. On other hand, the impact and sustainability of the interventions has also been assessed by interacting with both, the target communities/beneficiaries and the project planners/implementers.

**B.5 Conduction of Site Survey**

**B.5.1 Plantations, In-situ Soil & Moisture Conservation and Fencing Works**

On reaching the site, the plantation area was inspected thoroughly and carried out counting and measurements of live trees and shrubs. At every selected plantation closure, 100% counting of planted live plants was carried out.





The evaluation party had counted the total number of surviving plants planted and survival percentage was calculated site wise. Lime powder was used to mark the counted plants. The average height and diameter (at collar) of surviving plants was also measured on randomly selection basis. The evaluation party had also counted the seedlings of naturally growing important indigenous species to assess the status of natural regeneration and also counted existing main tree or plants species by laying down sample plot of 0.1 ha in the plantation closure. Further plants regenerated from root stock were also counted in these sample plots. Three to four sample plots were laid down depending upon the area of plantation.

The plantation work had also been intensively assessed for the selection of site, effectiveness of fencing, selection of species, technical standard of work and layout and location of in-situ Soil and Moisture Conservation Works. The quality of fencing work which was the basic means of proving protection of the closure had also been assessed by moving around the closure. The measurement of fencing has been taken manually by using measuring tape. The area of plantation area was compared with the track made by using GPS machine. The soil and moisture conservation works in the form of DRSM, Crates and WHS inside plantation closure had also been assessed qualitatively and quantitatively. Measurement of all smc work had been carried out inside the closure with the help of measuring tape. The total area of smc work was also calculated. The reasons of any damage in plantation area had also been recorded.

Further, estimation of actual works executed in the field in relation to the plan and fund granted and figures given in records (measurement book and plantation journal), assessment of impact on fauna of the areas (birds, insects and pollinators, assessment of evidence of grazing within plantation closure, estimation of benefits (such as grass, fodder and fuelwood) accruing to local communities from plantation sites, assessment of likely increase in carbon sequestration from afforestation works undertaken, assessment of impact of interventions on biodiversity in plantation closures, assessment of impact of interventions on soil moisture regime & ground water recharge and assessment of wrong technique of planting (plants planted without removing the polythene bag) were also made.

Assessment of grass production and collection was made in closure on sample basis by laying out 5m\*5m plot where the total weight of green grass had been collected at various locations. A quantification of grass collection had been made by comparing the data available with forest department and conversation with the local people.

After completion of work, the area was again inspected to ensure that no work was left uncounted, unmeasured and unnoted.

The evaluation party had captured video and photographs of the site with caption and site name. Photographs are integral part of the report. Location of sites and its area was counter verified from GPS track of the plantation site.

In case, survival rate is less than 30%, reason of low survival rate has also been recorded in consultation with Divisional head.



Finally, the collected information is filled up in the attached plantation, fencing and smcevaluation format in *Annexure-4*.

### **B.5.2 Infrastrucuture Work Activities and Equipments purchase**

The selected sample sites of Buildings, Inspection road/path and others were visited, surveyed, GPS co-ordinates recorded and photographed and their information was provided in civil work evaluation format in *Annexure-5*.

Equipment's purchased were verified at divisional level and the information was recorded in equipment's evaluated form in *Annexure-6*.

### **B.5.3 Record Keeping**

The record pertaining to Plantation Journals, Measurement Books, Nursery Journals, Map of Plantations etc. were also evaluated of sample sites. Map of Plantation etc. had also been evaluated on sample sites of plantation at first level.

### **B.6 Data analysis:**

*The analysis of primary data collected through field surveys was collated with the secondary data/information for corroboration and to compliment the findings. In addition, the findings emerging from the notes of site visits were appropriately incorporated to supplement and compliment the survey findings.*

- The data collected during field survey of plantation, fencing, SMC and construction works was processed in presentable form using relevant software (SPSS, MS office etc.).
- Analysis of data/information collected, was carried out division /site wise.
- Data collection approaches had involved both quantitative and qualitative techniques using appropriate questionnaire.
- Situation Analysis had been carried out on the various needs of the sample site with respect to the said parameters at RFP.
- Recommendations: Gaps and prioritization of effective strategies, effective planning and effective coordination were recommended on the basis of analysis of collected information/data.
- **On the basis of above analysis, the present Report was prepared.**



## B.7 WORK PLAN

S. No.	Deliverables	Months				
		1	2-7	8	9	
<b>A</b>	<b>Inception Phase</b>					
1	Preliminary meetings					
2	Desk review of project reports and secondary documents					
3	Finalization of sampling site and sampling strategy					
4	Development of key performance indicators, methodologies and data collection instruments					
5	Preparation and submission of Inception Report					
<b>B</b>	<b>Execution Phase</b>					
1	Orientation of field team & development of field plan					
2	Data collection as per the field plan					
3	Data quality Assurance					
<b>C</b>	<b>Reporting Phase</b>					
1	Data compilation					
2	Data Analysis					
3	Preparation and submission of draft report					
4	Preparation and submission of final assessment report					



## Chapter-C

# QUANTITATIVE ANALYSIS

### C.1 Present Third Party Evaluation

Present Third Party Evaluation pertains to works carried out during the years 2019-20 to 2021-22 under the J&K CAMPA. This evaluation was carried out by AFC Delhi during the year 2022-23.

### C.2 Methodology Used

Secondary information pertaining to physical targets achieved during the years 2019-20 to 2021-22 under the J&K CAMPA was obtained from the O/O Chief Executive Officer, J&K CAMPA Jammu and analyzed.

### C.3 Implementing Authorities

As per the secondary information, the CAMPA works in J&K CAMPA were executed by Forest Territorial as well as Non Territorial (Agrostology, ETF, Urban Forestry, MFP, NH1A, Planning & Publicity) divisions of Forest Department and other allied department such as Social Forestry, Wildlife department, Soil & Water Conservation of J&K UT.

### C.4 Physical Targets

As per the secondary information, the following physical targets were achieved during the years 2019-20 to 2021-22 under the J&K CAMPA.

#### C.4.1 Area Treated

The Department, Region/Circle and Division-wise area treated by forest and allied departments under J&K CAMPA during financial year 2019-20, 2020-21 & 2021-22 was as given in table- 1.

**Table- 1:** Department, Region/Circle and Division-wise area treated by forest and allied departments under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22.

Department	Region/ Circle	Division	Area Treated(In Ha)			
			2019-20	2020-21	2021-22	Total
Forest Department (Territorial)	Jammu Region	Jammu	169.00	600.00	464.00	1233.00
		Ramnagar	75.00	344.80	182.00	601.80
		Billawar	260.00	192.97	202.00	654.97
		Basohli	149.00	258.00	176.00	583.00
		Udhampur	262.00	650.00	241.00	1153.00
		Kathua	310.00	233.50	221.00	764.50
		Samba	128.00	200.00	180.00	508.00
		ETF	120.00	125.00	188.00	433.00
		Rajouri	319.00	528.00	208.00	1055.00
		Nowhera	211.00	335.00	278.00	824.00
		Reasi	423.00	303.00	194.00	920.00
		Mahore	125.00	351.00	269.00	745.00



		Poonch	349.00	491.00	428.00	1268.00
		Batote	234.60	683.70	234.00	1152.30
		Bhaderwah	397.14	739.78	190.00	1326.92
		Doda	85.00	195.00	246.00	526.00
		Kishtwar	130.00	616.00	633.00	1379.00
		Marwah	199.00	504.00	400.00	1103.00
		Ramban	155.23	150.65	200.00	505.88
		NH1A	50.00	106.00	90.00	246.00
		<b>Sub Total</b>	<b>4150.97</b>	<b>7607.40</b>	<b>5224.00</b>	<b>16982.37</b>
	Kashmir Region	Kehmil	42.00	93.44	173.44	308.88
		Kamraj	58.40	137.00	235.00	430.40
		Langate	30.00	100.00	172.20	302.20
		JV Baramulla	45.00	120.07	144.00	309.07
		Sindh	60.50	149.50	278.00	488.00
		PP Budgam	104.00	230.00	210.00	544.00
		Tangmarg	37.00	74.00	85.00	196.00
		Bandipore	63.00	140.00	113.00	316.00
		Lidder	106.29	115.91	149.00	371.20
		Kulgam	34.00	95.00	151.00	280.00
		Shopian	25.00	125.00	207.00	357.00
		Anantnag	69.00	115.00	166.00	350.00
		Awantipora	45.00	86.00	200.00	331.00
		<b>Sub Total</b>	<b>719.19</b>	<b>1580.92</b>	<b>2283.64</b>	<b>4583.75</b>
	Agrostology Circle	Jammu	157.00	132.20	247.00	536.20
		Kashmir	90.00	156.00	468.00	714.00
		<b>Sub Total</b>	<b>247.00</b>	<b>288.20</b>	<b>715.00</b>	<b>1250.20</b>
	Central Circle	Plg. & Publicity	0.00	80.11	75.00	155.11
		MFP	103.00	75.00	110.00	288.00
		<b>Sub Total</b>	<b>103.00</b>	<b>155.11</b>	<b>185.00</b>	<b>443.11</b>
Social Forestry Department	Social Forestry	Srinagar	31.20	0.30	82.16	113.66
		Baramulla	39.00	65.00	142.90	246.90
		Kupwara	33.50	85.00	104.00	222.50
		Anantnag	41.00	75.30	111.00	227.30
		Pulwama	30.75	48.45	112.00	191.20
		Doda	37.22	133.90	174.26	345.38
		Ramban	77.00	110.50	191.00	378.50
		Udhampur	78.54	159.06	128.60	366.20



	Jammu	38.48	154.02	157.14	349.64
	Kathua	162.50	160.50	38.96	361.96
	Poonch	81.50	112.50	188.00	382.00
	Rajouri	85.80	117.00	188.50	391.30
	<b>Sub Total</b>	<b>736.49</b>	<b>1221.53</b>	<b>1618.52</b>	<b>3576.54</b>
Wildlife Protection Department		262.8	194.07	300.87	757.74
WUCMA		0.00	230.00	150.00	380.00
Soil and Water Conservation Department		174.00	988.27	0.00	1162.27
Kandi Areas of Jammu Region		0.00	0.00	166.00	166.00
<b>Grand Total</b>		<b>6530.65</b>	<b>12471.43</b>	<b>10742.16</b>	<b>29700.54</b>

#### C.4.2 No. of Plantation Units Formed

The Department, Region/Circle and Division-wise no. of plantation units formed for treating the areas by forest and allied departments under J&K CAMPA during financial year 2019-20, 2020-21 & 2021-22 were as given in table-2.

**Table- 2:** Region/Circle and Division-wise no. of plantation units/closures formed for treating the areas by forest and allied departments under J&K CAMPA during financial year 2019-20, 2020-21 & 2021-22.

Department	Region/ Circle	Division	No. of Closures			
			2019-20	2020-21	2021-22	Total
Forest Department (Territorial)	Jammu Region	Jammu	14	60	32	106
		Ramnagar	32	47	12	91
		Billawar	29	22	12	63
		Basohli	12	10	13	35
		Udhampur	57	33	15	105
		Kathua	17	24	44	85
		Samba	11	18	15	44
		ETF	11	10	10	31
		Rajouri	35	66	18	119
		Nowhsera	21	28	19	68
		Reasi	27	22	16	65
		Mahore	24	19	14	57
		Poonch	38	45	32	115
		Batote	28	40	9	77
		Bhaderwah	32	36	12	80
		Doda	10	16	14	40
		Kishtwar	8	34	30	72
		Marwah	14	50	26	90
		Ramban	19	16	23	58
NH1A	7	10	0	17		



		<b>Sub Total</b>	<b>446</b>	<b>606</b>	<b>366</b>	<b>1418</b>
Kashmir Region		Kehmil	2	7	14	23
		Kamraj	6	7	19	32
		Langate	2	5	11	18
		JV Baramulla	4	12	11	27
		Sindh	5	7	6	18
		PP Budgam	5	9	6	20
		Tangmarg	2	4	5	11
		Bandipore	5	7	6	18
		Lidder	6	7	7	20
		Kulgam	2	5	6	13
		Shopian	2	5	10	17
		Anantnag	4	6	10	20
		Awantipora	1	2	5	8
		<b>Sub Total</b>	<b>46</b>	<b>83</b>	<b>116</b>	<b>245</b>
		Agrostology Circle		Jammu	15	19
Kashmir	9			11	19	39
<b>Sub Total</b>	<b>24</b>			<b>30</b>	<b>42</b>	<b>96</b>
Central Circle		Plg. & Publicity	0	6	6	12
		MFP	7	4	3	14
		<b>Sub Total</b>	<b>7</b>	<b>10</b>	<b>9</b>	<b>26</b>
Social Forestry Department	Social Forestry	Srinagar	13	3	15	16
		Baramulla	13	12	14	25
		Kupwara	6	7	14	13
		Anantnag	3	10	14	13
		Pulwama	4	5	9	9
		Doda	15	23	14	38
		Ramban	18	13	21	31
		Udhampur	25	23	13	48
		Jammu	33	14	19	47
		Kathua	18	13	3	31
		Poonch	18	11	12	29
		Rajouri	19	10	12	29
<b>Sub Total</b>	<b>185</b>	<b>144</b>	<b>160</b>	<b>489</b>		
Wildlife Protection Department			36	26	28	90
WUCMA			0	7	3	10
Soil and Water Conservation Department			18	133	0	151
Kandi Areas of Jammu Region			0	0	12	12
<b>Grand Total</b>			<b>756</b>	<b>1043</b>	<b>738</b>	<b>2537</b>



### C.4.3 Fencing Done Around the Plantation Units

The year wise fencing done around the plantation units under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22 were as shown in table-3.

**Table-3:**Year wise fencing done around the closures under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22

Fencing in Lakh Running Feet			
2019-20	2020-21	2021-22	Total
23.14	40.58	32.72	<b>96.44</b>

### C.4.4 Plants Raised in the Nurseries and Planted in the Treated Areas

The year wise plants raised in the nurseries and planted in the treated areas under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22 were as shown in table-4.

**Table-4:** Year wise plants raised in the nurseries and planted in the treated areas under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22

Activity	Plants in Lakh			
	2019-20	2020-21	2021-22	Total
Plants raised in nurseries	55.36	79.82	52.18	187.36
Plants planted in treated areas	37.06	67.78	69.01	173.85

### C.4.5 Soil Conservation Works

#### C.4.5.1 DRSM

The year wise DRMS constructed under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22 were as shown in table-5.

**Table-5:**Year wise DRMS constructed under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22

DRMS Constructed in Cum			
2019-20	2020-21	2021-22	Total
13679	48330	37264	<b>99273</b>





#### C.4.5.2 Crates

The year wise Crates constructed under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22 were as shown in table-6.

**Table-6:** Year wise Crates constructed under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22

Crates Constructed (No.)			
2019-20	2020-21	2021-22	Total
1204	2293	2592	<b>6089</b>

#### C.4.5.3 WHS/Ponds

The year wise No. of Water Harvesting Structures/Ponds constructed under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22 were as shown in table-7.

**Table-7:** Year wise No. of Water Harvesting Structures/Ponds constructed under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22

WHS/ Ponds Constructed (No.)			
2019-20	2020-21	2021-22	Total
21	132	378	<b>531</b>

#### C.4.6 Demarcation Works (No. of Boundary Pillars Installed)

The year wise forest Demarcation Works (No. of Boundary Pillars Installed) done under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22 were as shown in table-8.

**Table-8:** Year wise Demarcation Works (No. of Boundary Pillars Installed) done under J&K CAMPA during the financial year 2019-20, 2020-21 & 2021-22

Demarcation Works (No. of Boundary Pillars Installed)			
2019-20	2020-21	2021-22	Total
2879	7176	9669	<b>19724</b>



## Chapter-D

# QUALITATIVE ANALYSIS

### D.1 Third Party Evaluation

Third Party Evaluation pertaining to works carried out during the years 2019-20 to 2021-22 under the J&K UT CAMPA was allotted to AFC India Ltd. This third party evaluation was carried out by AFC India Ltd. during the year 2022-23.

### D.2 Selection and Evaluation of Plantations, Civil Works, Equipments and Nurseries

#### D.2.1 Plantation

##### D.2.1.1 Selection of Sites

As per Annual Plans of Operations (APO) for the years 2019-20 to 2021-22 of J&K CAMPA Project, the physical targets of plantations were achieved on 2537 units/closures located in 60 CAMPA Project Divisions of Territorial and Non Territorial (Agrostology, ETF, Urban Forestry, MFP, NH1A, Planning & Publicity) divisions of Forest department and allied departments such as Social Forestry, Wildlife, Soil and Water Conservation (DSCO) and WUCMA of J&K UT.

The records of works for the present Third Party Evaluation were compiled by the Evaluating Agency (AFC India) in consultation with the Chief Executive Officer, J&K UT CAMPA Jammu and the concerned authorities of allied departments, from the APOs of the years 2019-20 to 2021-22. The sites were selected on the basis of random selection, covering 30% of works carried out in all the divisions of territorial, non-territorial and allied departments.

The quantum of plantation work carried out during the years of 2019-20 to 2021-22 under CAMPA by the Implementing Agency and evaluated by the Evaluating Agency was as given in table-9.

**Table-9:** Plantation units development carried out during the years of 2019-20 to 2021 -22 under CAMPA by Implementing Agency and Evaluated by Evaluated Agency, AFC India Ltd.

Particulars	Number of Closures (unit)	Area of treatment (ha)	Fencing (Rft)
Total number of unit created by Implementing agencies from 2019-20 to 2021-22	2537	29700	96.44 Lakh Rft
30% of total work	762	8911	28.93 Lakh Rft
Work evaluated by Evaluating agency –AFC India Ltd.	*851	8963	28.95 Lakh rft

**\*836 plantation units and 15 nurseries**



The year wise plantation work evaluated by the Evaluating Agency was as given in table-10.

**Table-10:** Year wise plantation work evaluated by the Evaluating Agency

Sr. No.	Activity	Year	No. of Selected Sites	Area of Selected Sites (ha)	Fence Length of Selected Sites (Rft)
1.	Plantations	2019-2020	265	2129.05	737461
		2020-2021	292	3508.5	1232314
		2021-2022	279	3325.6	925984
		<b>Total</b>	<b>836</b>	<b>8963.1</b>	<b>2895759</b>

The department wise number of plantation units evaluated by the Evaluating Agency was as given in table-11.

**Table-11:** Department wise number of plantation units evaluated by the Evaluating Agency

Sr. no.	Name of Department	Divisions		Number of Plantation Sites/ Closures Evaluated
1	Forest Department	Forest Territorial	Territorial	448
		Non Territorial	Agrostology	34
			ETF	10
			MFP	7
			NH1A	12
			Urban Forestry	117
			Planning & Publicity	4
2	Social Forestry			131
3	Wildlife			26
4	Soil & Water Conservation dept			45
5	WUCMA			2
	<b>Total</b>			<b>836</b>

#### D.2.1.2 Procurement of Secondary Data

The secondary data of the selectedplantation units was obtained from the O/O concerned Divisional and Range Officers and analyzed.

#### D.2.1.3 Field Survey

Detailed field survey of all the selected plantation units was conducted by the AFC evaluation team. The process followed was as given below:

**a. Instructions to Evaluation Team, frontline staff of forest department and the local labourers:**

At the gate of every selected plantation site, instructions were given to the evaluation team, frontline staff of forest and allied departments and the local labourers on the following aspects:

- i. Briefing of work (Panchnama).
- ii. Measurement of planted area by using GPS.
- iii. Counting of species wise planted live plants.
- iv. Measurement of height and collar diameter of planted live plants on random sample basis.
- v. Estimation of plants of natural regeneration, existing main plant species.
- vi. Estimation of plants of root stock.
- vii. Evaluation of Soil and Water Conservation works.
- viii. Measurement and assessment of fencing surrounding the plantation area.
- ix. Impact of plantation on local vegetal cover, biodiversity and other related aspects.
- x. Quantification of tangible benefits such as collection of grasses from the closure by local community.
- xi. Assessment of likely increase of carbon sequestration and forest biomass based on in literature and published research articles/documents
- xii. Re-survey of plantation site.
- xiii. Recording of field observations in Plantation Format.
- xiv. Checking of record keeping.
- xv. Meeting with Stake Holders and village panchayat.
- xvi. Recommendations of Evaluators.



Photo-1: Discussion and signing of Panchnama



Photo-2: Checking of record on MB

**b. Briefing of work (Panchnama)**

On reaching every selected plantation unit, Panchnama was signed between the front line staff of Forest Department/Allied Department and the members of AFC evaluation team. Panchnama is basically a meeting held between the implementing agency officials and evaluating agency team where the evaluators briefed about the work to be carried out in a closure to the forest officials.

### c. Measurement of Planted Area

GPS track record of every selected plantation sites was conducted by walking on the boundary of planted area to verify the area on actual and the area mentioned on measurement book. The area were calculated and compared with plantation targets shown in the plantation journal.

### d. Counting of Species wise Planted Live Trees and Shrubs

At every selected plantation site, 100% total counting of planted live trees and shrubs was carried out. Lime powder was used to mark the counted plants. From this, species wise and overall survival % of every selected plantation unit was determined.



Photo-3: Plants counting on field by putting lime

### e. Measurement of Height and Collar Diameter of Planted Live trees and shrubs

At every selected plantation site, the height and collar diameter of randomly selected, species wise, representative planted live plants was measured. Calliper scale was used to measure the collar diameter of small plants. Species wise average height and collar diameter of planted live plants of every selected plantation site were determined.



Photo-4: Height measurement of live plants



Photo-5: Collar diameter measurement of live plants

### f. Estimation of Plants of Natural Regeneration and Existing Plant Species

At every selected plantation site, sample plots of 0.1 ha was randomly laid for the counting of plants of natural regeneration of main tree species and existing plant species. Around 4-5 sample plots were laid down depending upon the area of the plantation unit. Sample plots were laid down at every corner and middle location of a plantation unit. The species wise number of plants growing naturally mainly and existing plants species in each sample plot was counted and average number of species wise plants per sample plot were calculated and extrapolated to per ha.

### g. Estimation of trees from Root Stock

Similarly root stock estimation of each plantation site was carried out in the sameway by laying down sample plot of 0.1 ha for the counting of main tree species. The species wise number of trees root stock in each sample plot was counted and species wise average number of trees per sample plot were calculated and extrapolated to per ha.



Photo-6: Sample plot for natural regeneration, existing tree species and root stock study

### h. Evaluation of Soil and Water Conservation (SMC) Works

At every selcted plantation site, all the DRSM/Crates/WHS constructed as means of soil and water conservation were measured and its present condition was also evaluated.

The volume of SMC works carried out inside a plantation unit was measured and total number of SMC works was also counted inside a closure. The details of SMC works was counter verified from the journal.



Photo-7: Measurement of SMC work- Crate



Photo-8: Measurement of SMC work DRSM

### i. Measurement and assessment of fencing



Photo-9: Measurement of fencing

Fencing erected for protection of plantations was measured and its rollplayed in the protection of plantation unit along with the present condition was evaluated. Field evaluator moved surrounding the closure to measure the length of fencing and also to seethe condition of it.

Total number of iron angle or wooden post was counted and also the height of it was measured.

Number of strands and condition of fencing was also checked.

### **j. Checking of pits to see plastic bag removed during planting**

On sample basis, the pits of dried plants were dug to check whether the plants were planted by removing the plastic bag or not.



*Photo-10: Checking of pit if plastic bag was present*

### **k. Impact on other related aspects**

The impact of plantations on local vegetal cover, biodiversity enrichment, augmentation of medicinal plants and on water shed were recorded. Meeting with the local inhabitants were conducted to gather the information about the economic activity that took place as a result of this plantation.

### **l. Quantification of tangible benefits**

An assessment of grass production was done in laying out sample plot of 5m\*5m inside a



*Photo-11: Grass quantification in a sample plot and its production plant species and root stock study*

plantation unit on sample basis at various locations and extrapolated into per ha production. To get the average production of grass, various locations have been chosen. Quantification of tangible benefits such as collection of grasses as fodder from the closure by local community was also collected through focus group discussion and data available on record at forest division.

### **m. Re-survey of Plantation Site**

At every selected plantation site, after completion of field survey, the area was re-surveyed to ensure that no work was left uncounted, unmeasured and unnoted.

### **n. Recording of Field Observations**



*Photo-12: Checking of Records and recording of field observations*

At every selected plantation site, the observations made during the field survey were recorded in the relevant evaluation Format.

**o. Record keeping assessment**

The documents such as plantation journal, estimation sheet/MB, plantation map, etc. had been evaluated and method of record keeping as well as reporting mechanism was also recorded.

**p. Meeting with Stake Holders and local people**

Short meetings were held with the front line staff to know the constraints faced by them in the execution of project activities and their suggestions for improvement. Local people were also invited to share their views about the work done in their areas.



Photo-13: Meeting with local people

**q. Recommendations of Evaluators**

At every selected plantation unit, the evaluators have recorded their recommendations for the improvement of project activities.

**D.2.2 Infrastructure works**

**D.2.2.1 Selection of Infrastructure Works Sites**

The year wise number of infrastructure works sites randomly selected for evaluation were as given in table-12:

**Table-12:** Year wise number of infrastructure work evaluated by the Evaluating Agency, AFC India Ltd.

Sr. No.	Year of construction	No. of Civil Works Sites Selected
1.	2019-2020	8
2	2020-2021	8
3	2021-2022	40
<b>Total</b>		<b>56</b>

**D.2.2.2 Infrastructure works survey:** Every selected site of construction activities was visited by the evaluation team. The sites were photographed and their GPS readings, present condition and utilization were recorded in the concerned evaluation format.



Photo-14: Range office cum residence at Manda and Guard Hut at Tawi Herbal Eco Park, Jammu



### D.2.3 Equipments:

#### D.2.3.1 Selection of equipment selected for Evaluation

The year wise number of implementing agencies randomly selected for evaluation of equipments purchased are given in table-13.

**Table-13:** Year wise number of equipments purchased evaluated by the Evaluating Agency

Sr. No.	Year of purchasing	No. of Implementing Agencies
1.	2019-2020	11
2	2020-2021	07
3	2021-2022	20
<b>Total</b>		<b>38</b>

**D.2.3.2 Equipments survey:** Equipments purchased under CAMPA fund at various divisions have been evaluated and photographed. Equipments purchasing bills were checked during the visit.



*Photo-15: Equipments at Ganderbal nursery and animal controlling weapons at Kishtwar WL*

**D.2.4 Nursery survey:** Fifteen existing nurseries of various departments were visited, photographed and the record was checked. Infrastructure, condition as well as record keeping system were evaluated during field visit.



*Photo-16: Baramulla nursery and record checking at Malhar nursery of Sindh Territorial division*



## **D.3 Results of Qualitative Evaluation**

### **D.3.1. Plantations Evaluation**

#### **D.3.1.1 General Observations**

##### **a. No. of Plantation Units**

Total 836 randomly selected plantation units (table-10) were evaluated by the team of AFC India Ltd.

##### **b. Topography, Climate and Soil of Plantation Units**

Topography of plantation sites was hilly and the soil was generally clayey loam. Climate of Jammu region is of mixed types; some parts are temperate whereas some are very dry known as Kandi areas. Kashmir region generally has uniform climatic conditions depending upon the season.

##### **c. Advance Planning**

Advance planning for plantation units was done in the previous year includes:

- i. Survey of plantation site,
- ii. Preparation of treatment plan,
- iii. Raising of seedlings in the nearby nursery.

##### **d. Planting**

Planting operation include.

- i. Fencing (barbed wire or chain link) of plantation site,
- ii. Cutting of weeds for providing space for plants to be planted,
- iii. Earth work (digging of pits of 45cm x 45cm x 45cm size), and

Monsoon planting: in lower reaches of Jammu region.

Winter planting: in temperate part of J&K (higher reaches of Jammu region and whole Kashmir region).

##### **e. Village Panchayats Consultancy**

People participation is a very important tool for raising successful plantations. Keeping this factor in view, village panchayats were actively involved in the preparation of treatment plan of every plantation site/closure.

The village panchayat consultancy includes:

- i. Species to be planted
- ii. Type of fencing to be done
- iii. Location and type of soil and moisture conservation works to be done
- iv. Regulation of collection of grasses, fodder, fuelwood and medicinal plants
- v. Employment of local people for watch and ward of plantations

## f. Species Planting at Plantation Sites

During evaluation, it was observed that conifers as well as broad leaved species were planted depending on the edaphic and climatic condition of sites. The conifer species planted includes chir, pine, deodar and fir, etc. The broad leaved species planted includes majorly oak, ulmus, HC Nut, robinia, salix; timber species (acacia, sissou, siris, ailanthus) bamboo, fruit species (guava, mango, wild apple, akhrot, apricot, prunus and pomegranate, etc), trees of medicinal importance (arjun, amla, behda, melia, bel, jamun etc.) and ornamental species (bauhinia, tecoma, gulmohor, bottle brush, kaner, sukhchain, alstonia, palash etc.). Grass slips were also found planted along with the main species.

It has been observed that the species plantation was different with different department. Forest territorial department had given emphasis on planting conifers, broad leaved along with multipurpose tree species, trees of medicinal importance and wild fruit plants. Where as other department like social forestry planted conifers and ornamental plants majorly. Department such as wildlife had been given more focus on planting conifers, broad leaved and wild fruit plants; while other allied department planted both conifers and broad leaved plants. Agrostology division mainly focused on planting grass slips along with some conifers, broad leaved and multipurpose tree species.

Conifers were observed planted at upper higher reaches whereas in the dry areas known as Kandi areas planted tree species like acacia, sissou, bel, karangal, ber etc. were observed.

## g. Pattern of Planting

Pattern of planting adopted was 'Gap Planting'. Planting of seedlings was done wherever space were available inside the plantation unit. Mixed type plantations were carried out both in the strip and block areas. In some strip, line plantation has also been found.



Photo-17: Block Plantation



Photo-18: Strip plantation

### D.3.1.2 Important Observations

Some of the important observations made during the field visits were as given below:

- Fencing was found to be effective. No evidence of grazing (cow dung or any livestock drooping) was seen inside the plantation sites during field visit.
- Planting of saplings was done as per the norms.
- Various species of birds, insects, butterflies and snakes were seen during field survey.
- In addition to plantation, casualty replacement was also found to have been done. Along with the main tree species other species of timber, wild fruit plants have been found planted.
- Weeding and hoeing shall enhance the growth of plants planted and this need more attention.
- Inside few sites during field survey, collection of grasses and green leaf as fodder by the local people have been noticed.
- Geo spatial jute mat had been observed made under the fund of CAMPA at plantation units of NH1A for the protection of areas from soil erosion and provide support for plantation at highly steep slope of hilly areas.



Photo-19: Jute mat at Batote NH1A plantation site

- Plantation board needs to be placed at 22 closures.
- 45 closures were found to be under the process of plantation activities.

### D.3.1.3: Physical Area of Plantations

Site wise plantation areas were recalculated in the field from the GPS track made during field survey and compared with the areas mentioned in the plantation journal. Almost no variation has been noticed as far as areas of closures were concerned.

As per the RFP, **total areas of plantation units were 8911 ha comprising of 836 sites and after the evaluation the total areas were found to be 8963.1 ha, a higher value than the areas mentioned in RFP.**

### D.3.1.4: Status of Plantations

#### a. Artificial Regeneration

##### i. Region Wise Weighted Survival % of Plantations

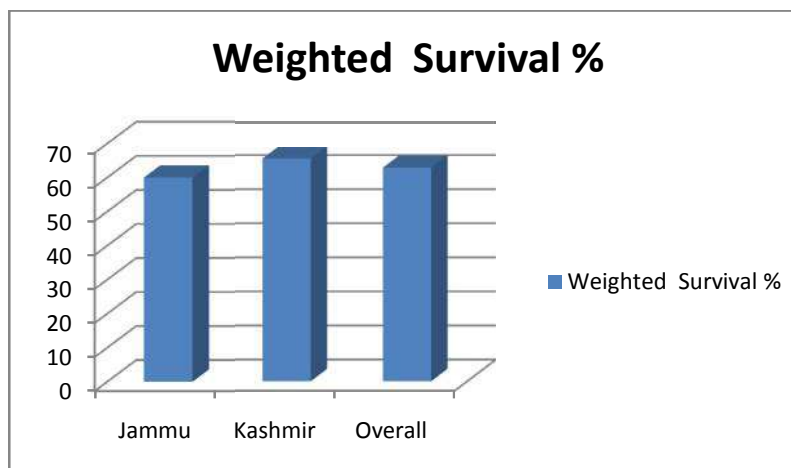
There are two geographical regions, viz. (i) Jammu and (ii) Kashmir in J&K UT. The geographical region wise weighted survival % of seedlings planted at 791 plantation units (836 sites completed- 45 sites under process = 791) was as given in table-14 and figure-1.

The geographical region wise weighted survival % of plantations was as given in table-14.

**Table- 14:** Geographical Region wise weighted survival % of plantations

Sr. No.	Geographical Region	Weighted Survival %
1	Jammu	60.0
2	Kashmir	65.4
<b>Overall Weighted Survival %</b>		<b>62.7</b>

**Figure- 1:** Region wise weighted survival % of plantations



*It is evident from table-14 and figure-1 that:*

- i. The average survival % of Kashmir region (65.4%) and Jammu region (60.0%) of plantations.*
- ii. Overall Weighted Survival percentage is 62.7, which is considered as very good survival of plantations.*



## ii. Circle Wise Weighted Survival % of Plantations

The departmental region/ circle wise weighted survival % of plantations was as given in table-15.

**Table-15:** Departmental region/ circle wise weighted survival % of plantations

Sr. no.	Name of Department	Name of Division	Name of Departmental Region	Name of Circle	Departmental Circle wise weighted survival %	Departmental Region wise weighted survival %	
1	Forest Department	i.Territorial	Jammu	East Circle	70.8	60.7	
				West Circle	55.2		
				Chenab Circle	58.4		
			Kashmir	South Circle	71.1		67.9
				North Circle	65.8		
				Srinagar Circle	66		
		ii.ETF-Non Territorial	Jammu		64.4		
		iii.MFP-Non Territorial	Jammu		55.3		
		iv.NHIA-Non Territorial	Jammu		49.4		
		v.Urban Forestry-Non Territorial	Jammu		63.2		
			Kashmir		54.6		
		vi.Planning & Publicity-Non Territorial	Kashmir		38.1		
		vii.Agrostology	Jammu		60.3		
Kashmir			61.1				
2	Social Forestry		Jammu		60		
			Kashmir		69.7		
3	Wildlife		Jammu		60.2		
			Kashmir		56.7		
4	Soil & Water Conservation		Jammu		63.7		
			Kashmir		60.1		
5	WUCMA		Kashmir		61.6		
<b>Overall Weighted Survival %</b>						<b>62.7</b>	



### iii. Division Wise Weighted Survival % of Plantations

The division wise weighted survival % of plantations was as given in table-16.

**Table-16:** Division wise weighted survival % of plantations

Sr. no.	Name of Department	Name of Departmental Region	Name of Division	Division wise weighted survival %
1	Forest Department	Territorial- Jammu	Basohli	70.2
2			Batote	63.5
3			Bhaderwah	67.1
4			Billawar	72.9
5			Doda	44.9
6			Jammu	61.2
7			Kathua	71.9
8			Kishtwar	50.2
9			Mahore	55.2
10			Marwah	60.2
11			Nowshera	53.5
12			Poonch	50.2
13			Rajouri	60.6
14			Ramban	56
15			Ramnagar	75
16			Reasi	55.6
17			Samba	69.9
18			Udhampur	74.1
19		Territorial- Kashmir	Baramulla JV	65.1
20			Kamraj	68.1
21			Kehmil	64.4
22			Langate	71.9
23			Anantnag	68.6
24			Awantipora	71.2
25			Kulgam	75.4
26			Lidder	61.5
27			Shopian	78.9
28			Bandipora	61.3
29			Pir Panjal	
30			Budgam	73.8
31		Sindh	58.5	
32		Non Territorial	Tangmarg spl division	72.6
33			ETF	64.4
34			MFP	55.3
35			NH1A	49.4
36			Urban Forestry	58.9
		Agrostology	60.1	



37			Planning & Publicity	38.1	
38	Social Forestry		Doda	44.8	
39			Ramban	64.7	
40			Udhampur	70.6	
41			Jammu	57.7	
42			Kathua	66.7	
43			Poonch	68.1	
44			Rajouri	63.4	
45			Anantnag	67.5	
46			Baramulla	67	
47			Kupwara	69	
48			Pulwama	71.5	
49			Srinagar	87.6	
50		Wildlife		Jammu	63.1
51				Kathua	69.1
52			Poonch	71.3	
53			Rajouri	49.4	
54			Chenab Kishtwar	59.9	
55			Udhampur	51.1	
56			Central	74.2	
57			South Kashmir	37.6	
58			Srinagar	44.2	
59	Soil & Water Conservation			61.8	
60	WUCMA			61.6	
<b>Overall Weighted Survival %</b>			<b>62.7</b>		

**iv. Site Wise Survival % of Plantations**

The closure/site wise survival % of plantations details was as given in *Annexure-1*.

**v. Year Wise Weighted Survival % of Plantations**

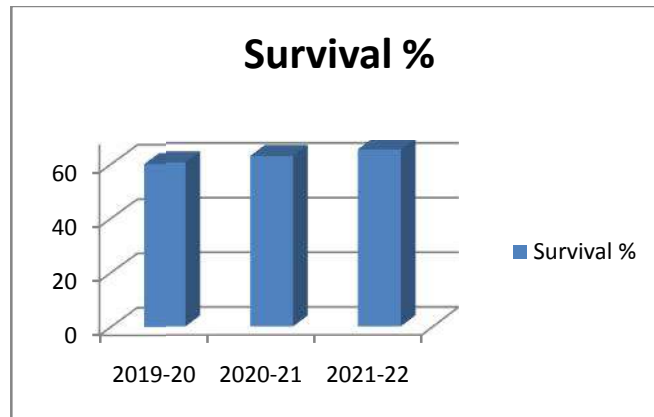
The year wise weighted survival % of plantations was as given in table- 17 and figure- 2

**Table-17:** Year wise weighted survival % of plantations

Year of Plantation	Survival %
2019-20	60.1
2020-21	62.4
2021-22	64.8



**Figure-2:** Year wise weighted survival % of plantations



It is evident from table-17 and figure-2 that:

- i. The survival % was highest (64.8%) of 2021-22 of plantations and lowest (60.1%) of 2019-20 plantations.
- ii. Because of mortality, survival rate in units formed in earlier years i.e. 2019-20 & 2020-21 is lower compared to units formed in 2021-22.

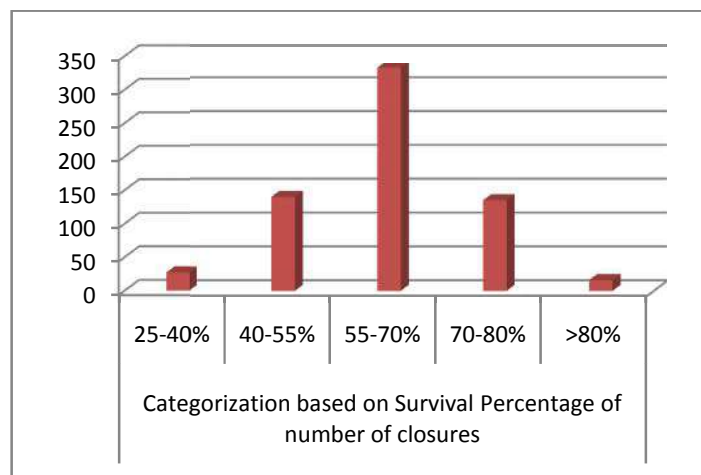
**vi. Category wise survival percentage of plantation unit**

The Category wise survival percentage of plantation unit was as given in table-18 and fig-3.

Table- 18: Category wise survival percentage of plantation units/closure

Categorization based on Survival Percentage of number of plantation units					
Survival %	25-40%	40-55%	55-70%	70-80%	>80%
Units	25	139	332	134	16

**Figure-3:** Category wise survival percentage of plantation units





*It is evident from table-18 and figure-3 that:*

- i. 16 units have plantation survival % of more than 80%*
  - ii. 134 units have plantation survival % varied between 70% and 80%*
  - iii. 332 units have plantation survival % varied between 55% and 70%*
  - iv. 139 units have plantation survival % varied between 40% and 55%*
  - v. 25 units have plantation survival % varied between 25% and 40%*
- Plantation units having more than 70% of plantation survival rate considered as very good survival; various divisions of territorial department such as Jammu, Basohli, Billawar, Baderwah, Kathua, Ramnagar, Samba, Poonch, Udhampur of Jammu region and Anantnag, Awantipora, Baramulla JV, Kamraj, Kehmil, Kulgam, Kupwara, Langate, PirPanjal, Shopian, Tangmarg of Kashmir region; Social forestry of Kathua, Poonch, Rajouri, Ramban, Udhampur, Anantnag, Baramulla, Kupwara, Pulwama and Srinagar; Agrostology of Jammu, Kathua, Samba; ETF Basohli, DSCO of Kathua, Rajouri, Samba, Anantnag, Baramulla; Wildlife department of Jammu, Kathua, Poonch, Central WL Srinagar and NH1A-Batote have showed this outstanding survival percentage of plantation. The reason of outstanding survival of plants are timely execution of work, site specific plants planted and effective protection measure taken for plantation units.
  - 55%-70% of plantation survival rate having maximum number of plantation units.
  - Plantation units having 40%-55% of plantation survival rate, in divisions such as Territorial of Batote, Doda, Kishtwar, Marwah, Mahore, Nowshera, Poonch, Rajouri, Ramban, Reasi; Social forestry of Doda, Ramban, Rajouri; Agrostology of Jammu, Poonch, Kashmir; NH1A Batote, DSCO of Jammu, Poonch, Srinagar; Jammu MFP; Wildlife of Kishtwar, Poonch, Rajouri, Central Srinagar showed average survival of plants.
  - 25 closures showed plantation survival of 25%-40% belong to Territorial of Doda, Kishtwar, Poonch; Social forestry of Doda and Jammu; South WL of Lidder; Ramban Agrostology, NH1A-Batote and DSCO of Doda. Two sites of Planning & Publicity department showed lowest survival of 28-29%. The reason behind these sub optimal survivals was due to planting towards the end of the rainy season, disturbance of roots of plants during carriage; and some natural factors like frost deposition during winter and landslide.

#### **vii. Year and species wise overall status of Survival, Height and Collar Diameter of Planted Plants**

The year wise and major species wise survival% of plantations, average height and average collar diameter of plants were as given in table-19.

**Table-19:** Year and Species wise, Survival%, Height & Collar Diameter of main plants species

Survival % of majorly planted species and the growth parameter					
Year	No.	Species	Survival %	Average Height (ft)	Average Collar Diameter (cm)
2019-20	1	<i>Acacia catechu</i> -Khair	43.8	4.9	3.5
	2	<i>Albizia lebbbeck</i> - Siris	52.9	3.8	3.4
	3	<i>Bauhinia variegata</i> - Bahunia	37.8	3.6	3.1
	4	<i>Emblica officinalis</i> - Amla	57.3	3.6	3.3
	5	<i>Aegle marmelos</i> - Bel	50.4	4.8	3.2
	6	<i>Alstonia scholaris</i>	52.1	5.2	4.3
	7	<i>Pongamia pinnata</i> - Sukhchain	45.2	3.8	3.3
	8	<i>Punica granatum</i> - Anar	54.4	3.4	3.1
	9	<i>Dalbergia sissoo</i> - Shisham	56.8	4.2	3.8
	10	<i>Terminalia arjuna</i> - Arjun	58.2	3.7	3.3
	11	<i>Terminilia bellirica</i> - Behda	41.3	2.6	2.3
	12	<i>Eucalyptus sp.</i> -Nilgiri	48.3	6.8	7.2
	13	<i>Melia azadirach</i> - Drank	36.2	4.1	3.4
	14	<i>Bambusa tulda</i> - Bamboo	52.4	5.8	
	15	<i>Prunus armeniaca</i> - Appricot	43.4	3.6	3.3
	16	<i>Prunus doemstica</i> -Hardi	33.4	2.8	2.4
	17	<i>Malus domestica</i> - Wild Apple	38.2	3.1	2.7
	18	<i>Juglans regia</i> - Akhrot	56.7	3.1	2.4
	19	<i>Fraxinus excelsior</i> -Ash	47.6	5.2	3.8
	20	<i>Robinia pseudoacacia</i> -Kikar	66.7	4.1	3.7
	21	<i>Ulmus wallichiana</i> - Ulmas	62.3	3.8	3.8
	22	<i>Pinus wallichiana</i> - Kayur	81.7	3.7	2.8
	23	H C Nut	58.7	2.9	2.3
	24	<i>Pinus roxburghii</i> -chir	88.6	3.8	2.7
	25	<i>Quercus incana</i> - Banj	81.5	2.9	2.3
	26	<i>Salix alba</i> - Salix	57.6	4.4	3.4
	27	<i>Cedrus deodara</i> - Deodar	80.4	3.8	3.5
	28	<i>Toona ciliata</i> - Toona	57.6	3.1	2.6
2020-21	1	<i>Acacia catechu</i> -Khair	49.3	3.1	2.5
	2	<i>Albizia lebbbeck</i> - Siris	47.5	3.3	2.7
	3	<i>Aegle marmelos</i> - Bel	46.7	3.4	3.1
	4	<i>Alstonia scholaris</i>	51.1	3.6	3.1
	5	<i>Dalbergia sissoo</i> - Sissoo	53.3	3.8	3.2
	6	<i>Melia azadirach</i> - Drank	38.9	3.5	3.1
	7	<i>Pongamia pinnata</i> - Sukhchain	42.3	3.3	2.9
	8	<i>Bauhinia variegata</i>	36.9	3.2	2.5
	9	<i>Emblica officinalis</i> - Amla	56.8	2.8	2.3
	10	<i>Eucalyptus sp.</i> -Nilgiri	46.2	4.6	4.2
	11	<i>Bambusa tulda</i> - Bamboo	48.7	4.6	
	12	<i>Malus domestica</i> - Wild Apple	48.4	2.9	2.5



	13	<i>Prunus armeniaca</i> - Appricot	51.3	2.8	2.3
	14	<i>Prunus doemstica</i> -Hardi	37.2	2.4	1.9
	15	<i>Juglans regia</i> - Akhrot	59.4	2.7	2.2
	16	<i>Terminalia arjuna</i> - Arjun	57.3	2.8	2.6
	17	<i>Terminilia bellirica</i> - Behda	47.2	2.6	2.2
	18	<i>Dioscorea sp.-</i>	48.3	2.8	2.3
	19	<i>Dodonea viscosa</i>	53.1	3.1	2.7
	20	<i>Fraxinus excelsior</i> -Ash	57.6	3.8	3.4
	21	<i>Robinia pseudoacacia</i> -Kikar	71.7	3.2	2.8
	22	<i>Ulmus wallichiana</i> - Ulmas	77.2	3.1	2.8
	23	<i>Pinus wallichiana</i> - Kayur	86.3	2.9	2.5
	24	<i>Pinus roxburghii</i> -chir	89.3	2.7	2.4
	25	<i>Quercus incana</i> - Banj	84.3	2.8	2.4
	26	<i>Salix alba</i> - Salix	63.2	3.4	2.9
	27	<i>Cedrus deodara</i> - Deodar	83.2	2.7	2.4
	28	H C Nut	55.7	2.4	1.6
	29	<i>Cassia galuca</i>	32.3	2.3	1.3
	30	<i>Toona ciliata</i> - Toona	48.2	3.1	2.6
2021-22	1	<i>Acacia catechu</i> -Khair	44.5	2.9	2.3
	2	<i>Albizia lebbeck</i> - Siris	56.5	2.7	2.4
	3	<i>Aegle marmelos</i> - Bel	48.3	2.8	2.4
	4	<i>Alstonia scholaris</i>	57.7	3.1	2.7
	5	<i>Dalbersia sissoo</i> - Sissoo	56.3	3.1	2.6
	6	<i>Melia azadirach</i> - Drank	48.4	2.9	2.3
	7	<i>Pongamia pinnata</i> - Sukhchain	45.6	3.1	2.6
	8	<i>Emblica officinalis</i> - Amla	58.4	2.8	2.3
	9	<i>Sapindas mukorasii</i> - Aritha	28.7	2.8	1.9
	10	<i>Eucalyptus sp.</i> -Nilgiri	63.2	3.6	3.3
	11	<i>Malus domestica</i> - Wild Apple	58.6	2.7	2.4
	12	<i>Prunus armeniaca</i> - Appricot	57.6	2.7	2.5
	13	<i>Prunus doemstica</i> -Hardi	39.3	2.6	1.8
	14	<i>Juglans regia</i> - Akhrot	66.4	2.5	1.7
	15	<i>Punica granatum</i> - Anar	61.3	3.1	2.6
	16	<i>Terminalia arjuna</i> - Arjun	62.4	3.2	2.6
	17	<i>Terminilia bellirica</i> - Behda	42.6	2.6	2.2
	18	<i>Dioscorea sp.-</i>	58.4	2.7	2.3
	19	<i>Dodonea viscosa</i>	55.3	2.8	2.4
	20	<i>Fraxinus excelsior</i> -Ash	63.3	2.6	2.1
	21	<i>Robinia pseudoacacia</i> -Kikar	77.4	2.9	2.4
	22	<i>Ulmus wallichiana</i> - Ulmas	72.4	2.8	2.6
	23	<i>Pinus wallichiana</i> - Kayur	88.2	2.6	2.2
	24	<i>Pinus roxburghii</i> -chir	91.6	2.8	2.1
	25	<i>Quercus incana</i> - Banj	88.4	2.6	1.9
	26	<i>Salix alba</i> - Salix	68.3	2.4	1.6
	27	<i>Cedrus deodara</i> - Deodar	85.7	2.7	2.3
	28	H C Nut	62.2	2.4	1.6



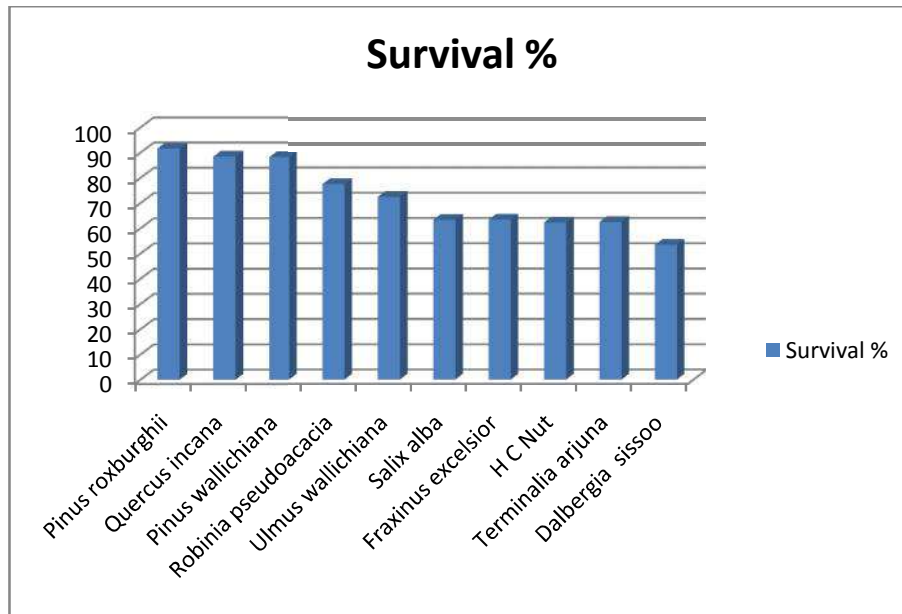
	29	<i>Toona ciliata</i> - Toona	55.7	2.8	2.3
	30	<i>Grewia optiva</i>	42.5	2.3	1.5
	31	Bottle brush	66.7	3.2	2.6
	32	<i>Delonix regia</i> - Gulmohor	69.8	3.4	3.1

It is evident from table-19 that:

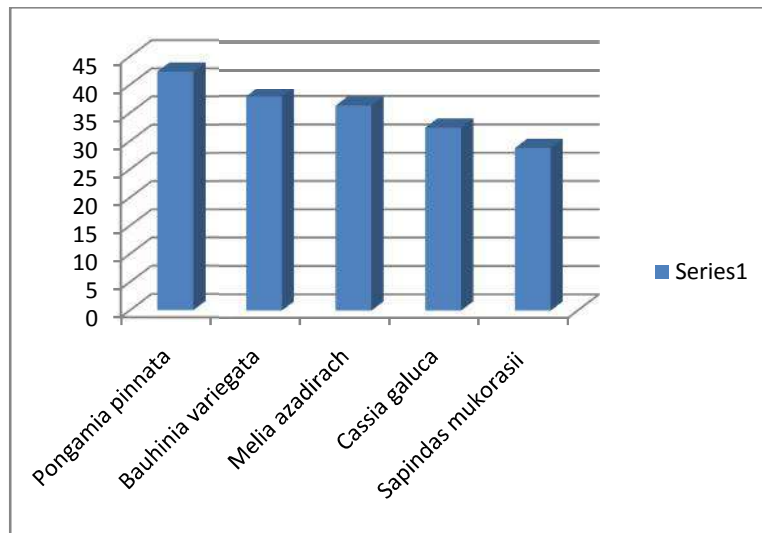
- i. *In 2019-20 plantations, highest survival (88.6%) was of Pinus roxburghii followed by Pinus wallichiana (81.7), Quercus incana (81.5) and Cedrus deodar (80.4). As far as broad leaved were concerned, highest survival were of Robiniapseudoacacia (66.2) and Ulmas (62.3). Other trees such as toona, sissoo, amla, arjun, akhrot, H C Nut and salix showed good survival of above 55%. Plants such as wild apple and Prunus domestica showed lowest survival of around 35%. The highest growth in terms of height was of Eucalyptus (6.8 feet) followed by Bamboo (5.8ft) and Alstonia (5.2ft). Highest collar diameter was found in Eucalyptus (7.2 cm) and Alstonia (4.3cm) followed by Ash and Sissoo (3.8cm).*
- ii. *In 2020-21 plantations, highest survival (89.3%) was of Pinus roxburghii followed by Pinus wallichiana (86.3), Quercus incana (84.3) and Cedrus deodar (83.2). As far as broad leaved were concerned, highest survival were of Ulmas (77.2) and Robiniapseudoacacia (71.7). Other trees such as amla, arjun, akhrot, H C Nut and salix showed good survival of above 55%. Plants such as Cassia glauca, Prunus domestica and Bauhinia showed lowest survival of around 35%. The highest growth in terms of height was of Eucalyptus and Bamboo (4.6 feet) followed by Ash and Sissoo (3.8ft); Salix (3.4ft). Highest collar diameter was found in Eucalyptus (4.2 cm) followed by Ash (3.4cm); Bel, Alstonia and Sissoo (3.1cm).*
- iii. *In 2021-22 plantations, highest survival (91.6%) was of Pinus roxburghii followed by Quercus incana (88.4%) and Pinus wallichiana (88.2). As far as broad leaved were concerned, highest survival were of Robiniapseudoacacia (77.4) and Ulmas (72.4). Other trees such as behda, arjun, akhrot, H C Nut, pomegranate, salix, ash, bottle brush, delonix and eucalyptus showed very good survival of above 60%. Trees like siris, sissoo, amla, apricot, dodonea and wild apple showed good survival of above 55%. The highest growth in terms of height was of Eucalyptus sp. (3.6feet) followed by gulmohor (3.4ft) and bottle brush (3.2ft); alstonia, sukhchain and sissoo (3.1ft). Highest collar diameter was found in Eucalyptus (3.3 cm) followed by gulmohor (3.1cm).*

It had been noticed for the last three years that the survival rate was highest for coniferous trees in the closures than the broad leaved trees. But the growth of coniferous trees was low in comparison to the broad leaved. The reason was that the conifers were slow growing plants where as the broad leaved were relatively fast growing plants.

- **Graphic representation of highest survival of 10 most prominent species in the plantation closure of the year 2019-20 to 2021-22**



- **Graphic representation least survival of 5 species in the plantation closure of the year 2019-20 to 2021-22**



#### viii. Circlewise and species wise status of Survival, Height and Collar Diameter of Planted Plants

Circlewise and species wise survival%, average height and average collar diameter of majorly planted plants were as given in table-20 to table 25 respectively.

Table-20: Jammu East Circle					
Sr. no.	Name of Plants	Plants Local name	Survival %	Avg height (ft)	Avg collar diameter (cm)
1	<i>Pinus roxburghii</i>	Chir	95.1	1.8	0.9
2	<i>Quercus incana</i>	Banj	83.7	2.5	2.1
3	<i>Pinus wallichiana</i>	Kail	81.2	1.8	1.3
4	<i>Cedrus deodar</i>	Deodar	68.8	1.7	0.8
5	<i>Aegle marmelos</i>	Bili Patra	67.9	2.7	2.5
6	<i>Dalbergia sissoo</i>	Sisham	66.7	3	2.6
7	<i>Dendrocalamus strictus</i>	Bans	66.2	5.8	5.6
8	<i>Toona ciliata</i>	Toona	66.2	3.7	3.3
9	<i>Melia azadirach</i>	Draink	66.2	2.9	2.5
10	<i>Eucalyptus sp.</i>	Nilgiri	65.8	6.5	7.2
11	<i>Albizia lebbek</i>	Siras	65.7	3.1	2.8
12	<i>Alstonia scholaris</i>	Alstonia	65.5	5.7	5.4
13	<i>Bauhinia variegata</i>	Karnail	65.2	4.2	3.5
14	<i>Psidium guajava</i>	Amrood	64.6	3.5	3.1
15	<i>Morus alba</i>	Shahtut	64.2	4.2	3.8
16	<i>Embllica officinalis</i>	Amla	63.4	3.4	2.8
17	<i>Punica granatum</i>	Anar	62.7	3.8	2.4
18	<i>Terminalia arjuna</i>	Arjun	62.6	3.1	2.5
19	<i>Bottle brush</i>	Bottle brush	61.4	4.9	3.9
20	<i>Cassia glauca</i>	Gulaka	60.2	4.4	3.2
21	<i>Acacia catechu</i>	Khair	59.9	3.3	2.9
22	<i>Pongamia pinnata</i>	Sukhchain	59.8	4.2	3.8
23	<i>Syzygium cumini</i>	Jamun	58.7	3.3	2.8
24	<i>Salix alba</i>	Salix	58.6	3.1	1.8
25	<i>Terminalia bellirica</i>	Behda	57.9	3	2.6
26	<i>Sapindus mukorasi</i>	Aritha	57.7	3.6	3.4
27	<i>Robinia pseudoacacia</i>	Kikar	57	3.2	2.7
28	<i>Mangifera indica</i>	Aam	54.8	3.6	3.3
29	<i>Cassia fistula</i>	Karangal	51.2	4.1	3.9
30	<i>Agave</i>	Agave	47.4	3.6	3.2
31	<i>Terminalia chebula</i>	Harade	46.6	3.1	1.9
32	<i>Juglans regia</i>	Akhrot	25.4	1.4	0.9

It is evident from table-20 that:

- In Jammu East Circle, *Pinus roxburghii* showed highest survival of 95.1% followed by *Quercus incana* of 83.7% and *Pinus wallichiana* of 81.2%.
- Ornamental plants such as *Alstonia*, *Bauhinia*, *Pongamia*, *Bottle brush* showed good survival of above 60%.
- Multipurpose tree species such as *Draink*, *Eucalyptus* and *Bamboo* showed good survival of above 60%.
- Lowest survival of plants showed by *Juglans regia* of 25.4%.

- The maximum height showed by plants such as *Eucalyptus* (6.5ft), *Alstonia* and *Bamboo* of 5.8ft and 5.7 ft respectively.

Sr. no.	Name of Plants	Plants Local name	Survival %	Avg height (ft)	Avg collar diameter (cm)
1	<i>Pinus roxburghii</i>	Chir	79.3	1.9	1.4
2	<i>Salix alba</i>	Salix	71.7	3	2.5
3	<i>Pinus wallichiana</i>	Kail	64.9	2.7	2.4
4	<i>Cedrus deodar</i>	Deodar	69.8	1.9	1.3
5	<i>Bauhinia variegata</i>	Karnail	62.1	3.8	3.2
6	<i>Populus deltoides</i>	Safeda	61.9	4.1	3.6
7	<i>Malus domestica</i>	Wild Apple	61	3.7	3.2
8	<i>Aesculus sp.</i>	H C Nut	60.8	3.1	2.8
9	<i>Dalbergia sissoo</i>	Sisham	59.8	3.5	3.1
10	<i>Morus alba</i>	Shahtut	58.9	3.4	2.9
11	<i>Robinia pseudoacacia</i>	Kikar	58.9	4.5	4.1
12	<i>Cassia glauca</i>	Gulaka	57.6	3.1	2.9
13	<i>Emblica officinalis</i>	Amla	57.2	3.8	3.2
14	<i>Dendrocalamus strictus</i>	Bans	56.8	3.5	3.8
15	<i>Punica granatum</i>	Anar	56.3	2.7	2.3
16	<i>Cassia fistula</i>	Karangal	55.3	3.7	3
17	<i>Albizia lebbek</i>	Siras	54.8	3.1	2.7
18	<i>Psidium guajava</i>	Amrood	53.5	3.3	3
19	<i>Acacia catechu</i>	Khair	53.1	3.4	2.6
20	<i>Melia azadirach</i>	Draink	53.1	2.7	2.4
21	<i>Syzygium cumini</i>	Jamun	52.2	2.8	2.2
22	<i>Terminalia bellirica</i>	Behda	51.5	3.1	2.6
23	<i>Terminalia arjuna</i>	Arjun	51	3.4	2.7
24	<i>Ulmus wallichiana</i>	Ulmas	49.9	3.8	3.5
25	<i>Grewia optiva</i>	Dhaman	49.4	2.7	2.5
26	<i>Toona ciliata</i>	Toona	48.9	3.7	3.2
27	<i>Pongamia pinnata</i>	Sukhchain	47.2	3.1	2.8
28	<i>Prunus armeniaca</i>	Hardi	47	2.5	2.2
29	<i>Quercus incana</i>	Banj	45.4	2.9	2.6

It is evident from table-21 that:

- In Jammu West Circle, Plant *Pinus roxburghii* showed highest survival of 79.3% followed by *Salix alba* of 71.7%.
- In this circle wild fruit plants showed good survival of above 55%.
- Lowest survival was observed in *Quercus incana* of 45.4%.
- *Robinia* showed highest growth in terms of height of 4.5ft followed by species such as *Bauhinia*, *Amla*, *Cassia fistula*, *Toona* of 3.8 ft.





Table-22: Jammu Chenab Circle					
Sr. no.	Name of Plants	Plants Local name	Survival %	Avg height (ft)	Avg collar diameter (cm)
1	<i>Quercus incana</i>	Banj	68.9	2.3	1.8
2	<i>Pinus wallichiana</i>	Kail	68.8	2.6	2.3
3	<i>Pinus roxburghii</i>	Chir	67.5	2.5	2.1
4	<i>Punica granatum</i>	Anar	59.6	1.8	1.1
5	<i>Cedrus deodar</i>	Deodar	59.3	2.6	2.2
6	<i>Aesculus sp.</i>	H C Nut	51.3	2.7	2.3
7	<i>Robinia pseudoacacia</i>	Kikar	50.9	3.6	3.3
8	<i>Ailanthus excelsa</i>	Ailanthus	49.6	3.6	4.2
9	<i>Ulmus wallichiana</i>	Ulmas	47.1	2.7	2.2
10	<i>Prunus armeniaca</i>	Hardi	45.6	3.2	3
11	<i>Melia azadirach</i>	Draink	45.3	2.7	2.2
12	<i>Dalbergia sissoo</i>	Sisham	42.7	2.5	2.2
13	<i>Malus domestica</i>	Wild Apple	32.4	2.6	2.2

It is evident from table-22 that:

- In Jammu Chenab Circle, *Quercus incana* and *Pinus wallichiana* showed highest survival of 68.9% and 68.8% respectively.
- In this region multipurpose tree species such as *Ailanthus*, *Draink* and *Shisham* showed average survival of above 40%.
- Wild apple showed lowest survival of 32.4%.
- *Robinia* and *Ailanthus* showed good height of 3.6 ft.

Table-23: Kashmir South Circle					
Sr. no.	Name of Plants	Plants Local name	Survival %	Avg height (ft)	Avg collar diameter (cm)
1	<i>Aesculus sp.</i>	H C Nut	78.1	3.2	2.6
2	<i>Cedrus deodar</i>	Deodar	77.5	1.5	0.8
3	<i>Pinus wallichiana</i>	Kail	76.9	2.2	1.8
4	<i>Pinus roxburghii</i>	Chir	76.5	2.5	2.2
4	<i>Fraxinus excelsior</i>	Ash	72.2	4.2	3.8



5	<i>Artimesia pyretrum</i>	Artemisia	71.6	1.9	1.2
6	<i>Robinia pseudoacacia</i>	Kikar	69.9	4.8	4.2
7	<i>Abies sp.</i>	Fir	67.2	2.1	1.5
8	<i>Prunus armeniaca</i>	Hardi	63.5	3.8	3.5
9	<i>Bergenia sp.</i>	Bergenia	63.1	2.8	2.6
10	<i>Diosceria sp.</i>	Krechi	62.1	2.9	2.3
11	<i>Ulmus wallichiana</i>	Ulmas	58.2	4.6	4.1
12	<i>Malus domestica</i>	Wild Apple	54.2	4.1	3.5

It is evident from table-23 that:

- In Kashmir South Circle, H C Nut showed highest survival of 78.1% followed by *Cedrus deodar* of 77.5% and *Pinus wallichiana* of 76.9%.
- Wild apple and Ulmas showed lowest survival of 54.2% and 58.2% respectively.
- Maximum height of plants was observed in *Robinia* of 4.8ft and Ulmas of 4.6ft.
- 

Sr. no.	Name of Plants	Plants Local name	Survival %	Avg height (ft)	Avg collar diameter (cm)
1	<i>Pinus roxburghii</i>	Chir	94.8	2.5	2.1
2	<i>Pinus wallichiana</i>	Kail	89.5	2.2	1.6
3	<i>Cedrus deodar</i>	Deodar	82.3	2.2	1.7
4	<i>Robinia pseudoacacia</i>	Kikar	79.8	4.6	4.3
5	<i>Ulmus wallichiana</i>	Ulmas	65.6	2.8	2.3
6	<i>Diosceria sp.</i>	Krechi	62.7	1.3	0.7
7	<i>Fraxinus excelsior</i>	Ash	62.1	2.8	2.3
8	<i>Malus domestica</i>	Wild Apple	61.3	3.6	2.7
9	<i>Artimesia pyretrum</i>	Artemisia	61.1	1.4	0.8
10	<i>Aesculus sp.</i>	H C Nut	52.8	3.1	2.4



It is evident from table-24 that:

- In Kashmir North Circle, all conifers showed highest survival of above 80%. *Pinus roxburghii* showed of 94.8%, *Pinus wallichiana* of 89.5% and *Cedrus deodar* of 82.3% survival.
- In this region, almost all major plants showed good survival of above 60%.
- H C Nut showed lowest survival of 52.8%.
- *Robinia* and wild apple showed maximum height of 4.6ft and 3.6ft respectively.

Table-25: Srinagar Circle					
Sr. no.	Name of Plants	Plants Local name	Survival %	Avg height (ft)	Avg collar diameter (cm)
1	<i>Pinus wallichiana</i>	Kail	88.9	2.3	1.8
2	<i>Prunus armeniaca</i>	Hardi	82.3	3.1	2.6
3	<i>Pinus roxburghii</i>	Chir	81.1	2.4	1.9
4	<i>Cedrus deodar</i>	Deodar	73.2	2.5	1.6
5	<i>Ulmus wallichiana</i>	Ulmas	69.1	3.4	3.1
6	<i>Robinia pseudoacacia</i>	Kikar	67.2	3.9	3.5
7	<i>Bergenia sp.</i>	Bergenia	64.1	0.9	0.5
8	<i>Aesculus sp.</i>	H C Nut	61.1	2.9	2.4
9	<i>Prunus armeniaca</i>	Hardi	58.4	3.2	2.6
10	<i>Malus domestica</i>	Wild Apple	58.3	3.8	3.5
11	<i>Juglans regia</i>	Akhrot	58.1	1.8	0.8

It is evident from table-25 that:

- In Srinagar Circle, *Pinus wallichiana* showed highest survival of 88.9% followed by *Prunus armeniaca* of 82.3% and *Pinus roxburghii* of 81.1%.
- In this region all plants showed good survival of above 55%.
- *Robinia* and wild apple showed maximum height of 3.9ft and 3.8ft respectively.



## b. Status of Natural Regeneration

Natural regeneration of principal tree species of sites was found growing abundantly in areas of Aided Natural Regeneration units as shown in table-26.

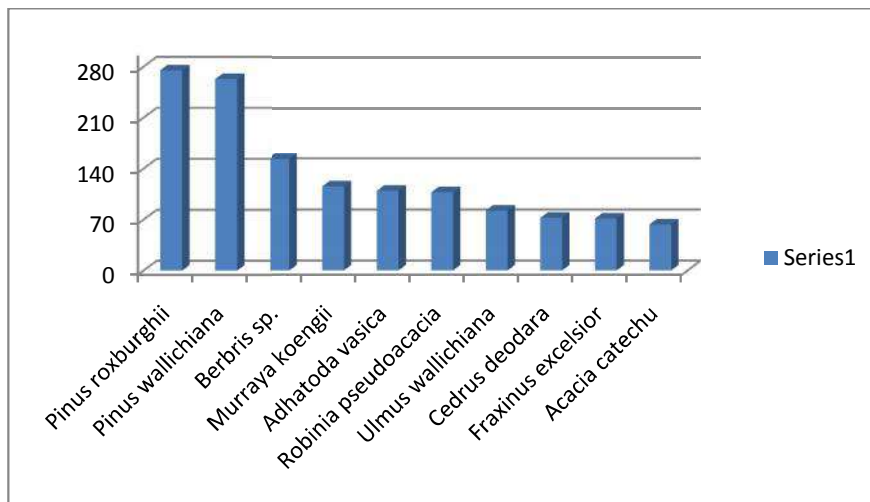
**Table-26:** Species wise per ha plants of natural regeneration of main species

Sr. No.	Species	Plants/ha of Natural Regeneration
1	<i>Cedrus deodara</i> - Deodar	72
2	<i>Berberis sp.</i> - Rasot	153
3	<i>Fraxinus excelsior</i> -Ash	71
5	H C Nut	32
6	<i>Pinus wallichiana</i> - Kayur	263
7	<i>Pinus roxburghii</i> - Chir	275
8	<i>Robinia pseudoacacia</i> -Kikar	107
9	<i>Salix alba</i> - Salix	53
10	<i>Ulmus wallichiana</i> - Ulmas	82
11	<i>Malus domestica</i> - Wild Apple	41
12	<i>Acacia catechu</i> - Khair	63
13	<i>Sizygium cumini</i> -Jamun	24
14	<i>Cassia fistula</i> - Amaltas	26
15	<i>Pongamia pinnata</i> - Sukhchain	21
16	<i>Murraya koengii</i> - Kari patta	115
17	<i>Adhatodavasic</i>	109
18	<i>Mangifera indica</i> - Mango	19
19	<i>Mallotus phillippensis</i>	39
20	<i>Zizyphus sp.</i> - Ber	28
21	<i>Grewia optiva</i>	36
22	<i>Bauhinia sp.</i> -Bahunia	22

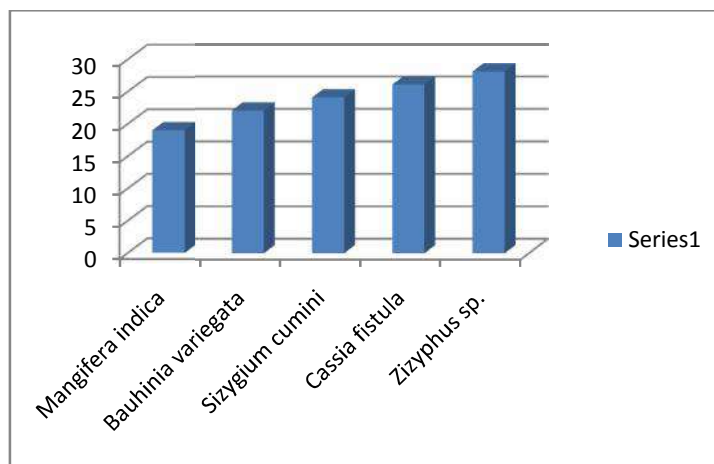
It is evident from table-26 that

- i. The highest natural regeneration was of two conifers such as *Pinus roxburghii* (275 plants/ha) followed by of *Pinus wallichiana* (263 plants/ha).
- ii. Broad leaved such as *Robinia*, *Ulmas* showed good regenerartion of 107 and 82 plants/ha respectively.
- iii. Shrubs of medicinal importance like *Berberis*, *Murraya* and *Adhatoda* showed very good natural regenerartion of above 100 plants per ha.
- iv. Trees such as *Mango*, *Jamun*, *Ber*, *Bauhinia*, *Amaltas*, *Sukhchain* showed lowest natural regeneration of about 20 plants per ha. The reason behind the least natural regenerartion of these trees may be the edaphic and biotic factors as well as these species were not local specific plants.

- **Graphic representation of highest naturally regenerated 10 most prominent species in the plantation closure**



- **Graphic representation least naturally regenerated 5 species in the plantation closure**



### c. Status of Regeneration through Root Stock

Trees of root stock were found growing in several plantations units, but the number was found to be small. Species wise per ha root stock tree species was shown in table-27.

**Table-27:** Species wise per ha plants of root stock of tree species

Sr. No.	Species	Plants/ha of Root Stock
1	<i>Pinus wallichiana</i> - Kayur	7
2	<i>Pinus roxburghii</i> - Chir	8
3	<i>Quercus incana</i> - Banj	10
4	<i>Cedrus deodara</i> - Deodar	7
5	<i>Ulmus wallichiana</i> - Ulmas	6
6	<i>Eucalyptus sp.</i> - Nilgiri	3
7	<i>Dalbergia sissoo</i> - Shisham	4



#### d. Total plants per ha including Artificial and Natural Regeneration; and Existing trees

##### d.i. Division wise status of number of plants per ha in plantation unit

Existing trees were also counted by laid down sample plot as was done in the case of natural regeneration and root stock study in the plantation unit. Department and division wise total number of existing trees, natural regeneration and root stock plants were as given in table - 28.

**Table-28:** Department and division wise total number of existing trees, natural regeneration and root stock plants

Sr. no.	Region	Name of Division	Total No. of live plants (Artificial, Natural and Root stock) per ha	No. of Existing plants per ha	Total No. of live plants (Artificial, Existing, Natural and Root stock) per ha
<b>A. Forest Department-Territorial</b>					
1	Jammu	Basohli-Territorial	656	202	858
2	Jammu	Batote- Territorial	765	197	962
3	Jammu	Bhaderwah-Territorial	586	183	769
4	Jammu	Billawar - Territorial	892	267	1159
5	Jammu	Doda- Territorial	520	163	683
6	Jammu	Jammu- Territorial	721	217	938
7	Jammu	Kathua- Territorial	817	223	1040
8	Jammu	Kishtwar-Territorial	635	169	804
9	Jammu	Mahore-Territorial	541	182	723
10	Jammu	Marwah-Territorial	788	191	979
11	Jammu	Nowshera-Territorial	568	161	729
12	Jammu	Poonch- Territorial	454	169	623
13	Jammu	Rajouri- Territorial	680	207	887
14	Jammu	Ramban-Territorial	690	202	892
15	Jammu	Ramnagar-Territorial	704	231	935
16	Jammu	Reasi- Territorial	543	186	729



17	Jammu	Samba- Territorial	576	211	787
18	Jammu	Udhampur- Territorial	831	274	1105
19	Kashmir	Baramulla JV	1127	254	1381
20	Kashmir	Kamraj- Territorial	1348	238	1586
21	Kashmir	Kehmil- Territorial	903	249	1152
22	Kashmir	Langate- Territorial	1131	217	1348
23	Kashmir	Anantnag- Territorial	1182	251	1433
24	Kashmir	Awantipora- Territorial	1327	262	1589
25	Kashmir	Kulgam- Territorial	1260	258	1518
26	Kashmir	Lidder- Territorial	874	209	1083
27	Kashmir	Shopian- Territorial	1055	227	1282
28	Kashmir	Bandipora- Territorial	1176	247	1423
29	Kashmir	Pir Panjal Budgam- Territorial	1393	265	1658
30	Kashmir	Sindh- Territorial	854	198	1052
31	Kashmir	Tangmarg spl division	1394	256	1650
<b>Forest Department-Non Territorial</b>					
<b>B.</b>	<b>Agrostology</b>				
32	JnK	Agrostology Dept.	596	189	785
<b>C.</b>	<b>Eco Task Force</b>				
33	Jammu	ETF	805	204	1009
<b>D.</b>	<b>NH1A</b>				
34	Jammu	NH1A	931	214	1145
<b>E.</b>	<b>Jammu MFP</b>				
35	Jammu	MFP	833	218	1051
<b>F.</b>	<b>Planning &amp; Publicity</b>				
36	Kashmir	Plan & Pub	1905	237	2142



<b>G.</b>	<b>Urban Forestry</b>				
37	Kashmir	Srinagar- Urban Forestry	1117	179	1296
<b>H.</b>	<b>Social Forestry Dept.</b>				
38	Jammu	Jammu-Social Forestry	661	182	843
39	Kashmir	Kashmir-Social Forestry	898	183	1081
<b>I.</b>	<b>Wildlife Department</b>				
40	JnK	Wildlife Dept.	752	213	965
<b>J.</b>	<b>Soil &amp; Water Conservation Dept.</b>				
41	JnK	DSCO	798	181	979
<b>K.</b>	<b>WUCMA</b>				
42	Kashmir	WUCMA	856	228	1084
	<b>Average number of plants per ha</b>				<b>1096</b>

It is evident from table-28 that

- i. The average number of plants per ha including artificial plantation, natural regeneration, existing plant species and root stock is **1096 plants per ha** considered as very good.
- ii. 22 divisions belonging to Forest Territorial, Social Forestry, ETF, Planning & Publicity, NHIA, Srinagar Urban Forestry, MFP and WUCMA showed highest number of plants of more than 1000 plants per ha.
- ii. Highest natural regeneration of around 200 or above plants per ha were observed in most of the divisions except few such as Doda, Kishtwar, Poonch, Nowshera divisions showed around 160 plants per ha grown naturally. Edaphic and biotic factors may have played an important role in growing plants naturally in these regions.

#### d.ii. Circle wise summary sheet of status of plantations

Circle wise summary sheet of status of plantation and it's survival; per ha total number of plants including artificial plantation, natural regeneration, existing trees and root stock; were as given in table-29.





**d.ii.Table:-29: Circle wise summary sheet of status of plantations details**

A	B	C	D	E	G	H	I	J	K	L	M
Sr. no.	Year	Circle	Total number of closures	Area (Ha)	No. of plants planted	No. of survived plants	Survival %	No. of plants survived per ha	Natural regeneration, root stock and existing plants per ha	Total no. of plants (J+K)	*Remarks (Very Good/ Good/ Satisfactory/ Poor)
1	2019-20	East Circle	80	479.1	141766	98161	69.2	205	946	1151	Very good
		West Circle	43	428	162733	90611	55.7	213	734	947	Good
		Chenab Circle	38	463.9	282311	159970	56.7	346	742	1088	Very good
		Jammu Region	64	326.8	203770	117599	57.8	359	737	1096	Very good
		Srinagar Circle	11	200	273727	171926	62.8	860	1229	2089	Very good
		South Circle	6	86.8	122555	82056	66.9	945	1232	2177	Very good
		North Circle	3	34	46910	34227	72.9	1007	1171	2178	Very good
		Kashmir Region	17	108	140703	73602	52.3	681	888	1569	Very good
2	2020-21	East Circle	74	683	226746	167712	73.9	245	963	1208	Very good
		West Circle	40	475	181570	98075	54.1	207	713	920	Good
		Chenab Circle	60	1030	421986	248922	59.1	242	885	1127	Very good
		Jammu Region	61	536.7	231033	135127	58.5	252	640	892	Good
		Srinagar Circle	7	188	196250	127589	65.1	679	1041	1720	Very good
		South Circle	9	201.7	236170	170259	72.1	844	1285	2129	Very good
		North Circle	14	188.2	225318	148079	65.7	787	1353	2140	Very good
		Kashmir Region	29	356	245545	136369	55.5	383	775	1158	Very good



A	B	C	D	E	G	H	I	J	K	L	M
Sr. no.	Year	Circle	Total number of closures	Area (Ha)	No. of plants planted	No. of survived plants	Survival %	No. of plants survived per ha	Natural regeneration, root stock and existing plants per ha	Total no. of plants (J+K)	*Remarks (Very Good/ Good/ Satisfactory/ Poor)
3	2021-22	East Circle	92	669.3	156886	117827	75.1	176	944	1120	Very good
		West Circle	25	320	109775	61815	56.3	193	713	906	Good
		Chenab Circle	32	547	290110	160901	55.5	294	768	1062	Very good
		Jammu Region	35	467.7	171178	103828	60.7	223	729	952	Good
		Srinagar Circle	6	151	181950	126423	69.5	837	1216	2053	Very good
		South Circle	12	313	366175	263181	71.9	841	1294	2135	Very good
		North Circle	11	157	155916	103390	66.3	1034	1141	2175	Very good
		Kashmir Region	22	315	273282	175529	64.2	557	920	1477	Very good

\*1001 and above plants per ha - Very Good

751 - 1000 plants per ha - Good

501-750 plants per ha- Satisfactory

<500 plants per ha - Poor



### e. Plantation evaluation of Urban Forestry

There were 117 plantation units evaluated under Urban Forestry of Jammu region which were all situated in and around the city of Jammu. The average survival of plantation of all closures was 63.2%. The average height of plant was 4.1 feet and collar diameter was 3.5 cm. Ornamental plants and medicinal plants majorly have been planted by this division. The detail of sites of urban forestry was attached in *Annexure-2*.

### f. Plantation unit under process of plantation activities

45plantation units of the year 2021-22 were found under the process of plantation activities. The list of such unit was given in *Annexure-3*.

### g. Fencing Works

The year wise areas of fencing selected in plantation units for evaluation were as given as in table-30.

**Table-30:** The year wise areas of fencing evaluated

Sr. No.	Year of construction	Fence Length of Sites Selected (Rft)
1.	2019-2020	737461
2	2020-2021	1232314
3	2021-2022	925984
<b>Total</b>		<b>2895759</b>

### h.1 Status of Fencing in the Plantation Units

Every plantation unit was surrounded by fencing as a means of protection of plants of artificial regeneration, natural regeneration and regeneration through root stock. Mainly barbed wire fencing with angle iron of 4-5 strands of wire were found erected. Use of wooden posts was also found in the areas of West Circle and Chenab Circle of Jammu. Some units were also fenced with chain link fencing. The distance between the posts was about 3m.

It was observed that the quality of fencing was very good and the iron angles/ wooden posts were firmly cemented in the ground.

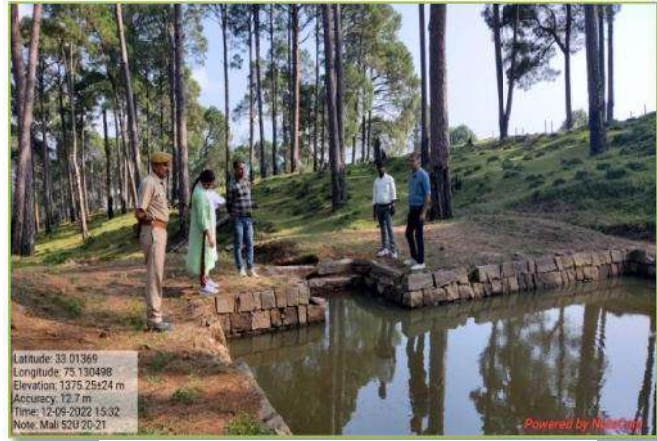
Total 28.95 Lakh rft fencing was evaluated. Dimensions of fencing were measured, compared with record and found almost correct.

In 6plantation units of Batote, Billawar, Doda, Ramanagar, Kishtwar areas where fencing was damaged partially due to landslide, need to be repaired.

### **i. Status of Soil and Water Conservation inside Closure**

Soil and water conservation structure in the form of DRSM, Crates and WHS were found constructed inside many plantation sites. The main purpose of constructing these structures was to break the velocity of water flowing down from the upper part of hills during monsoon so that the small plants did not get washed away due to high velocity of water.

Dimensions of DRSM, Crates and WHS were measured, compared with record and found almost correct. The total volume of DRSM or crates varied from 9.5 to 100 cum in most of the plantation units. Number of structure of DRSM in a closure varied from 1 to 60. The size of DRSM varied 5m x 1m x 1m to 4.5m x 5.5m x 10m. The number of crates in a closure varied from 1 to 9 and the size of it was 4m x 4m x 16m.



*Photo-20: Water Harvesting Pond (WHS)*

These works have played their good role in soil and water conservation and found in good condition in most of the closures.

Most of the WHS were found filled up with rain water and the level of water ranges from 1.5 m to 3 m.

DRSM were found to be made with loose stones. In some plantation units, few DRSM structure were found damaged due to heavy flow of water during monsoon season. 8 plantation units of Jammu, Doda, Billawar, Kathua, Mahore and Ramban, where some DRSM found partially damaged due to heavy water flow during monsoon need to be repaired.

### **j. Status of Tangible Benefits to the local inhabitants**

Various types of grasses such as Centipede grass, Rye grass, Cyanodon, Napier, Red clover and Fescues grass, etc. were found naturally growing in the plantation sites as well as grass slips of these species were planted inside plantation area along with the conifers and broad leaved. Local people collect the grasses and leaves from plantation sites as fodder for their lives stock. Also they collect dried log of plants as fuelwood.

During field survey AFC evaluation team laid down 5m\*5m plot at 15 plantation sites of different locations to get an assessment of grass production from the different areas. The grasses were removed from the sample plot and weighted. The quantity of grasses from the plot was varied from 20 to 33 kg of green grasses. So, the grass production varied from 8 to 13 quintals per ha for a season. Generally 3-4 harvest of grasses was done in a year. So, the grass production varied from 30 to 50 quintals per ha in a year.



*Photo-21: Fuel wood and Grass collection from plantation units by local people*

As per the data available with the forest divisions and also discussed with the villagers in focus group discussion, it was noted that around 45-80 kg grasses per ha was generally collected from the plantation sites by the local communities as fodder for their livestock.

One headload of grasses comprised of approx. 20 kg of grass. Villagers shared that the price of grass per headload was Rs. 80/-. So value of grasses collected by the local people varies between Rs. 160 and 320 per ha. Normally the cutting of grasses took place during the month of October and November every year.

Average fuelwood collected by the villagers from the plantation sites ranged from 30 to 65 kg per ha. One headload of firewood comprised of 25 kg of dry wood. Villagers shared that the price of firewood @ Rs. 125/-per headload. So value of firewood collected by the local people varies between Rs. 125 and 325/- per ha.

#### **k. Impact of Project Activities on vegetation, biodiversity and other aspects**

Due to plantation and related activities, the vegetative cover in the plantation sites and also the forest biomass has increased. Birds, animals, butterflies, insects and reptiles were seen in this region. Villagers shared that peacock, wild hen, wild pigeon (known as Alan), insects and butterflies were coming to the areas more frequently. They also shared that leopard was also seen in these forest areas.

During focus group discussion, the villagers shared that there was a rise in ground water table due to afforestation activities resulting in increase in availability of water.

## I. Increase in Carbon Sequestration

As the plants planted during the year 2019-20 to 2021-22 were very young, it was not advisable to uproot such young plants for the estimation of carbon sequestration.

But these plants will play a great role in future in carbon sequestration and mitigation of climate change.

Hardwoods and softwoods are equal in the efficiency of carbon sequestration. Softwoods or coniferous trees, such as fir or spruce, are fast-growing trees. They will, therefore, transform carbon dioxide as quickly as possible into the wood. On the other hand, hardwoods or deciduous trees, such as beech or oak, have a slower growth rate. During the first years of their leaves and the later will only absorb a small amount of carbon dioxide. But they live longer and are denser and hence store 580 kg/m<sup>3</sup>, compared to 450 kg/m<sup>3</sup> for softwoods on average. Average tree aboveground carbon (AGC; kg) rapidly increased with tree diameter at breast height (DBH; cm) among dominant tree species. For instance, an average 25 cm diameter tree stored 90–121 kg of AGC depending on tree species, while a 50 cm diameter tree stored 541–683 kg of AGC.<sup>1,2</sup>

1. <https://ecotree.green/en/blog/when-it-comes-to-sequestering-carbon-in-the-forest-all-trees-are-efficient>
2. Research article: <https://doi.org/10.3389/ffgc.2020.594274>

### D.3.2 Civil Works

Total 56 Civil Works sites were evaluated and most of them were found in good conditions. Details of evaluation of Civil Works sites were as given in table-31.



Photo-22: Dayala Check post and Sundrikot forest hut



**Table-31:** The details of Civil Work Evaluation

Sr no.	Department	Region	Division	Year	Name of the unit- Forest Comptt/Range	Work ID no.	Work details	Remarks
1	Territorial	Jammu	Marwah- T	2019-20	34b/U/Udhampur		Inspection path	Found in good condition
2	Territorial	Jammu	Kathua- T	2019-20	Kathua		Guard Hut/Staff Quarter/Control Room	Found in good condition
3	Territorial	Jammu	Kathua- T	2019-20	DayalaChack		Check Post (Bathroom)	Found in good condition
4	Wildlife	Jammu	Kathua- WL	2019-20	Jasrota		Watch Tower	Found in good condition
5	Wildlife	Jammu	Kishtwar- WL	2019-20	Division		Control Room including shed for cages/vehicle	Found in good condition
6	Wildlife	Jammu	Jammu- WL	2019-20	Gharana Wetland Conservation Centre		Inspection path	Found in good condition
7	Wildlife	Jammu	Poonch- Rajouri WL	2019-20	Tatakutti WLS		Construction of Staff quarter cum control room along Mughal Road	The building was in good condition.
8	Territorial	Jammu	Kathua- T	2020-21	Sundarikote		Inspection Hut/BO Hut	Found in good condition
9	Territorial	Jammu	Poonch-T	2020-21	Haveli		Conference Hall at Forest department complex	The building is in good condition.
10	Wildlife	Jammu	Jammu- WL	2020-21	Nandini		Rescue Centre	Found in good condition
11	Wildlife	Jammu	Kishtwar- WL	2020-21	JTCCR		Operational requirement of Control Rooms / Ration Gas / man power for handling man animal conflict	Purchased and in good condition
12	Urban Forestry	Jammu	Jammu- UF	2020-21	Tawi Herbal Eco Park		Guard Hut	The building was in good condition
13	Urban Forestry	Jammu	Jammu- UF	2020-21	Tawi Herbal Eco Park		Watch Tower (3 Nos)	Found in very good condition
14	Urban Forestry	Jammu	Jammu- UF	2020-21	Jammu	W/F/UFJ/21-22/0 1504	Residential and office buildings for frontline staff.	The building was in good condition
15	Territorial	Jammu	Basohli- T	2021-22	Rehalta	W/F/BAS/21-22/0	Forest roads, watch towers	Work under process



Sr no.	Department	Region	Division	Year	Name of the unit- Forest Comptt/Range	Work ID no.	Work details	Remarks
						1317		
16	Territorial	Jammu	Batote-T	2021-22	Gandhri/49/Maitra	W/F/BAT/21-22/01557	Forest roads, paths, firelines, watch towers	Found in good condition
17	Territorial	Jammu	Batote-T	2021-22	Gandhri/49/Maitra	W/F/BAT/21-22/01584	Residential and office buildings for frontline staff.	The overall finish and look of the building was poor.
18	Territorial	Jammu	Bhaderwah- T	2021-22	Gathi More to Pandku Co. 13/K		Inspection path	The path was in good condition
19	Territorial	Jammu	Bhaderwah-T	2021-22	12/N/Neeru/Kakol	W/F/BDR/21-22/03363	Residential and office buildings for frontline staff.	The building was in good condition
20	Territorial	Jammu	Bhaderwah-T	2021-22	12/N/Neeru/Kakol	W/F/BDR/21-22/03363	B.O. Hut Kakol	The building was in good condition
21	Territorial	Jammu	Billawar- T	2021-22	Billawar	W/F/BLR/21-22/00416	Residential and office buildings for frontline staff	Work under process
22	Territorial	Jammu	Doda- T	2021-22	58 Kuntwara	W/F/DOD/21-22/01735	Residential and office buildings for frontline staff	Work under process
23	Territorial	Jammu	Kishtwar- T	2021-22	Machail Paddar	W/F/KTR/21-22/02431	Residential and office buildings for frontline staff	Work under construction
24	Territorial	Jammu	Mahore-T	2021-22	Gulab Garh/03	W/F/MHR/21-22/00804	Residential and office buildings for frontline staff.	Building under construction process. Need adequate fund to complete this work
25	Territorial	Jammu	Poonch-T	2021-22	51/S/Surankote	W/F/PUN/21-22/00607	Residential and office buildings for frontline staff.	The building was in good condition
26	Territorial	Jammu	Poonch-T	2021-22	105/H/Haveli	W/F/PUN/21-22/00602	Residential and office buildings for frontline staff.	The building was in good condition
27	Territorial	Jammu	Rajouri-T	2021-22	Kalalkaas/Kandi/199R	W/F/RAJ/21-22/03567	Residential and office buildings for frontline	The building was in good condition





Sr no.	Department	Region	Division	Year	Name of the unit- Forest Comptt/Range	Work ID no.	Work details	Remarks
							staff.	
28	Territorial	Jammu	Ramban-T	2021-22	Ramban range	W/F/RBN/21-22/02487	Residential and office buildings for frontline staff.	Found in very good condition. Overall finish and look was good. Also the purpose of serving is also good.
29	Territorial	Jammu	Ramnagar-T	2021-22	Ramnagar	W/F/RNG/21-22/01483	Residential and office buildings for frontline staff	Work under process
30	Territorial	Jammu	Reasi-T	2021-22	Reasi/36	W/F/RSI/21-22/00959	Residential and office buildings for frontline staff.	The building was in good condition
31	Territorial	Jammu	Samba- T	2021-22	26D/Devak/ChillaDanga	W/F/SAM/21-22/02115	Inspection path	Found in good condition
32	Territorial	Jammu	Udhampur- T	2021-22	55/8U/Udhampur/Bhati		Shelter and Water harvesting structure, 20*40 ft shelter shed	Protected by local guard. Found in good condition. WHS was filled with water.
33	Territorial	Jammu	Udhampur- T	2021-22	59/Panchari/Chai Lodhra	W/F/UDH/21-22/01639	Residential and office buildings for frontline staff	Work under process
34	Social Forestry	Jammu	Jammu- SF	2021-22	Sidhra Nursery	W/S/SJM/21-22/04583	Residential and office buildings for frontline staff	Found in very good condition. Overall finish and look was good. Also the purpose of serving was also good.
35	Urban Forestry	Jammu	Jammu- UF	2021-22	Tawi Herbal Eco Park		Inspection House	Found in very good condition
36	Wildlife	Jammu	Jammu- WL	2021-22	Wildlife range Udhampur	W/W/WJM/21-22/01812	Rescue Centre	Found in good condition
37	Wildlife	Jammu	Jammu- WL	2021-22	Manda		Construction of Range office cum residence	Under construction
38	Wildlife	Jammu	Kathua- WL	2021-22	1/JSR/Jasrota	W/W/WKT/21-	Residential and office	Found in very good



Sr no.	Department	Region	Division	Year	Name of the unit- Forest Comptt/Range	Work ID no.	Work details	Remarks
						22//02783	buildings for frontline staff	condition. Overall finish and look was good. Also the purpose of serving was also good.
39	Wildlife	Jammu	Kishtwar- WL	2021-22	Kiyar Nallah		Watch Tower	Found in good condition
40	Wildlife	Jammu	Rajouri-WL	2021-22	29/Surankote	W/W/WRA/21-22//01099	Residential and office buildings for frontline staff.	The building was in good condition and serves the purpose.
41	Wildlife	Jammu	Rajouri- WL	2021-22	Tatakutti WLS	W/W/WRA/21-22//01106	Animal rescue centre and veterinary treatment for wild animals	Work under construction
42	Territorial	Kashmir	Srinagar	2019-20	Khanmoh Nursery	W/S/SSR/21-22/04293	Nursery Infrastructure, construction of fabricated angel iron-steel structure	The structure found in very good condition
43	Territorial	Kashmir	Tangmarg special division	2020-21	61/Gulmarg	Ferozpora (A+B)	Upgradation of Inspection hut	Found in very good condition. Overall finish and look was good. Also the purpose of serving is also good.
44	Territorial	Kashmir	Anantnag-T	2021-22	Verinag/13aV, Titanic Point Qazigund	W/F/ANG/21-22/00329	Guard Hut, Staff Toilet Blocks	Need to consult the contractor to complete the work
45	Wildlife	Kashmir	Anantnag-WL	2021-22	Overa-Aru WLS/03909	W/W/WAN/21-22	Animal rescue centre and veterinary treatment for wild animals	Work under construction
46	Territorial	Kashmir	Awantipora-T	2021-22	Lam	W/F/AWP/21-22/00823	Residential and office buildings for frontline staff	Work under process
47	Territorial	Kashmir	JV Baramulla-T	2021-22	Dewanbagh	W/F/JVB/21-22/01078	Residential and office buildings for frontline staff	Work under process
48	Territorial	Kashmir	Kamraj- T	2021-22	Kandi/00/Rajpur	W/F/KMR/21-22/00212	Residential and office buildings for frontline	The overall finish and look of the building was



Sr no.	Department	Region	Division	Year	Name of the unit- Forest Comptt/Range	Work ID no.	Work details	Remarks
							staff.	poor.
49	Territorial	Kashmir	Kamraj- T	2021-22	36/South Lolab/Dourusa	W/F/KMR/21-22/ 00215	Residential and office buildings for frontline staff	Work under construction
50	Territorial	Kashmir	Kehmil- T	2021-22	Naihari/54NH	W/F/KEH/21-22/0 2092	Residential and office buildings for frontline staff	Work under construction
51	Territorial	Kashmir	Kulgam- T	2021-22	D H Pora	W/F/KUL/21-22/0 0617	Residential and office buildings for frontline staff.	Found in very good condition. Overall finish and look was good. Also the purpose of serving was also good.
52	Territorial	Kashmir	Langate- T	2021-22	37/Rafiabad/Chatoosa	W/F/LGT/21-22/0 1021	Residential and office buildings for frontline staff.	Building under construction process
53	Territorial	Kashmir	Lidder-T	2021-22	Pahalgam	W/F/LDR/21-22/0 0783	Residential and office buildings for frontline staff	Work under process
54	Territorial	Kashmir	Shopian-T	2021-22	Division office	WF/SHP/21-22/0649	Residential and office buildings for frontline staff	Work under process
55	Territorial	Kashmir	Shopian-T	2021-22	Romshi/Ri8	W/F/SHP/21-22/0 0653	Residential and office buildings for frontline staff	Found in very good condition. Overall finish and look was good. Also the purpose of serving was also good.
56	Territorial	Kashmir	Tangmarg-T	2021-22	65c/Gogaldara	W/F/TAN/21-22/0 0508	Residential and office buildings for frontline staff	Work under process

### D.3.3 Equipments

Equipments of 38 divisions were evaluated and most of them were found in good and working conditions. Details of evaluation of equipments purchased were as given in table-32.

**Table-32:** The details of Equipments evaluation

Sr no	Department	Region	Division	Year	Name of divisions	Equipments	Remarks
1	Territorial	Jammu	Batote-T	2019-20	Divisional Office	GPS-4	All were functional
				Xerox machine-1			
				Camera-1			
				Printer-1			
2	Territorial	Jammu	Billawar - T	2019-20	Divisional office	Computer-1	All were functional
				Printer-1			
				GPS-2			
3	Territorial	Jammu	Jammu-T	2019-20	Divisional office	Printer-3	All were functional
				GPS- 14			
				Camera-1			
4	Territorial	Jammu	Kathua-T	2019-20	Divisional office	Computer-2	All were functional
				Printer-3			
				Camera-1			
				Xerox machine-1			
5	Wildlife	Jammu	Poonch-Rajouri WL	2019-20	Tatakutti WLS	Procurement of fire fighting equipments and kits	All were functional
6	Territorial	Jammu	Billawar - T	2020-21	Divisional office	GPS-14	All were functional
				Printer-1			
				Xerox machine-1			
7	Urban Forestry	Jammu	Jammu-UF	2020-21	Jammu, Mahamaya	Xerox machine-1	All were functional
				Printer-1			
				Camera-1			
8	Territorial	Jammu	Nowsheera-T	2020-21	Divisional office	GPS-10	All were functional
				Printer-2			
				Laptop-1			
				Camera-1			



Sr no	Department	Region	Division	Year	Name of divisions	Equipments	Remarks
9	Territorial	Jammu	Samba-T	2020-21	Divisional office	GPS-7	All were functional
				Printer-1			
				Xerox machine-1			
				Computer-1			
10	Wildlife	Jammu	Poonch-Rajouri WL	2020-21	Kullian CR	Darts, Needles, Drugs / CO2 Cylinder and accessories for tranquilizing Gun	All were functional and useful
11	Territorial	Jammu	Basohli-T	2021-22	Basohli division	Computer-1	All were functional
				GPS-6			
				Printer-2			
				Xerox machine-1			
12	Territorial	Jammu	Doda- T	2021-22	Doda Forest Division	Computer-1	All were functional
				GPS-7			
				Printer-1			
13	Territorial	Jammu	Jammu-T	2021-22	Divisional office	Computer-1	All were functional
				Printer-3			
				Laptop-1			
				Camera-1			
				Xerox machine-1			
14	Territorial	Jammu	Kishtwar-T	2021-22	Divisional office	Computer-1	All were functional
				GPS-7			
				Printer-1			
				Camera-1			
				Xerox machine-1			
15	Territorial	Jammu	Marwah - T	2021-22	Divisional office	Computer-1	All were functional
				GPS-7			
				Printer-2			
				Camera-1			
16	Territorial	Jammu	Ramban -T	2021-22	Divisional Office	Computer-2	All were in good condition
				GPS- 5			
				Xerox machine-1			
				CPU-1			



Sr no	Department	Region	Division	Year	Name of divisions	Equipments	Remarks
17	Territorial	Jammu	Ramnagar-T	2021-22	Divisional office	Computer-1 GPS-10	All were functional
18	Territorial	Jammu	Udhampur- T	2021-22	Udhampur ,Panchari & Dudu	Computer-1 GPS-10 Printer-1 Xerox machine-1	Purchase in process
19	Wildlife	Jammu	Poonch-Rajouri WL	2021-22	Kullian CR	Procurement of fire fighting equipments and kits	All were functional and very useful
20	Social Forestry	Jammu	Jammu-SF	2021-22	Divisional office	Computer-1 GPS-7 Printer-2 Laptop-1 Camera-1	All were functional
21	Social Forestry	Jammu	Doda-SF	2021-22	Divisional office	Computer-1 GPS-5 Printer-2 Camera-1	All were functional
22	Territorial	Kashmir	Anantnag-T	2019-20	Divisional office	Computer-1 GPS-4 Laptop-1 Printer-5 Gun set-1	All were functional 3 functional printers Useful
23	Territorial	Kashmir	Bandipora- T	2019-20	Divisional office	Computer-2 Printer-2 Xerox machine-1 Laptop-2 Camera-1	All were functional
24	Territorial	Kashmir	Srinagar	2019-20	Khanmoh Nursery	Nursery equipments	Very useful
25	Social Forestry	Kashmir	Srinagar - SF	2019-20	SF Division Srinagar	6 tool kits	All were in good condition



Sr no	Department	Region	Division	Year	Name of divisions	Equipments	Remarks
26	Social Forestry	Kashmir	Srinagar - SF	2019-20	SF Division Srinagar, Ganderbal	7 tool kits	6 kits were functional
27	Social Forestry	Kashmir	Srinagar - SF	2019-20	SF Division Srinagar, Budgam	7 tool kits	All were in good condition
28	Territorial	Kashmir	Bandipora- T	2020-21	Divisional office	GPS-12	All were functional
29	Territorial	Kashmir	Baramulla JV	2020-21	Divisional office	GPS-10	All were functional
30	Territorial	Kashmir	Anantnaga-T	2021-22	Qazigund range office	Equipment and devices for communication and information technology	All were functional
31	Territorial	Kashmir	Anantnaga-T	2021-22	Divisional office	Laptop-3 GPS-18 Xerox machine-1	All were functional
32	Territorial	Kashmir	Budgam - T	2021-22	Divisional office	Computer-1 GPS-5 Printer-1 Xerox machine-1	All were functional
33	Territorial	Kashmir	JV Baramulla	2021-22	Dewanbagh&Noorkhah	Printer-1 Drone-1 GPS-5	All were functional
34	Territorial	Kashmir	Kehmilt	2021-22	Naihari/48 NH	Computer-1 GPS-5 Printer-1 Camera-1 Xerox machine-1	All were functional
35	Territorial	Kashmir	Kulgam - T	2021-22	Divisional office	Computer-2	All were functional
36	Territorial	Kashmir	Langate - T	2021-22	Divisional Office, Langate	30 GPS machine	All were functional
37	Territorial	Kashmir	Lidder-T	2021-22	Bijbehara Office	Computer-1 GPS-15	All were functional

Sr no	Department	Region	Division	Year	Name of divisions	Equipments	Remarks
						Printer-2	
						Laptop-1	
38	Territorial	Kashmir	Shopian -T	2021-22	Shopian range office	Computer-2	All were functional
						GPS-14	
						Printer-1	
						CCTV with Monitor-1	

### D.3.4 Nursery Evaluation

Total 15 nurseries belong to different department and divisions had been visited and evaluated. The infrastructure and other facilities developed under the fund of CAMPA proved to be very good and useful for developing saplings to fulfill the target of plantation at various locations. The details about the nurseries were as given in table-33.

**Table-33:** The details of nursery evaluation

Sr. no.	Region	Division/ Dept	District	Nursery name	Remarks
1	Jammu	Doda- Territorial	Doda	52-Zehand Nursery/Kunntwala	Very Good
2	Jammu	Doda- Territorial	Doda	89/D/soil/Chapnari nursery	Very Good
3	Jammu	Basohli- Territorial	Kathua	37 , Hut Nursery	Excellent
4	Jammu	Samba- Territorial	Samba	Balode nursery	Very Good
5	Jammu	Billawar- Territorial	Kathua	Challan nursery, Ramkot	Very Good
6	Jammu	Reasi- Territorial	Reasi	36R/Wazir Bowli Nursery	Very Good
7	Jammu	Kathua- WL	Kathua	Kathua nursery	Excellent
8	Kashmir	Langate- Territorial	Kupwara	Langate nursery/mawar	Very Good
9	Kashmir	Kamraj- Territorial	Kupwara	Zangli Kupwara-North Lolab/121-Nursery	Excellent
10	Kashmir	Lidder- Territorial	Anantnag	4AC nursery	Very Good
11	Kashmir	Sindh- Territorial	Ganderbal	MalharHightech	Very Good



				Nursery, Ganderbal	
12	Kashmir	Tangmarg-Territorial	Baramulla	Gulmarg/47- Nursery	Excellent
13	Kashmir	Srinagar- WL	Srinagar	Khanmohnrery, Srinagar	Excellent
14	Kashmir	Baramulla- SF	Ganderbal	Waheedpura nursery /Gbl	Excellent

### D.3.5 Status of Record Keeping and Reporting Mechanism

Year wise Plantation journal and nursery journal produced by the frontline staff and checked by the evaluation team were almost appropriate. Plantation map and other aspects were present in most of the cases.

Plantation journal of 19 units need to be updated with all informations. Proper documents of plantation activities need to be updated on regular basis by the department of Jammu urban forestry.

Documents related to civil work and purchasing of equipments were found to be proper. Also the reporting mechanism of work was also found to be good.



*Photo-23: AFC field evaluator on the way to Kishtwar WL*



*Photo-24: Group discussion with frontline staff and local people*



## ***Chapter-E***

### **RECOMMENDATIONS OF THE EVALUATORS**

Recommendations of AFC Evaluators for the improvement of afforestation, SMC and related activities are as given below:

1. J&K UT CAMPA works have helped in:
  - i. Increase in vegetative cover resulting in increase in number of birds, animals, butterflies, insects and reptiles; and biodiversity of the area.
  - ii. Rise in ground water table resulting in increased availability of water to the local people; and augmentation of moisture regime useful for improving local ecology of the area.
  - iii. Increase in forest biomass resulting in increased Carbon sequestration and storage.
  - iv. Increase in availability of grasses, leaf, fodder, fuel wood and other non-timber produce to the local people.
2. Soil work around the planted saplings must be carried out for enhancing the growth of plants planted. It helps in removal of weeds, minimizing the root competition for nutrients and soil moisture between saplings planted and the weeds. Further, it helps in providing adequate sunlight to the plants planted resulting in increased photosynthesis.
3. Selection of tree species for planting should be site specific. Emphasis should be given to plant more coniferous trees.
4. Damaged in- situ SMC and fencing due to landslide and other natural reasons should be repaired.
5. Forest, Plantation and Nursery Journals should be updated regularly
6. Equipment's like GPS and for fire controlling should be procured more due to increasing role of technology and threat from fires.
7. Adequate manpower need to be provided for watch and ward of closures in a better way.
8. Forest fire is a major threat for success of closure. Department may conduct training sessions for field functionaries and other stakeholders to train them in fire fighting and effective protection measures.
9. Training and capacity building of local community in plantation and allied activities will help both in afforestation as well as conservation measures.
10. The contractors carry out the plantation and civil work should be given time line to complete the work within time frame. Focus should be given to carry out plantation work during favourable soil, moisture and weather conditions.



**Annexure-1: Closure wise plantation, Fencing and Soil & Water Conservation works Details**

Sr. no.	Region	District/ Division/ Dept	Year	Name of the unit- Forest Compt/Range	Coordinates (Lat/Long)	Area (ha)	No. of plants planted	No. of live plants	Survival % of planted plants	Av. ht of live plants (ft)	Av. collar diameter of live plants (cm)	Natural regeneration per ha	Root Stock per ha	Total No. of live plants (Artificial, Natural and Root stock) per ha	Fencing (RFT)	DRSM (CUM)
1	Jammu	Basohli-Territorial	2019-20	33/bsl ,Palhahee-1 , Sandher	N32.34.176 E75.51997	7	2000	1128	56.4	2.5	2.3	388	11	560	2200	
2	Jammu	Basohli-Territorial	2019-20	31/bsl , Sandher,Nagana	N32.33208 E75.50723	7	1500	1045	69.7	3.5	3.8	457	6	612	2200	
3	Jammu	Basohli-Territorial	2019-20	18c/bsl , CHOI-MORH,Khurku, Plassi	N32.32748 E75.43842	10	2000	1346	67.3	2.8	2.5	367	14	515	3000	
4	Jammu	Basohli-Territorial	2019-20	9/bsl Khurku Morh, Jhankhar	N32.34343, E75.45650	10	3300	2305	69.8	2.7	2.5	567	9	807	3000	
5	Jammu	Basohli-Territorial	2020-21	17/bsl ,Chaka-1 , Mahanpur	N32.32473 E75.4257	24	4000	2811	70.3	2.3	2.2	594	17	728	8100	
6	Jammu	Basohli-Territorial	2020-21	84/bni ,Siara ,Ajoun	N32.635046 E75.8921	18	4000	2904	72.6	2.2	1.8	506	10	677	9200	
7	Jammu	Basohli-Territorial	2021-22	02/bsl , Bagh Nagali, Ramarachana	N32.622096 E75.750223	21	6000	4273	71.2	1.3	1.9	307	11	521	7600	90
8	Jammu	Basohli-Territorial	2021-22	68/bni , Amnota-1, Chandal	N32.44065 E75.49103	3	1800	1292	71.8	1.5	1.8	289	13	733	2300	50
9	Jammu	Basohli-Territorial	2021-22	33/bsl , Chhara Sandhar	N32.33718 , E75.50830	15	5500	3944	71.7	2.3	2.1	386	12	661	9600	300
10	Jammu	Basohli-Territorial	2021-22	17/bsl , Chaka-2, Sabar	N32.32525 E75.42233	10	4000	2895	72.4	3.4	2.9	441	13	744	5800	200
11	Jammu	Batote-Territorial	2019-20	41/Btt/Batote/Maitrs Ballout	N33.221535, E75.23943	10	5285	3665	69.3	3.2	1.3	318	7	692	3000	
12	Jammu	Batote-Territorial	2019-20	14c/btt/Batote/Champa	N33.133143, E75.305528	11	4900	3260	66.5	2.2	1.6	609	8	913	3360	
13	Jammu	Batote-Territorial	2019-20	22/Btt/Soil-NHI-A/Nashri/Batote	N33.13903, E75.300942	12	4900	3260	66.5	3.2	1.4	439	6	717	3370	
14	Jammu	Batote-Territorial	2019-20	16/MRT/Marmat /Hamble	N33.085318, E75.497365	10	5200	2284	43.9	2.9	2.5	675	12	915	3000	
15	Jammu	Batote-	2019-	49/MRT/Marmat	N33.041938,	10	5280	3374	63.9	3.4	2.9	404	10	751	3000	



Evaluation/ Study of Plantations and Construction of Soil and Water Conservation Structures & Civil Works Executed under CAMPA during the Year 2019-20 to 2021-22

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Sr. no.	Region	District/ Division/ Dept	Year	Name of the unit- Forest Compt/Range	Coordinates (Lat/Long)	Area (ha)	No. of plants planted	No. of live plants	Survival % of planted plants	Av. ht of live plants ( ft)	Av. collar diameter of live plants ( cm)	Natural regeneration per ha	Root Stock per ha	Total No. of live plants (Artificial, Natural and Root stock) per ha	Fencing (RFT)	DRSM (CUM)
		Territorial	20	/Pathwara Roat	E75.44392											
16	Jammu	Batote-Territorial	2019-20	59/G/Gandhri/Bhatni	N33.235157, E75.181492	10	5125	2997	58.6	2.5	1.6	583	9	892	3000	
17	Jammu	Batote-Territorial	2019-20	52/g/Parnote-Sharoor/Gandhri	N33.242453, E75.198309	10	4900	3451	70.4	3.2	2.8	386	6	737	3000	
18	Jammu	Batote-Territorial	2019-20	52/G-1/Gandhri/Parnote-B	N33.242406, E75.19834	10	5170	3252	62.9	3.5	3	415	11	751	3000	
19	Jammu	Batote-Territorial	2019-20	64/G/Kabbi/Gandhri	N33.204345, E75.191564	12	5520	3837	69.5	3.1	2.7	558	8	886	5500	50
20	Jammu	Batote-Territorial	2019-20	63a/g/Gandhri/Bhatni	N33.218282, E75.180888	10	5274	3484	66.1	3.4	2.7	635	7	991	3000	
21	Jammu	Batote-Territorial	2020-21	15/tt/Batote/Jangi Morh	N33.127707, E75.309535	15	6900	4602	66.7	2.8	1.6	490	10	807	4950	
22	Jammu	Batote-Territorial	2020-21	29/Btt/Soil-NHIA/Ramban/Talangan	N33.176611, E75.281371	25	7196	3457	48.1	3.3	3.1	538	7	683	9750	50
23	Jammu	Batote-Territorial	2020-21	14A/Dhak/Batote	N33.148028, E75.320093	41	13530	9105	67.3	3.2	1.5	407	9	638	10300	
24	Jammu	Batote-Territorial	2020-21	35A/Padda Shopyal/Tatarsoo	N33.197635, E75.253036	40	13200	8606	65.2	3.3	2.2	237	11	463	10000	
25	Jammu	Batote-Territorial	2020-21	22B/BH/Batote/Dhalwas	N33.14329, E75.303499	15	4950	3165	63.9	3.4	4.6	277	10	498	4650	
26	Jammu	Batote-Territorial	2020-21	23/M/Marmat/Moothi	N33.033653, E75.493255	15	3900	2021	51.8	3	2.1	403	11	549	7600	
27	Jammu	Batote-Territorial	2020-21	55/MRT/Mandrala Sewat/Marmat/Kharonti	N33.061094, E75.422756	46	3500	2374	67.8	5.3	3.4	442	11	505	13500	100
28	Jammu	Batote-Territorial	2020-21	52/G/Gandhri/Sharore/Darnote-B	N33.2429, E75.203957	0.35	4290	2882	67.2	3.1	2.4	441	5	1446	1500	
29	Jammu	Batote-	2020-	55/g/Gandhri/Ka	N33.257238,	22	7260	4951	68.2	3.2	2.9	496	13	734	8700	50



Sr. no.	Region	District/ Division/ Dept	Year	Name of the unit- Forest Compt/Range	Coordinates (Lat/Long)	Area (ha)	No. of plants planted	No. of live plants	Survival % of planted plants	Av. ht of live plants (ft)	Av. collar diameter of live plants (cm)	Natural regeneration per ha	Root Stock per ha	Total No. of live plants (Artificial, Natural and Root stock) per ha	Fencing (RFT)	DRSM (CUM)
		Territorial	21	nga	E75.163476											
30	Jammu	Batote-Territorial	2020-21	52B/G/Gandhri/Kanga/Parnote-B	N33.243175 E75.191737	13	4290	2561	59.7	2.6	1.9	414	7	618	5150	
31	Jammu	Batote-Territorial	2020-21	48/G/Gugwal/Gandhri/Ramban	N33.218085, E75.220775	37	12210	7472	61.2	2.8	1.7	346	11	559	9400	70
32	Jammu	Batote-Territorial	2020-21	57b/G/Gandhri/Kanga/Bistala	N33.271454, E75.035377	10	10500	7128	67.8	3.7	2.8	443	9	1165	3000	
33	Jammu	Batote-Territorial	2020-21	74/G/Gandhri/Bhatni	N33.195786, E75.174785	15	6900	4328	62.7	2.6	1.1	629	8	926	6300	50
34	Jammu	Batote-Territorial	2020-21	46B/G/Gandhri/Gugwal	N33.107362, E75.20667	32	10560	6695	63.4	3.8	3.4	378	4	591	12000	50
35	Jammu	Batote-Territorial	2020-21	49/G/Failthy/Gugwal-B	N33.230973, E75.226403	25	8250	4974	60.3	3.1	2.8	284	10	493	8450	50
36	Jammu	Batote-Territorial	2021-22	14B/Soil/Nashri/Batote	N33.132173, E75.302308	10	7000	4205	60	2.2	0.9	511	6	938	4500	
37	Jammu	Batote-Territorial	2021-22	12/Rakhjeroj/Batote	N33.134357 E75.327999	5	4500	2784	61.9	2.6	1.4	224	9	790	2000	90
38	Jammu	Batote-Territorial	2021-22	63a/g/Gandhri/Batote	N33.21778, E75.183057	12	5440	3742	68.7	2.7	1.8	513	10	835	3700	50
39	Jammu	Batote-Territorial	2021-22	47/G/Gandhri/Garolla/Gugwal	N33.213087, E75.215963	14	8120	5222	64.3	3.5	2.4	329	8	710	6000	70
40	Jammu	Bhaderwah-Territorial	2019-20	5/JWR/Chutehari/Chirala	N33.12202 E75.79914	10	4000	2546	63.6	2.1	1.6	269	5	529	3000	
41	Jammu	Bhaderwah-Territorial	2019-20	86/BH/Balesh/Soti/Kashar	N32.97.33.5, E075.91.53.9	10	6000	3768	62.8	2.3	1.8	264	6	647	3000	
42	Jammu	Bhaderwah-Territorial	2019-20	12/N/neeru/kakoli/Doongi	N330012.6, E0.75.44.23.	10	3600	2240	62.2	2.1	1.2	341	8	573	3000	
43	Jammu	Bhaderwah-Territorial	2019-20	62/k/Kellar/Trown	N33.04.47.8, E075.34.06.6	20	3600	2216	61.5	1.5	0.7	427	9	547	3000	
44	Jammu	Bhaderwah-Territorial	2019-20	8/K/Kellar/Kahri/Ghuraka	N33.03.48.4, E075.39.41.	10	2000	1318	65.9	2.8	3.1	379	9	520	3000	



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					7											
45	Jammu	Bhaderwah-Territorial	2019-20	36/N-T/Neeru/Bastikhoral/Neeru	N32.56.20.1, E075.43.12.0	15	5253	3608	68.7	2.2	1.6	311	9	561	6000	
46	Jammu	Bhaderwah-Territorial	2019-20	58/N/Dhara Sarna/haga/neeru	N33.00.01.4, E075.40.52.7	12	6000	4212	70.2	2.6	2.3	513	10	874	3600	
47	Jammu	Bhaderwah-Territorial	2019-20	15/n/Neeru/Linga Dandi	N33.59.16.5, E075.44.14.2	25.95	1554	836	53.8	3.2	1.9	392	9	433	7790	
48	Jammu	Bhaderwah-Territorial	2020-21	6/JWR/Chutehari/Chirala	N33.135307 E75.78290	14.39	1000	522	52.2	1.4	0.8	378	7	421	4317	
49	Jammu	Bhaderwah-Territorial	2020-21	1/BH/Bhalesh/De sale/ Pingal	N33.11.19.6, E075.86.87.3	40	22000	14665	66.6	1.8	0.9	277	6	650	12000	
50	Jammu	Bhaderwah-Territorial	2020-21	12/jit/Bhalesh/Kasar	N33.04.18.8, E075.83.59.9	15	6000	3924	65.4	1.7	0.8	426	9	697	4500	
51	Jammu	Bhaderwah-Territorial	2020-21	11/Jay/Chiralla/Eidega Bhalla/Taita-II	N33.09.17.8, E075.82.88.5	22	7700	5340	69.3	1.5	0.6	253	5	501	6600	
52	Jammu	Bhaderwah-Territorial	2020-21	57/BH/Balesh/Chanti	N32.97.58.5 E075.94.48.5	15	6000	4012	66.8	2.4	1.9	258	5	530	6000	140
53	Jammu	Bhaderwah-Territorial	2020-21	7a/Jay/Chirala/Kundeli/Tanta-2	N33.08.03.0 E075.85.10.7	18	6300	4143	65.7	1.8	0.9	265	5	500	5400	
54	Jammu	Bhaderwah-Territorial	2020-21	12/Jay/Chirala/Bhola/Tanta-2	N33.09.40.8, E075.82.30.1	22	7700	5258	68.2	1.5	0.6	223	8	470	6600	310
55	Jammu	Bhaderwah-Territorial	2020-21	4/K/Kellar/Brahmpuri/Gurakha-1	N33.05017, E075.36.36.6	20	7450	5328	71.5	2.1	1.1	195	6	467	6000	100
56	Jammu	Bhaderwah-	2020-	24/K/Kellar/Ghee	N33.01.46.8,	30	12000	8592	71.6	2.5	2.4	562	11	859	9000	150



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		Territorial	21	di/Dungli	E 075.36.52.3											
57	Jammu	Bhaderwah-Territorial	2020-21	36/N/Neeru/Basti	N32.55.58.5, E07.43.08.1	20	7000	4463	63.7	2.4	1.8	573	12	808	6000	
58	Jammu	Bhaderwah-Territorial	2020-21	28/N/Neeru/Thana	N33.915656 E075.78.23.0	30	13000	8846	68	2.6	2.4	369	7	671	9000	
59	Jammu	Bhaderwah-Territorial	2021-22	32/Jai/Kirala/Baidhari/Bai	N33.018506, E075.76652	20	7000	4907	70.1	1.5	0.9	213	4	462	6000	
60	Jammu	Billawar - Territorial	2019-20	16a&17b/Ramkot/Panjian-Sulara	N32.68663, E75.433403	9	1500	1112	74.1	1.8	0.68	698	10	832	2700	10
61	Jammu	Billawar - Territorial	2019-20	42/ Parnalla, Bilawar	N 32.558614 E 75.601259	20	7500	4694	62.5	2.2	1.9	819	11	1065	6000	
62	Jammu	Billawar - Territorial	2019-20	15/B RKT/Dramini/Sananchor, Ramkot	N 52.663348 E 75.464645	9	1600	1144	71.5	3.3	2.8	505	13	645	2700	10
63	Jammu	Billawar - Territorial	2019-20	21/blr/Pehna Peiya strip/	N32.657639 E75.623828	4	410	258	63.1	2.5	2.7	396	3	464	1200	
64	Jammu	Billawar - Territorial	2019-20	18/blr, Thanda Pani/ Sukral	N 32.644565 E 75.59507	9	1500	1087	72.6	2.3	2.1	892	8	1021	2700	
65	Jammu	Billawar - Territorial	2019-20	15b/RKT/Nokain, Ramkot	N 32.669036 E 75.467941	9	1500	763	62.8	2.3	2.1	546	7	638	2700	
66	Jammu	Billawar - Territorial	2019-20	19, Churai Strip-I, Billawar	N 32.621057 E 75.602253	6	210	132	66.7	2.6	2.5	399	7	428	2000	
67	Jammu	Billawar - Territorial	2019-20	19, Churai Strip-II, Billawar	N 32.622219 E 75.599104	6	210	134	69.1	2.8	2.5	649	7	678	2000	
68	Jammu	Billawar - Territorial	2019-20	20Blr/Upper Ludrai/ Billawar	N 32.644946 E75.618151	9	1500	995	66.3	2.9	2.6	629	7	746	2700	
69	Jammu	Billawar - Territorial	2019-20	14/blr/Galua/dhokakrola	N 32.648035 E75.514156	9	1500	847	67.1	1.4		556	7	657	2700	
70	Jammu	Billawar - Territorial	2020-21	23 Machhedi, Baja di That,	N32.714982, E75.593613	15	3000	2635	87.8	0.9	0.32	1040	17	1233	6500	75



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				Billawar												
71	Jammu	Billawar - Territorial	2020-21	14/A /Basik More, Dhanuprole, Billawar	N 32.642868 E 75.508549	0.69	150	96	64	1.6		372	2	513	1000	10
72	Jammu	Billawar - Territorial	2020-21	4/Gali/Bhatodi/Billawar	N 32.711662 E 75.570025	11	3000	2756	91.8	1.4		1953	17	2221	5000	75
73	Jammu	Billawar - Territorial	2020-21	23/ RKT/ Banja Da Tala/Ramkot, Noul	N 32.725701 E 75.415448	16	5000	3542	70.8	1.7		635	11	867	8000	85
74	Jammu	Billawar - Territorial	2020-21	10/RKT/ Makwal/Ramkote, Kandharnoo	N 32.65356 E 75.398598	12	2000	1466	73.3	2.5	2.2	638	13	773	5300	
75	Jammu	Billawar - Territorial	2020-21	19Blr/ Banda Strip-II/ priawar/kathawa	N 32.613533 E 75.616693	0.15	250	146	63.6	1.4		423	7	1403	300	
76	Jammu	Billawar - Territorial	2020-21	23/ RKT/ Churu Da Karan,Ramkote	N 32.738633 E 75.405257	11	7000	5286	75.5	1.3		351	13	844	4000	
77	Jammu	Billawar - Territorial	2020-21	12blr/ Devi/ Dhanuprole	N 32.69814 E 75.560315	20	3500	2344	66.9	1.5	1.3	1054	17	1188	7000	90
78	Jammu	Billawar - Territorial	2021-22	Dallian/15-BLR/Lahri	N 32.649247 E 75.55665	12.6	4500	3065	68.1	1.8	1.2	550	9	802	4600	91
79	Jammu	Billawar - Territorial	2021-22	17/B/Badal/Ramkot/Panjain	N32.682902 E 75.432182	5	3000	2448	81.6	4.5	4.2	366	4	860	4000	
80	Jammu	Billawar - Territorial	2021-22	3-Kawara/Sadrota, Billawar	N 32.734084 E 75.539116	57.4	8000	6444	80.5	1.5		498	7	617	12240	350
81	Jammu	Billawar - Territorial	2021-22	7/blr/Badhadu/ Godufal	N 32.423218 E 75.31090	26	7000	5054	72.2	2.2	2.1	722	17	933	7360	200
82	Jammu	Billawar - Territorial	2021-22	17/blr/Silla, Sukral	N 32.40474 E 75.353667	8.6	3000	2227	74.2	2.1		641	8	908	3840	90
83	Jammu	Billawar -	2021-	1b/ RKT/Tarbal,	N 32.620141	7	3000	2232	74.4	2.6	2.5	741	9	1069	4000	





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		Territorial	22	Ramkot	E 75.388353											
84	Jammu	Doda-Territorial	2019-20	4K-II/Sarwan/Thakrai	N33.34.15.0, E75.67.75.78	10	7800	3283	42.1	2.6	2.2	293	4	625	3000	
85	Jammu	Doda-Territorial	2019-20	50/Kuntwara, Gundna	N33.21.1557, E75631858	10	8200	3149	38.4	2.5	2.4	287	7	609	3200	
86	Jammu	Doda-Territorial	2019-20	85-IA/SJ/Siraj/Malloh/Koti	N33.190352 E75.483929	3	2400	993	41.4	3.2	3.1	276	3	610	3200	35
87	Jammu	Doda-Territorial	2019-20	85-SJ/Siraj/Malloh/Koti	N33.19.14.8, E75.49.12.46	8	6500	2619	40.3	3.1	2.8	271	8	606	1500	23
88	Jammu	Doda-Territorial	2019-20	69-I/Sj/Siraj/Koti	N33.18.88.88, E75.54.64.25	10	5600	2301	41.1	3.1	2.7	525	12	767	3350	
89	Jammu	Doda-Territorial	2020-21	20/k/Balna-Thakrai/Doda	N33.28.68.07, E75.68.1172	12	7800	3135	40.2	1.8	1.7	211	3	475	7000	50
90	Jammu	Doda-Territorial	2020-21	1/K, Thakrai/Arigam	N33.21.055, E75.42.20.3	12	6000	2412	40.2	2.6	2.4	274	6	481	7000	50
91	Jammu	Doda-Territorial	2020-21	55/Kunthwara/Doda	N33.19.50.28 E75.68.38.48	20	6000	2442	40.7	2.4	2.2	235	3	360	6450	50
92	Jammu	Doda-Territorial	2020-21	67/Kt/Kuhtwara/Bahiyal-Dashhan	N33.12.241, E7533746	14	4200	2196	52.3	3.7	4.3	284	7	448	4500	60
93	Jammu	Doda-Territorial	2020-21	84/Siraj/Gadi/Koti	N33.21.17.36, E75.50.78.88	3	1500	579	38.7	3.1	2.8	287	9	489	4350	90
94	Jammu	Doda-Territorial	2020-21	73/Tod Dhaka/Siraj	N33.25.2962, E75468131	12	1500	612	40.8	2.4	2.2	279	7	337	4200	90
95	Jammu	Doda-	2020-	28K/Ladnoo,	N33.258292	20	4000	1608	40.2	2.5	2.2	283	6	369	7000	55



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		Territorial	21	Kotal	E75.730738											
96	Jammu	Doda-Territorial	2021-22	20/sbl/Thakrai/Nichha	N33.3767.42 , E75.61.9316	20	18000	10505	58.3	1.5	1.2	236	11	772	6000	
97	Jammu	Doda-Territorial	2021-22	7/Sj/Siraj/Dabrail	N33.187612, E75.3936.55	22	3000	1237	41.2	2.6	2.4	274	3	333	8000	
98	Jammu	Doda-Territorial	2021-22	58/kt/Kuhthwala/Nakah	N33.247471, E75621992	10						254	4		4000	
99	Jammu	Doda-Territorial	2021-22	31/SD/Siraj/Malan	N33.29.401, E75.43.26.61	26					34.6	277	9		8000	
100	Jammu	Jammu-Territorial	2019-20	55/ Bajalata/Bahu/Aithem	N 3246307 E 07458591	9	2500	1639	65.5	6.2	11.3	531	11	724	2100	
101	Jammu	Jammu-Territorial	2019-20	1 KDR/Bhambla/Kalidhar	N33.02361 E743412.4	8	3000	2101	70.1	10	16.5	762	13	1038	2500	
102	Jammu	Jammu-Territorial	2019-20	28/K / Dhok Khalsa, Panjgrain/Kalidhar	N 32.53213 E 07434384	7	2000	1254	62.7	7.2	8.5	679	6	864	2000	
103	Jammu	Jammu-Territorial	2019-20	7/N /Rumbhal Sula/Nagrota	N 3254434 E0745129	21	3500	2220	63.4	2.2	1.7	452	9	567	6400	
104	Jammu	Jammu-Territorial	2020-21	24/Bajalta/Tuta Di Khoi	N 3245210 E 07458010	12	5000	3381	67.6	1.8	1.6	705	16	1003	5000	50
105	Jammu	Jammu-Territorial	2020-21	30 KDR/Talal/Kalidhar	N 32.56518 E 74.32292	25	10000	6581	65.8	2.4	2.2	563	14	840	8000	
106	Jammu	Jammu-Territorial	2020-21	19 Kandi/Kalidhar/Tanda	N 32.995507 E 74.73412	18	5000	3370	67.4	2.3	1.5	426	5	618	5400	50
107	Jammu	Jammu-Territorial	2020-21	3N, Seri Dhammi, Jagti	N 32.820585 E 74912771	15	8000	3111	38.9	2.8	1.4	634	13	854	6000	
108	Jammu	Jammu-	2020-	5N/Simbleaid,	N 32.503375	12	6500	4079	62.7	2.2	1.4	347	4	691	5000	30



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		Territorial	21	Jagti-II	E 074.524433											
109	Jammu	Jammu-Territorial	2020-21	6/M, Undhal, Channi Mansal, Jindrah	N 32.410531 E 75.103457	20	8000	5490	68.6	3.2	2.8	416	9	700	6500	30
110	Jammu	Jammu-Territorial	2020-21	2/T /Janakha/Jindrah	N 32.51578 E 74.58137	12	8000	5389	67.3	2.9	1.5	403	11	863	6500	20
111	Jammu	Jammu-Territorial	2020-21	3/J, Palli/Jindrah	N 32.51180 E 07401474	3	2000	1014	50.7	2.6	2.1	319	3	660	2000	
112	Jammu	Jammu-Territorial	2021-22	4/M, Dabar Meira, Snowa, Jammu	N 32.54263 E 0744910.8	15	2500	1384	55.3	2.2	1.4	768	18	878	4500	
113	Jammu	Jammu-Territorial	2021-22	8M, Chanaid, Jindrah	N 32.711887 E 75123861	10	5000	3190	63.8	2.7	1.9	466	7	792	4500	30
114	Jammu	Jammu-Territorial	2021-22	65/Bahu/Palpad	N 32.44347 E 07455186	15	3000	2012	67.1	2.3	1.6	583	10	727	6000	30
115	Jammu	Jammu-Territorial	2021-22	4/P/ Keran, Paloura	N 32.473755 E 74505626	20	3000	1746	58.2	2.1	1.5	441	7	535	6500	30
116	Jammu	Jammu-Territorial	2021-22	7/C/H, Bahu, Sunjwan, Barmini Khad	N 32 42241 E 07456120	7	3000	1227	40.9	2.4	1.5	451	4	630	7000	
117	Jammu	Jammu-Territorial	2021-22	33/K/Kalah, Dori Kalidar/Jammu	N 3354485 E 07429393	25						573	7		8500	40
118	Jammu	Kathua-Territorial	2019-20	33 J/Jasrota/Khabbal -Tehin	N323343.0, E7522057	10	3000	2151	71.7	4.5	5.6	415	7	637	3000	34.77
119	Jammu	Kathua-Territorial	2019-20	76/J/Sohal-Saida, Jashrota	N323213.9, E751659.3	10	3000	2175	72.5	5.6	6.7	798	16	1032	3000	
120	Jammu	Kathua-Territorial	2019-20	77/J/Said Kooth, Jashrola, Saida	N323212.6, E751736.9	20	6000	4212	70.2	4.8	6.2	628	17	856	6000	90
121	Jammu	Kathua-Territorial	2019-20	44/j/Jasrota/Sakhanoo, Bera-II	N323224.5, E752542.2	10	3000	2281	71.8	3.3	4.2	780	13	1021	3000	
122	Jammu	Kathua-	2019-	19K/Dhakhnakh-	N32407695,	10	3000	2200	73.3	4.8	5.6	754	19	993	3000	55



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		Territorial	20	1/Danna	E75679316											
123	Jammu	Kathua-Territorial	2019-20	28/K/Langa Nal-Chann Mukdhal, Sundrikut	N3229597, E753317.9	10	3000	2043	61.8	5.7	5.8	502	15	721	3000	90
124	Jammu	Kathua-Territorial	2019-20	27/K/Kayala-Janglote/Kyalahnal	N322720.69, E753217E	10	2000	1406	70.3	3.5	3.7	692	17	850	3000	
125	Jammu	Kathua-Territorial	2020-21	33/J/Koli, Jasrota, Thein	N 323438.4, E0751206.9	20	6000	4369	72.8	3.6	4.3	799	12	1029	6000	
126	Jammu	Kathua-Territorial	2020-21	60j/Jasrota/Gali Dadholi, Badoli	N32572378, E7530156	14	6500	4706	72.4	4.7	4.9	678	19	1033	7000	90
127	Jammu	Kathua-Territorial	2021-22	11-J/Hiranagar, Balad, Kaouri Bagni	N 322926.0, E752053.0	16						516	4		4500	
128	Jammu	Kathua-Territorial	2021-22	36K, Beri Di Badi, Sundrikut	N32.311718 E75.322240	32						478	9		9000	
129	Jammu	Kishtwar-Territorial	2019-20	16/K/Nali/Kishtwar	N33.146858, E75.937767	15	7500	4175	55.6	2.9	3.5	567	9	854	4500	
130	Jammu	Kishtwar-Territorial	2019-20	20B/N/Soil KTR/Nattas Nagda Dool	N33.350284, E75.820372	15	9000	5317	59.1	3.3	3.2	412	9	775	4500	
131	Jammu	Kishtwar-Territorial	2019-20	34/k/Kishtwar/Sharoti	N3310.976, E7557491	25	11000	4889	44.4	2.1	1.3	361	7	564	7500	
132	Jammu	Kishtwar-Territorial	2020-21	12a/p, Ongail, Dadder, Kishtwar	N33.209031 E76.254207	11.33						763	8	771	3400	
133	Jammu	Kishtwar-Territorial	2020-21	10a/N/Nagseni/Keeru	N33.336464, E75944163	4.5	2000	1258	62.9	2.8	2.5	376	3	659	1350	
134	Jammu	Kishtwar-Territorial	2020-21	63/k/Kunganbran/Semna	N33.309132 E75.788593	20	7500	3091	41.2	2.1	1.2	137		296	5600	100
135	Jammu	Kishtwar-Territorial	2020-21	16/N/Nagseni/Passgad/Chirool-I	N33.34895, E75.868065	25	7000	3269	46.7	2.8	1.8	176	3	310	7200	120
136	Jammu	Kishtwar-Territorial	2020-21	12n/S/Pootnag/Nagseni soil	N33.344005, E75910944	25	6000	3601	60	2.5	1.6	401	6	551	7400	



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				range/Galhar												
137	Jammu	Kishtwar-Territorial	2020-21	3a/N/Nagseni/Be rulwala	N33.377262, E75.871462	20	8400	4746	56.5	2.6	1.8	593	102	932	5900	
138	Jammu	Kishtwar-Territorial	2020-21	3A/N/Nagseni/Padri/Kishtwar	N33.374185, E75.858046	4	1400	847	60.5	2.3	1.2	677	6	894	1300	
139	Jammu	Kishtwar-Territorial	2020-21	59/K/Trigam-I/Jhamlan	N33.284707, E75793702	25	5000	1855	37.1	2.7	2.1	587	9	670	7200	120
140	Jammu	Kishtwar-Territorial	2021-22	7A/N/Nagseni/Nownatoo	N33.317181 E75.989968	23	12450	5999	48.1	1.6		329	14	604	6000	
141	Jammu	Kishtwar-Territorial	2021-22	63/K/kishtwar	N33.320552 E75.792702	25	9000	3945	43.8	1.7	0.8	211	2	371	7300	50
142	Jammu	Kishtwar-Territorial	2021-22	2A/N/Nagseni/Bronth Cherji	N33.2256 E75.505	21	14000	7708	55	1.8	1	353	13	733	6000	
143	Jammu	Kishtwar-Territorial	2021-22	40/K/Deerwalla/Chandali-I/Kishtwar	N33.15026, E75.84495	30	11000	4113	37.4	2.2	0.9	194	2	333	7500	90
144	Jammu	Kishtwar-Territorial	2021-22	20B/N/Nagseni/Dool	N33.350284 E75.820372	19	11000	5925	53.8	2.7	2	591	11	914	5000	140
145	Jammu	Kishtwar-Territorial	2021-22	19/N/Nagseni/Nagra	N33.348701, E75821747	11	3500	1449	41.4	1.4	0.9	479	9	620	4000	90
146	Jammu	Kishtwar-Territorial	2021-22	16a/N/Nagseni/Chirole-1	N33.344427 E75.864712	10	6000	3256	54.2	2.3	1.8	370	9	705	3500	60
147	Jammu	Kishtwar-Territorial	2021-22	20c/N/Nagseni/Chirole-II	N33.2111, E754815	23	10000	5741	57.4	2.8	2.2	256	4	510	6000	
148	Jammu	Kishtwar-Territorial	2021-22	13/D/Daddar/Ishtyari	N33.160143, E76.303858	30						351	5		9000	
149	Jammu	Mahore-Territorial	2019-20	93/AR/Mahore/Surwah/Judda	N33.18147, E74.903817	4	1600	1052	65.7	3.9	3.5	376	3	642	1200	
150	Jammu	Mahore-Territorial	2019-20	10/GG/Gulabgarh/Bhal/Angralla	N33.37577, E74.891829	5	2000	1211	60.5	3.7	4.1	342	4	588	1500	
151	Jammu	Mahore-Territorial	2019-20	8/GG/Gulabgarh/Sarh/Bagga	N33.349155, E74.83134	10	6010	3482	57.9	4.2	5.1	328	5	681	3000	
152	Jammu	Mahore-	2019-	14/GG/Gulabgarh	N33.375147,	3	1200	778	64.8	4.2	5.1	277	4	540	900	



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		Territorial	20	/Angralla	E74.8943											
153	Jammu	Mahore-Territorial	2019-20	89AR/Mahore/Teerath/Surukote	N33.166072, E74.926717	1	400	202	50.5	2.7	3.2	119		321	chain link 300 rft	
154	Jammu	Mahore-Territorial	2019-20	106/AR/Mahore/Rumbal/Mattote	N33.1234, E744955	10	6000	3233	53.8	3.7	4.6	354	5	682	3000	
155	Jammu	Mahore-Territorial	2019-20	95/9B/AR/Mahore/Kouri/Judda	N33.160138, E74875481	2	800	475	59.3	3.6	4.7	123		361	600	
156	Jammu	Mahore-Territorial	2020-21	7/GG/Gulabgarh/Sarh/Mahore	N33.323756, E74.856313	20	10000	5008	50.08	3.3	2.7	216	4	470	6000	50
157	Jammu	Mahore-Territorial	2020-21	4/GG/Mahore/Gulabgarh/Acharalla	N33.324716, E74.8530389	20	10000	4740	47.4	5.4	5.2	348	6	591	6000	50
158	Jammu	Mahore-Territorial	2020-21	69/GG/Gulabgarh/Thalkote	N33.23.853, E74.43.243	15	6000	3944	66.1	3.3	3.6	367	6	636	4500	100
159	Jammu	Mahore-Territorial	2020-21	105/AR/Mahore/Maltote/Pattian	N33.24167, E74.443243	10						298	5		3000	
160	Jammu	Mahore-Territorial	2020-21	105/AR-1/Tuli Masta/Mahore/Pattian	N33.13.2, E74.51.48	25						261	8		7500	43
161	Jammu	Mahore-Territorial	2021-22	11/GG/Gulabgarh/Angralla	N33.371184, E 74.883404	20	7000	4121	58.8	3.2	3.5	376	6	588	6000	
162	Jammu	Mahore-Territorial	2021-22	127/AR/Sildhar/Mahore/Naggarr	N33.302647, E 74.947488	25	9000	4855	53.9	3.1	2.8	323	4	521	7000	80
163	Jammu	Mahore-Territorial	2021-22	133/AR/Mahore/Cheeral/Shagroo	N33.282249, E74.846536	17	4500	2476	55.02	4.1	3.3	324	6	476	5000	
164	Jammu	Mahore-Territorial	2021-22	81/AR/ Mahore/Sawalakote/Garh	N33.172895, E74.977438	3	600	353	58.8	3.8	3.2	356	3	477	1200	
165	Jammu	Marwah-Territorial	2019-20	80/b/u/Marwah	N33.514863, E75586682	15	19650	12558	63.9	3.2	2.9	319	16	1172	6000	
166	Jammu	Marwah-Territorial	2019-20	48/u/Udil/Kishtwar	N33.428762, E75.565841	20	22000	11014	50			268	6	825	6000	



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167	Jammu	Marwah-Territorial	2019-20	61/U/Udil/Gwari-Kidroo/Singhpore	N33.464596, E75.562748	20	22000	13194	59.9	2.7	1.6	437	13	1110	6000	
168	Jammu	Marwah-Territorial	2019-20	90C/U/Udil/Pehalgowara	N33.522357, E75.592368	20	21000	11733	55.8	3.2	1.8	313	4	904	6000	
169	Jammu	Marwah-Territorial	2019-20	34b/u/Udil/Urdgam Zalla	N33.427213, E75.604342	20	22000	13308	60.4	1.9	1.3	741	9	1415	6000	
170	Jammu	Marwah-Territorial	2020-21	39b/D/ Dalmar/Dachhan	N 38.24448, E 75.433504	4	4500	2643	58.7	1.4	1.1	276	3	940	1200	150
171	Jammu	Marwah-Territorial	2020-21	29b/D/Dachhan/Suid/Gugat	N33.517907, E75.91336	20	4000	2738	68.4	2.2	2.1	683	12	832	6000	450
172	Jammu	Marwah-Territorial	2020-21	30a/d/Dachhan/Anant nallah/Suid	N33.50428, E75.878722	20	16000	11276	59.3	1.6		562	7	1133	6000	450
173	Jammu	Marwah-Territorial	2020-21	17/D/Dachhan/Prangus/Marwah	N33.476403, E75.834529	5	5000	3176	63.5	1.4		233	3	871	1500	150
174	Jammu	Marwah-Territorial	2020-21	18b/d/Dachhan/Tundar/Prungus	N33.466805, E75.85953	5	1200	816	68	1.3		376	3	542	1500	150
175	Jammu	Marwah-Territorial	2020-21	15/D/Dachhan/Bhardu/Lopara	N33.476601, E75.817703	4	1500	967	64.4	1.3		436	7	685	1200	150
176	Jammu	Marwah-Territorial	2020-21	33/D/Hunz Rar Dachhan	N33.448689, E75.832197	25	6000	3720	62	1.4		320	9	478	7500	450
177	Jammu	Marwah-Territorial	2020-21	76/U/Udil/Synthen/Kishtwar	N33.574031, E75.537182	4	400	207	51.7	2.1	0.9	231	2	285	800	
178	Jammu	Marwah-Territorial	2020-21	77/U/Udil/Synthen/Kishtwar	N33.574603, E75.515865	5	400	240	60	2.3	1.5	345	6	399	875	
179	Jammu	Marwah-Territorial	2021-22	27C/D/Dhchhan/Gujjar Kothan/Janakpur	E33.519898, N75.809784	20	21000	13406	63.8	2.2	1.8	867	9	1546	6000	450
180	Jammu	Marwah-Territorial	2021-22	26/D/Dachhan/Kiyar	N33.553455, E75.812914	25	6000	3461	57.6	1.7	1.2	234	7	379	7500	150
181	Jammu	Marwah-Territorial	2021-22	60c/Udil/Worinar Singhpore	N33.746912, E75.5393	20	6500	3789	58.2	2.3	1.2	263	6	458	6000	
182	Jammu	Marwah-Territorial	2021-22	39a/d/Dachhan/Frasnakhas	N33.427303, E75.730312	20	22000	12884	58.5	2.5	1.5	327	5	976	6500	150



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183	Jammu	Marwah-Territorial	2021-22	4/M/Nonpecli/Chokparnu	N33.38483 E75.413125	20						242	6		6000	
184	Jammu	Nowshera-Territorial	2019-20	107/N/Nowshera/Rajpur Kamila	N33.217205, E74.19799	10	4500	2852	63.3	3.4	2.2	288	4	577	4500	
185	Jammu	Nowshera-Territorial	2019-20	19/N/Lameri/Dhak-Dharat/Nangal Devi	N33.085402, E74.350378	8	1500	752	50.1	5.4	3.9	247	2	343	2500	
186	Jammu	Nowshera-Territorial	2019-20	34D/Sunderbani/Badano/Dharamsal	N33.125582, E74.443203	13	5000	2114	42.1	4.2	3.6	378	6	547	3900	
187	Jammu	Nowshera-Territorial	2019-20	43D/Sunderbani/Siot/ Thandapani	N33.6467, E74.24075	12	4500	1723	38.3	4.3	3.5	412	5	561	3600	
188	Jammu	Nowshera-Territorial	2019-20	3/N/Lamberi Lower	N33.13312 E 74.34297	8	900	473	52.5	4.6	3.5	323	4	386	2500	
189	Jammu	Nowshera-Territorial	2019-20	123/D/2/Sunderbani/Major-Di-Bowli/Nadani	N33.02754, E74.498801	10	1200	682	56.8	5.2	4.3	342	4	414	3000	25
190	Jammu	Nowshera-Territorial	2019-20	126D/Sunderbani/Neela Dub/Bhajwal	N33.022632, E74.456436	6	1000	513	51.3	4.8	3.9	344	2	431	1500	13
191	Jammu	Nowshera-Territorial	2020-21	77/N/Nowshera/Quila Dharal/Lam	N33.217885, E74.138548	2	1000	596	59.6	3.1	2.8	231	2	531	1600	
192	Jammu	Nowshera-Territorial	2020-21	128/D/Sunderbani/Kuldalri/Bajwal	N33.036411 E74.436286	2	1500	854	56.9	1.8	1.2	261	4	692	2200	
193	Jammu	Nowshera-Territorial	2020-21	104/N1/Nowshera/Kamila Kote	N33.233085, E74.193104	28	11770	5775	49.06	3.5	3.2	395	7	608	8000	1 WH S
194	Jammu	Nowshera-Territorial	2020-21	104/N-2/Nowshera/Rajpur Kamla	N33.228229 7, E74.201395	16	4400	2798	63.5	3.2	2.8	413	6	594	6000	
195	Jammu	Nowshera-Territorial	2020-21	105/N/Nowshera/Rajpur Androoth	N33.230837, E74.157943	32	8500	5099	59.9	3.6	2.7	376	6	541	7500	15





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196	Jammu	Nowshera-Territorial	2020-21	72N/Nowshera/Jhanger	N33.25352, E74.069762	12	3000	1640	54.6	3.7	2.9	411	7	555	5500	
197	Jammu	Nowshera-Territorial	2020-21	142N/Lamberi/Samkar/Suran	N33.21202, E74.295504	13	3500	1676	47.8	4.6	3.5	348	7	484	6500	
198	Jammu	Nowshera-Territorial	2020-21	85/D/Lamberi/Allya/Harichuma-A	N33.185279, E74.542432	20	10000	5959	59.6	4.7	3.9	379	7	684	7000	
199	Jammu	Nowshera-Territorial	2020-21	149D/Sunderbani/Peli/Kangri	N33.017487, E74.429873	7	3000	1482	49.4	2.3	1.8	305	5	522	3200	
200	Jammu	Nowshera-Territorial	2020-21	75D/Sunderbani/Nahoti/Hathal	N33.5603, E74.32.7693	15	9500	4947	52.1	4.3	3.8	322	5	657	6800	
201	Jammu	Nowshera-Territorial	2021-22	49/D/Sunderbani/Loyal/Salari	N33.091687, E74.521095	3	1600	826	51.6	2.6	1.8	234	3	512	2400	
202	Jammu	Nowshera-Territorial	2021-22	94/D/Lamberi/Ikhni/Rajouri	N33.173364, E74.605089	2	375	209	55.7	2.4	1.9	219	4	328	3000	
203	Jammu	Nowshera-Territorial	2021-22	86/N/Quila Darhal/Nowshera	N33.222937, E74.156946	22	5000	2732	54.6	3.9	3.4	347	6	477	7000	1 WH S
204	Jammu	Nowshera-Territorial	2021-22	107D/Sunderbani/Devak/Rajouri	N33.115093, E74.581091	4	5500	3141	57.1	2.6	1.7	343	4	1132	3900	
205	Jammu	Nowshera-Territorial	2021-22	77/D/Sunderbani/Hathal	N33.7006, E74.32806	6	7000	3565	50.9	4.2	3.3	278	3	875	5900	
206	Jammu	Nowshera-Territorial	2021-22	3/N/ Lamberi Upper /Rajal	N33.129467, E74.355687	19	10000	5351	53.5	4.1	3.6	328	6	616	8850	42.3
207	Jammu	Poonch-Territorial	2019-20	188/M-Part-1 /Salani / Mendhar / Nabna Chunga	N 33.701261 E 74.126188	7	2532	1045	41.3	4.5	7.8	384	3	536	2100	11
208	Jammu	Poonch-Territorial	2019-20	188/M-Part-2/Salani / Mendhar / Nabna Chunga	N 33.42323 E 74.06636	7	2532	969	38.3	3.7	6.4	349	2	489	2100	9.5
209	Jammu	Poonch-Territorial	2019-20	186/M-Part-2/Barila/Mendha	N 33.701261 E 74.126188	7	2532	1017	40.2	3.6	4.6	342	3	490	2100	9.5



Evaluation/ Study of Plantations and Construction of Soil and Water Conservation Structures & Civil Works Executed under CAMPA during the Year 2019-20 to 2021-22

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in J&K



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				r/ Nabana Chungan												
210	Jammu	Poonch-Territorial	2019-20	176/M /Mendhar/Nabana Chhungan	N 33.687469 E 74.127551	7	2532	956	37.8	2.1	1.4	187		324	2100	9.5
211	Jammu	Poonch-Territorial	2019-20	167/M-Part-II/Salwah/Mehdhar/ Chapar Dhara	N 33.633074 E74.17819	10	3355	1425	42.4	3.3	2.8	278	2	423	3000	
212	Jammu	Poonch-Territorial	2019-20	157/M/ Kallar /Mendhar	N 33.599381 E 74.26642	20	600	249	41.6	3.8	5.6	318	3	333	6000	40
213	Jammu	Poonch-Territorial	2019-20	106/H/Haveli/Loran-1/Doba	N33.85951, E74.34044	11	3075	1899	61.7	1.5	0.4	295	2	470	3300	
214	Jammu	Poonch-Territorial	2019-20	38/s/Surankoti/Kotiar/Murrah	N33.654914, E74.377832	10	2800	1736	62	2.5	2.2	345	6	525	3000	
215	Jammu	Poonch-Territorial	2019-20	40/s/Surankoti/Sangliani	N33.631621, E74.337299	10	2800	1136	40.5	3.8	4.1	289	3	406	3000	
216	Jammu	Poonch-Territorial	2019-20	217/H/Haveli/Jhullas/Salori	N33.737507, E74.003246	10	3150	1852	58.9	2.8	2.2	189		374	3000	15
217	Jammu	Poonch-Territorial	2020-21	201/M/ Balnoi Mendhar /Bhata Chatter	N33.674204 E74.024795	11	1800	655	36.4	4.3	3.8	312	4	376	3300	62 cum, 1 WH S
218	Jammu	Poonch-Territorial	2020-21	186/M/Barila /Mendhar	N33.702706 E 74.126031	11	5250	2031	38.7	3.6	4.7	324	5	514	3300	75 cum, 1 WH S
219	Jammu	Poonch-Territorial	2020-21	181/M Ram kund/Mendhar	N 33.647827 E74.086855	20	7800	3663	49.9	3.9	3.5	267	4	454	7000	66 cum, 1 WH S



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220	Jammu	Poonch-Territorial	2020-21	153/M/Kalla Jullah-II/Mendhar	N33.583667 E74.226108	11	4500	2187	48.9	3.3	3.1	233	2	434	3300	50c um, 1 WH S
221	Jammu	Poonch-Territorial	2020-21	152/M /Nar/Mendhar/Basala-2	N 33.588862 E 74.221531	11	4200	2019	48.07	3.3	2.8	265	3	452	3400	60c um, 1 WH S
222	Jammu	Poonch-Territorial	2020-21	136/M/Chajjila-A/Mendhar/Nar-Mankote	N 33.631593 E 74.061093	9	5200	1996	38.4	3.6	3	287	5	514	3100	72 cum, 1 WH S
223	Jammu	Poonch-Territorial	2020-21	129/M/Dabraj/Mendhar/Batheri Nallah	N 33.689531 E 74.043048	11	4500	1804	40.1	4.1	3.9	264	3	431	3200	76c um, 1 WH S
224	Jammu	Poonch-Territorial	2020-21	52/h/Haveli/Hari Budha/Jammu Shaheed	N3343858, E 07416588	10	2750	1686	61.3	3.1	0.7	276	2	447	3000	7
225	Jammu	Poonch-Territorial	2020-21	56/h/Hari Budha/Haveli/Kachal	N33.785306, E74262825	10	3700	2335	63.3	1.4	0.5	381	3	618	3000	70
226	Jammu	Poonch-Territorial	2021-22	183/M /Mendhar/ Naduni Baghiol	N33.662924 E 74.102739	11	1000	413	41.3	3.3	2.9	265	4	307	3200	
227	Jammu	Poonch-Territorial	2021-22	155/M-II /Gali Sahgiol/Nar/ Mehndhar	N 74.270638 E 33.5736	14	4200	1921	45.7	2.7	2.5	179	3	319	4100	
228	Jammu	Poonch-Territorial	2021-22	155/M-I/Medhar /Kanghwali	N 33.572528 E 74.270438	10	3200	1334	41.7	2.9	2.5	265	4	402	3000	



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229	Jammu	Poonch-Territorial	2021-22	52b/h/Haveli/Hari Budha/Saraian	N33.746239, E74.264072	13	5800	4187	72.2	2.8	2.3	313	4	639	5000	50
230	Jammu	Poonch-Territorial	2021-22	101/H/Haveli/Kat ha/Parthari	N33.844432, E74.358973	15	5000	3276	65.5	3.7	2.6	305	4	527	4500	
231	Jammu	Poonch-Territorial	2021-22	51c/s-1/Surankoti /Hari/Khetan	N3341239, E07415504	12	3600	1659	46.1	2.6	1.7	297	3	438	3500	
232	Jammu	Poonch-Territorial	2021-22	250/skt/Sanai/Surankote/Chawan Wala Tallah	N33.64.4982, E74.215699	12	3500	2281	65.1	2.7	1.9	286	4	480	3600	
233	Jammu	Poonch-Territorial	2021-22	5/skt/Surankote/Dogrian	N33.62297, E74.453395	12	4000	2438	60.9	1.5	0.6	322	6	531	3800	
234	Jammu	Poonch-Territorial	2021-22	46/R/Sachera/Rajouri	N33.21.47.8, E74.18.36.8	12						342	5		3800	
235	Jammu	Rajouri-Territorial	2019-20	31/R/Sawani - A/Daman	N 33.27.25.1 E 74.29.6201	6	4800	2818	58.7	3.5	2.9	292	4	765	1500	
236	Jammu	Rajouri-Territorial	2019-20	31/R/Sawani - A/Lowher Kote/Rajouri	N33.27.2512 E 74.29.6201	15	12000	6756	56.3	4.8	4.2	263	5	718	4500	
237	Jammu	Rajouri-Territorial	2019-20	44/R/Mehari Dassal/Bathoni-B	N33.360705 E74.26.554	4	3200	1746	54.5	3.8	3.1	271	2	709	1200	
238	Jammu	Rajouri-Territorial	2019-20	96/R/Manjakote/ Naili/Rajouri	N33.45.93.7 E74.25.90.73	11	1375	735	53.4	2.3	1.8	254	3	324	3300	
239	Jammu	Rajouri-Territorial	2019-20	38/k/Khandi/Darere/Boohal	N 33.36.953 E74.62.5309	7	5500	3829	69.6	4.3	4.1	471	7	1025	2100	
240	Jammu	Rajouri-Territorial	2019-20	86/k/Kalkote/Pot ha-B/ Kasergalla Strip	N33.26.709 E 74.33.0591	7	6000	3946	65.7	2.6	2.1	373	6	943	1320 cum, chain link 780	50
241	Jammu	Rajouri-Territorial	2019-20	92/k/Kalakote/Khadorian- A/Balli	N33.24.8153 E74.20.352	7	7000	4747	67.8	3.3	2.9	251	3	932	1320 cum, chain	50



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															link 820	
242	Jammu	Rajouri-Territorial	2019-20	149/k/Kalakote/Bandi Galla	N33.25.641 E74.45.2186	7	4000	2668	66.7	2.6	1.9	313	4	698	1200 cum, chain link 900	50
243	Jammu	Rajouri-Territorial	2019-20	136/k/Katakote/Bainambal/Khariarion	N33.33.1072 E74.53.0515	15	13000	8227	63.2	2.3	1.6	309	4	861	4500	50
244	Jammu	Rajouri-Territorial	2020-21	185/R/Soil range/Mandar Gala	N33.39.6523 E74.48.156	8	4000	2296	50.7	3	2.5	321	6	614	2400	
245	Jammu	Rajouri-Territorial	2020-21	23/R/Darasawala/Rajouri	N33.34.5136 E74.23.1483	7	3500	2586	73.8	3.2	2.8	387	5	761	2100	
246	Jammu	Rajouri-Territorial	2020-21	97/R/Katarmal/Rajouri	N33.42.93.8 E74.27.15.03	7	3500	1810	51.7	2.8	2.4	314	5	578	2100	
247	Jammu	Rajouri-Territorial	2020-21	97/R/Katarmal/Rajouri	N32.42.87.5 E74.27.15.53	8	4000	2467	61.6	2.7	1.8	289	3	600	2400	
248	Jammu	Rajouri-Territorial	2020-21	14/R/Shahpur B/Thotyali/Rajouri	N33.33.77.5 E74.22.11.31	8	4000	2404	60.1	2.6	1.9	334	4	639	2400	
249	Jammu	Rajouri-Territorial	2020-21	50/k/ Boonal-B/Gabbar/Kandi	N33.37.7648 E74.63.17.77	6	3000	1469	48.9	1.8	1.4	197	2	444	1800	30
250	Jammu	Rajouri-Territorial	2020-21	169/k/Kandi/Nag rota/Chura Gallikangota	N33.23.44 E74.21.16.6	15	7500	4046	53.9	1.9	1.5	384	6	660	4500	
251	Jammu	Rajouri-Territorial	2020-21	122/k/Kalakote/Tata Pani/ Kawanwala	N33.25.6519 E75.45.0794	7	3500	2050	58.5	2.6	1.7	277	2	572	2100	



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252	Jammu	Rajouri-Territorial	2020-21	110b/k/Sialsui/Kalakote/Phalli/Mahu	N33.22.4972 E 74.36.2682	8	4000	2604	65.1	2.8	2.1	353	4	682	2400	10
253	Jammu	Rajouri-Territorial	2020-21	79/k/Saramoo/Kalakote/Nursingh Pura	N33.16.857 E74.39.6514	8	4000	2409	60.9	3.1	2.9	326	4	631	2400	
254	Jammu	Rajouri-Territorial	2020-21	163/k/Kalakote/Salyar Chatta	N 33129505 E 074.44 818	8	4000	2231	55.8	3.2	2.7	321	3	603	2400	
255	Jammu	Rajouri-Territorial	2020-21	39/k/Targain-B/Mata Wali/Kandi	N33.37.7648 E74.63.1777	7	3500	2051	58.6	2.1	1.6	302	2	597	2100	
256	Jammu	Rajouri-Territorial	2020-21	38/k/Ratta Pani/Khandi	N33.37.723 E74.620.854	6	3000	2095	69.8	3.6	3.2	317	5	671	1800	
257	Jammu	Rajouri-Territorial	2021-22	59/k/Khandi/Kenthi Walichaan	N33.34.4187 E74.55.5126	8	4000	2142	63.5	1.8	1.1	342	4	614	2400	
258	Jammu	Ramban-Territorial	2019-20	23/Bnl-Mohu/Banihal/Ramban	N 33.42007 E 75.112088	8	6000	3579	59.6	3.3	2.9	168	3	618	2640	
259	Jammu	Ramban-Territorial	2019-20	46/R/Galli Strip/Ramban	N 33.234207 E 75.267065	0.01	600	297	49.5	2.6	1.7	54			3432	
260	Jammu	Ramban-Territorial	2019-20	37/R-II/Bradgadi/Digdool-A/Ramban	N 33.309542 E 75.215144	10	2000	1242	62.1	2.4	1.9	372	9	505	2640	
261	Jammu	Ramban-Territorial	2019-20	45/SC/Banihal/Lamber Banihal	N33.479944, E75164260	10	10000	5144	51.4	3.6	3.8	352	2	868	3300	
262	Jammu	Ramban-Territorial	2020-21	41/Bnl/Banihal/Nagni/Ramban	N 33.385653 E 75.102478	15	10500	5575	53.1	2.5	1.8	341	4	717	4500	
263	Jammu	Ramban-Territorial	2020-21	46/Neera / Ramban	N 33.229 E 75.250641	0.034	1100	478	43.4	2.8	2.6	66			2112	
264	Jammu	Ramban-Territorial	2020-21	38 R/Danthiyal/Ramban	N 33..31167 E 75.205887	20	10000	6653	66.5	2.8	3.1	216	5	554	6000	150
265	Jammu	Ramban-Territorial	2020-21	10r/Neel-C/Googoni/Ramban	N 33.361337 E 75.234128	15	9000	4611	51.2	3.6	3.9	402	7	716	4500	



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266	Jammu	Ramban-Territorial	2020-21	45/sc/Zaban Banihal/Sc Banihal	N33.491524, E75.14602	15	13500	5696	42.2	1.9	1.7	112	3	495	4500	
267	Jammu	Ramban-Territorial	2021-22	8/Shagan/Banihal-Sarbagni-B/Ramban	N 33.355549 E 75.156976	15	14100	8785	62.3	2.3	1.2	214	4	804	6600	
268	Jammu	Ramban-Territorial	2021-22	13rbn/Pogal-A/Ramban Danla	N 33.378585 E 75.31568	20	11000	5711	51.9	1.1		176	3	465	2000	
269	Jammu	Ramban-Territorial	2021-22	18/Rbn/Pogal-B/Phasal/Ramban	N 33.345917 E 75.309466	15	13000	8068	62.1	2.4	1.1	307	4	849	6000	77.1
270	Jammu	Ramban-Territorial	2021-22	7/AR/Gool/Sumad	N33.266358, E75.131336	20	22000	12913	58.7	3.2	2.5	347	6	999	7500	
271	Jammu	Ramban-Territorial	2021-22	53/PMI/Banihal/Hekem ki Behek/Chamahvas	N33.378195 E75.220112	20						218	4		7500	
272	Jammu	Ramnagar-Territorial	2019-20	25/N, Arsen, Tamsakot, North Ramnagar	N 32.503281 E 75.224203	1	600	426	71	2.3	2.2	117	2	545	1100	
273	Jammu	Ramnagar-Territorial	2019-20	70/bgh Strip-7, Kulvanta , Kaitha, Basantgarh	N32.46436 E75.2525.4	0.255	500	336	67.2	2.1	2.2	94		1412	1000	
274	Jammu	Ramnagar-Territorial	2019-20	70/bgh Strip-8, Kulvanta , Kaitha, Basantgarh	N32.46428 E75.25320	0.75	750	560	78.6	2.3	2.2	188		935	1200	
275	Jammu	Ramnagar-Territorial	2019-20	34c/s , Mar Rakh, Boughli, Ramnagar (South)	N32.48030 E75.19317	18	6000	4451	74.1	3.6	3.4	434	16	697	6000	90
276	Jammu	Ramnagar-Territorial	2019-20	33b/s , Kirmoo, Ramanagar (South )	N32.46580 E75.17018	20						1367		1367	7500	
277	Jammu	Ramnagar-	2020-	1/N/North	N325445.3,	18	5000	3612	72.7	2.3	1.8	312	13	526	6000	



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		Territorial	21	Ramnagar/Baryan	E0751416.6											
278	Jammu	Ramnagar-Territorial	2020-21	31A/N/Chillar, North Ramnagar	N 32480.3.3, E0751720.7	18	6000	4268	71.1	2.4	2.1	367	15	619	5000	90
279	Jammu	Ramnagar-Territorial	2020-21	71/BGH-Strip-II/Basantgath	N324521.1, E0752534.7	3	250	182	72.8			379		440	1000	
280	Jammu	Ramnagar-Territorial	2020-21	26b/n , Gerani , Kurta-2 , North Ramnagar	N 32.50135 E 075.22266	30	15000	11354	75.6	2.3	2.1	249	14	641	10000	90
281	Jammu	Ramnagar-Territorial	2020-21	70/bgh , Strip 1 , Kulvanta , Kaitha, Basantgarh	N 32.46387 E 75.25498	2.5	120	97	80.8	1.5	0.89	336	3	378	1200	
282	Jammu	Ramnagar-Territorial	2020-21	65/bgh , Strip-2, Chakal road , Gandh top, Basantgarh	N 32.48055 E75.30315	2	280	200	71.4	7.6	6.8	357	4	461	1500	
283	Jammu	Ramnagar-Territorial	2020-21	33a/s ,Kirmoo , Ramnagar South	N 32.47048 E75.17325	15	5000	3874	77.4	3.2	3.8	436	13	707	5000	90
284	Jammu	Ramnagar-Territorial	2020-21	70/bgh , Strip-I , Kulvanta, Kaitha, Basantgadh	N 32.46261 E75.25210	2	167	128	76.6	1.7		284	4	352	1000	
285	Jammu	Ramnagar-Territorial	2020-21	68c/bgh , Strip III , Chitrari, Basantgadh	N32.47530 E75.27215	3	633	489	77.2	1.5		203	7	373	1700	
286	Jammu	Ramnagar-Territorial	2021-22	29A/Bari/Ramnagar	N324838.7, E07523495	12	4800	3554	74.1	2.2	1.8	413	11	720	5500	
287	Jammu	Ramnagar-Territorial	2021-22	72B/Basantgadh/Lehar	N324456.3, E0752607.9	20	14000	10321	73.7	1.3		391	19	926	6000	
288	Jammu	Ramnagar-Territorial	2021-22	72a/bgh, Basantgarh, Lehar	32.4419.5N, 75.2439.6E	12	8000	6474	80.9	1.4	0.55	316	7	862	4000	
289	Jammu	Reasi-Territorial	2019-20	87/k/Nomain/Soil range	N32.97024, E74896673	3	1200	687	57.2	3	2.8	314	4	547	1000	





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290	Jammu	Reasi-Territorial	2019-20	18a/R/Reasi/Sugadhari/Noagte	N33.133762, E74931692	2	1200	730	60.8	2.3	1.7	324	2	691	1500	
291	Jammu	Reasi-Territorial	2019-20	64/th/Thakrakote/Devta Di Their	N33.09314, E74644878	20	6000	2794	46.5	2.9	2.1	396	6	542	6000	
292	Jammu	Reasi-Territorial	2019-20	59/Th/Thakrakote/Pouni/Beolian	N33.098174, E74.68483	18	5500	2927	53.2	2.6	2.2	288	4	455	5000	
293	Jammu	Reasi-Territorial	2019-20	50/Th/Thakrakote/Laiga/Malaid	N33.065748, E74.737961	20	5500	3127	59.4	2.4	1.7	396	5	557	6000	45
294	Jammu	Reasi-Territorial	2019-20	67/th/Thakrakote/Dabriyala	N33.070595, E74.670705	20	5500	2228	40.5	2.9	2.4	434	6	551	6000	45
295	Jammu	Reasi-Territorial	2019-20	96/K/Katra/Talliyan/Nomain	N32.954133 E74.905542	18	5440	2872	52.7	3	2.6	476	6	642	5000	46.9
296	Jammu	Reasi-Territorial	2019-20	27/R/Reasi/Salal/Poun Sujandher	N33.137597, E74.85242	20	5000	3077	61.4	2.8	1.7	387	4	545	4500	35.45
297	Jammu	Reasi-Territorial	2019-20	28/R/Reasi/Aliyan Salal	N33.135819, E74.84377	12	2000	1169	58.4	2.3	1.7	318	2	417	3300	45
298	Jammu	Reasi-Territorial	2019-20	19/a/r/Reasi/Bakal Harotekote	N33.130075, E74.930998	15	6000	3702	61.7	2.8	1.9	429	5	681	6000	45
299	Jammu	Reasi-Territorial	2020-21	18a/R/Reasi/Sugadhari/Noagte	N33.135895, E74935252	6	1200	747	62.2	2.2	1.6	369	4	497	1200	20
300	Jammu	Reasi-Territorial	2020-21	76/k/Soil rangreasi/Suketar/Bhaga-1st	N33.073499, E74848046	7	1000	569	56.9	2.1	1.1	276	3	360	1200	5
301	Jammu	Reasi-Territorial	2020-21	6/Th/Thakrakote/Garikote	N33.201321 E74.802163	18	6000	3347	55.8	1.8	1.5	353	4	543	6000	50
302	Jammu	Reasi-Territorial	2021-22	4/Th/Thakrakote/Jijbagli	N33.238484, E74747563	15	2500	966	38.6	1.8	1.2	336	5	405	5000	
303	Jammu	Reasi-Territorial	2021-22	10A/Th/Thakrakote/Balda Panosa	N33.177026, E74.73458	18	5000	2955	59.1	1.8	1.4	368	4	536	5000	
304	Jammu	Reasi-Territorial	2021-22	43/R/Drangli Tote/Reasi/Praysa	N33.09838, E74.973119	22	9400	5326	56.6	1.7	1.2	456	6	704	9000	80



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305	Jammu	Reasi-Territorial	2021-22	42/R/Reasi/Phagori Nalha/Prayse	N33.095857, E 74965967	25	8000	5288	66.1	2.2	1.6	345	5	562	9500	
306	Jammu	Reasi-Territorial	2021-22	36R/Reasi/B/park, Trintha/Mari-A	N33.08101, E74.84865	12						287	7		6000, chain link 2000rft	
307	Jammu	Samba-Territorial	2019-20	46/D/Karnal-Purmandal/Chirk	N3267045, E075034067	8	3200	2353	73.5	4.8	4.3	319	7	620	2500	
308	Jammu	Samba-Territorial	2019-20	28/D/Chilla Danga/Mohargarh, Samba	N324025.6, E0750530.0	8	3200	2179	68.1	3.8	2.7	207	4	483	2500	
309	Jammu	Samba-Territorial	2019-20	56/D/Gowal Chura, Samba/Kali	N323650.0, E0750645.0	8	3200	2110	65.9	3.2	2.9	278	9	551	2500	50
310	Jammu	Samba-Territorial	2019-20	59/D/Mansar Morh, Nandani, Samba	N323415.1, E0750551.7	2.2	800	511	63.8	6.7	7.8	293	6	531	1500	
311	Jammu	Samba-Territorial	2019-20	9/B/Chirk/Purmandal/Dharamshal, Samba	N323932.7, E0750041.5	15	6000	4573	76.2	8.3	9.8	595	13	913	4500	25
312	Jammu	Samba-Territorial	2020-21	49/B/Samba/Sunt/Garen	N32.36.36.9, E075.15.11.1	16	6000	3740	62.3	4.3	3.9	301	7	542	5700	90
313	Jammu	Samba-Territorial	2020-21	3B/D/Samba/khirdi	N323749.4, E0750615.8	10	2900	1831	63.1	5.4	4.8	279	7	469	4800	
314	Jammu	Samba-Territorial	2020-21	29/P/Purmandal/Pacholi	N3243375, E0750126.3	15	5300	3760	70.9	3.8	3.2	288	6	545	6500	
315	Jammu	Samba-Territorial	2020-21	52/B, Taida, Badbareli, Samba	N32.3520.3, E75.1438.5	10	2200	1477	67.1	3.6	1.2	513	11	672	4500	53.5
316	Jammu	Samba-Territorial	2021-22	26/D/27/D/Chilladanga, Mohargarh	N324028.0, E07505.238	20	7000	5054	72.2	2.4	2.6	253	6	512	6300	60



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317	Jammu	Samba-Territorial	2021-22	19/B/Purmandal/Badharali Takkar	N324109.3, E0755808.8	15	6500	4718	72.5	5.6	4.3	182	4	501	5400	60
318	Jammu	Samba-Territorial	2021-22	30/P/Pacholi/Purmandal/Samba	N324320.7, E07501186	15	5000	3717	74.3	3.2	2.9	219	7	474	6500	60
319	Jammu	Samba-Territorial	2021-22	75/B/Loarbi/Nihari, Samba	N3235078, E0751011.1	13	4000	2692	67.3	2.2	1.8	263	8	478	6200	
320	Jammu	Samba-Territorial	2021-22	44/B, Goran	N32.36003, E75.16401	10	4000	2753	68.8	2.8	1.4	486	12	773	4000	
321	Jammu	Udhampur-Territorial	2019-20	82/D-strip-1/dudu/udhampur-Gharian-kullasar	N32.999545, E75.321667	3	1400	794	56.7	3.7	4.2	590	4	859	1500	
322	Jammu	Udhampur-Territorial	2019-20	78/dudu/udhampur-Gharian-karsund	N32.996399, E75.34332	3	1400	725	59.8	1.4	1.5	831	3	1076	1500	
323	Jammu	Udhampur-Territorial	2019-20	82/D-strip-4/dudu/udhampur-Gharian-khurd	N32.98755, E75.321912	3	1400	866	61.9	4.3	3.8	474	3	766	1500	
324	Jammu	Udhampur-Territorial	2019-20	82/D-strip-2/dudu/udhampur-Gharian-kullasar	N32.997027, E75.326460	3	1400	893	63.7	3.2	2.9	439	5	742	1500	
325	Jammu	Udhampur-Territorial	2019-20	27/P, Panchuri, Panjar	N33.094418, E75.094367	6	3100	1953	63	1.3	0.58	487	2	815	2200	22.25
326	Jammu	Udhampur-Territorial	2019-20	55/U/II/udhampur/Bhatti Mali	N33.015692, E75.12489	6	3100	2031	65.5	2.5	2.2	472	7	818	2200	20.4
327	Jammu	Udhampur-Territorial	2019-20	55/U/I/udhampur/Bhatti Mali	N33.015387, E75125452	6	3100	1961	63.2	3.3	3.1	513	5	845	2200	20.16
328	Jammu	Udhampur-Territorial	2019-20	49U-I/Pangara/Bhatti/udhampur	N32.891988, E75120489	6	3100	2191	70.6	3.8	4.2	561	6	932	2200	20.54
329	Jammu	Udhampur-Territorial	2019-20	49U-II/Pangara/Bhatti	N32.982556, E75124074	6.5	3500	2564	73.2	3.8	4.2	493	8	895	2400	30.44



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				/Udhampur												
330	Jammu	Udhampur-Territorial	2019-20	19/U-II/Seen thakran/Soil range Udhampur	N32.921993, E75006038	6.5	3500	2284	65.2	2.5	2.3	421	9	781	2400	30
331	Jammu	Udhampur-Territorial	2019-20	19/U-I/Udhampur/Seen thakran	N32.920056, E75.009051	6.5	3500	2009	57.4	4.6	4.2	379	11	699	2400	30
332	Jammu	Udhampur-Territorial	2019-20	9/U/Bathat/Garnai	N32.866236, E75063732	3.4	1500	1195	79.6	4.8	3.9	583	6	940	1700	
333	Jammu	Udhampur-Territorial	2019-20	Guddar Sangial/SC range/Udhampur	N32.920007 E75.009147	10	3500	2386	68.1	4.7	4.1	413	7	659	2400	
334	Jammu	Udhampur-Territorial	2020-21	NPV74/D-II/Dudu/Dhanas	N325748.2, E0752142.5	25	8700	6429	73.8	3.1	2.8	791	8	1056	7500	40
335	Jammu	Udhampur-Territorial	2020-21	52U Mali, Udhampur	N33.005366, E75.090698	18	9060	6123	67.5	1.3	0.33	472	11	823	7400	45
336	Jammu	Udhampur-Territorial	2020-21	57/P/Pancheri/Galiote-II	N33.132117, E75106917	20	6800	4870	71.6	1.8		526	12	782	7000	
337	Jammu	Udhampur-Territorial	2020-21	57/P-I/Pancheri/Galiote-I	33.133011, 75.110081	33	12000	8092	67.4	1.5		608	17	870	11000	65
338	Jammu	Udhampur-Territorial	2020-21	42/p/Panchari/Damnote/Nalinika-2	N33.124073 E75.058703	20	5000	3192	63.8	1.4		439	7	606	6000	50
339	Jammu	Udhampur-Territorial	2020-21	50/U/Udhampur/Pangara	N32989621, E75119674	30	1150	8121	70.6	3.6	3.8	509	10	790	8000	46.35
340	Jammu	Udhampur-Territorial	2020-21	59/P/Pancheri/Badhota/	N33.136166, E75.13469	13	6000	3670	61.2	2.1		483	6	771	5500	25
341	Jammu	Udhampur-Territorial	2020-21	64/P/Pancheri/Village DiggiLander	N33.112107, E75.172891	4	5500	3638	66.9	1.7		543	5	1458	6000	30
342	Jammu	Udhampur-Territorial	2020-21	95A/U/Toontee/Sughlar	N32.905177, E75.212084	15	6000	3768	62.8	2.4		352	4	607	5000	40.45
343	Jammu	Udhampur-	2020-	82/D-strip-	N32997027,	3	1400	985	70.3	2.9	2.3	376	4	708	1500	



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		Territorial	21	2/dudu/udhampur-Gharian-kullasar	E75322646											
344	Jammu	Udhampur-Territorial	2021-22	61u/Udhampur/Tirshi	N32.921993, E75006038	25	10500	7453	70.9	1.7		531	13	642	8000	29.06
345	Jammu	Udhampur-Territorial	2021-22	76U/D, Dudu/Khgharian-I, Udhampur	N32.932362 E75.220941	7.8						457	5		3000	
346	Jammu	Udhampur-Territorial	2021-22	49U/III/Udhampur/Pangara	N32.982251, E75116046	32						438	7		11000	52.6
347	Jammu	Udhampur-Territorial	2021-22	341P/Panchari/Dubigali bai/Maugri	N33.11183, E75.08351	20						383	6		6000	40
348	Kashmir	Baramulla JV	2019-20	28/BNR/Boniyar/Burnate	N34.132915, E74.183639	6	8160	5920	72.5	4.6	2.7	534	9	1530	1800	
349	Kashmir	Baramulla JV	2019-20	17/Uri/Parnpella/Jaboda	N34.128398, E74.043988	13	21450	15530	72.4	3.5	2.7	433	14	1642	3900	
350	Kashmir	Baramulla JV	2020-21	2/Hamal/Doabgah	N34.263137, E74.298381	20	22450	15792	70.3	2.8	2.5	391	12	1193	6000	
351	Kashmir	Baramulla JV	2020-21	15/Kathai/Uri/Dariyara	N34.144506, E74021935	7	9000	4852	53.9	2.6	1.2	273	8	974	8800	
352	Kashmir	Baramulla JV	2020-21	17a/Bla, Kachpother/Baramulla	N34122884 E74350251	24	18700	11759	62.9	2.9	2.2	268	7	765	7200	
353	Kashmir	Baramulla JV	2020-21	Khandiyar Julsheeri/river rejuvenation	N341159.68 E741803.47	5.06	7990	5338	66.8	4.3	5.2	381	11	1447	3400	
354	Kashmir	Baramulla JV	2021-22	73/Baramulla/Heavan-Fathygrah/Kandi	N34.178447, E74.329136	15	11000	6035	54.8	2.1	1.8	325	6	733	4500	
355	Kashmir	Baramulla JV	2021-22	19B/Bla/Kandi Nowgam/Baramulla	N 34070034 E74212931	10	7066	3613	51.1	3.5	1.1	372	5	738	3000	



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356	Kashmir	Kamraj-Territorial	2019-20	33,36,37/Kandi/Baramulla/Rajpora	N34.379776, E74.507813	15.7	10230	5612	54.8	2.8	1.7	394	10	761	4700	
357	Kashmir	Kamraj-Territorial	2019-20	49/SL/South Lolab/Lalpora	N34.508078, E74437612	13	21450	15102	70.4	3.7	3.4	543	13	1718	3904	
358	Kashmir	Kamraj-Territorial	2019-20	30/Kandi/Rampora	N34.40764, E74047979	13	21150	10160	48.1	3.8	2.4	453	33	1268	3900	
359	Kashmir	Kamraj-Territorial	2020-21	43/SL/South Lolab/Daropora	N34.483848, E74471082	22	36300	25956	71.5	3.2	3.6	551	9	1740	6600	
360	Kashmir	Kamraj-Territorial	2020-21	81/M/Hatmulla		20	33000	23206	70.6	3.2	2.7	499	12	1671	6000	
361	Kashmir	Kamraj-Territorial	2021-22	29/K/Kandi/Rampur	N34.427652, E74.479003	16	13500	10758	79.7	2.2	1.7	536	19	1227	1500	
362	Kashmir	Kamraj-Territorial	2021-22	121NL/Zangli/Khumreyal	N34.545293, E74273553	15	16850	13096	77.7	2.2	1.7	514	8	1395	4448	10 nos
363	Kashmir	Kamraj-Territorial	2021-22	7/Kadi/Kupwara/Shadipora	N33.474084, E307067	11	13750	9459	68.7	2.6	2.2	324	7	1191	3300	
364	Kashmir	Kamraj-Territorial	2021-22	50/SL/South Lolab/Daropora	N34.513566, E74.424026	25	26500	17974	67.8	3.7	1.8	439	6	1164	7200	73.6 drsm, 10 crates, 1 WHS
365	Kashmir	Kehmil-Territorial	2020-21	74/NH/Naiharie/Punzwa	N34.29.531, E074.11.781	3.13	3428	2198	64.1	2.2	1.8	25		727	939	
366	Kashmir	Kehmil-Territorial	2020-21	48/m/rh/Ramhal/Hangnikote/Daril	N3426632, E07405408	14	14550	11758	80.8	4.3	4.5	483	10	1333	4200 and 560	
367	Kashmir	Kehmil-Territorial	2020-21	58/NH/Naihari/Wayun/Gulgam	N342670, E074.14.104	10	9200	5853	63.6	3	2.2	302	8	895	3000	
368	Kashmir	Kehmil-	2020-	10LB/55/NH/Naih	N3434417,	10	11650	6407	54.9	2.9	2.1	153	4	798	3000	



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	r	Territorial	21	aril/Awoora	E07410968											
369	Kashmir	Kehmil-Territorial	2020-21	30/NH/RH/Ramhal/Panzgam-nr Army Unit	N3420722, E7403947	18	18700	8035	42.9	3.5	3.9	257	5	708	5400	
370	Kashmir	Kehmil-Territorial	2021-22	7/D/RH/Shaldori/Ramhal	N3427372, E07404393	13	14550	9620	66.1	3.6	3.9	101	3	844	3400	
371	Kashmir	Kehmil-Territorial	2021-22	7-8RH/Hafrada/Kehmil	N34.457001 E 74077538	28	24400	17120	70.1	3.2	2.9	287	6	904	8400	
372	Kashmir	Kehmil-Territorial	2021-22	11/D/RH/Manzgam/Ramhal/Tumina	N3428139, E074 03 470	14	13200	9607	72.7	2.7	2.1	321	8	1015	3600 and 600	
373	Kashmir	Langate-Territorial	2019-20	59/Rajwar/Hamla Sultanpora	N34.414161, E74.176883	15	17300	12777	73.8	3.3	3.5	507	9	1368	4500	
374	Kashmir	Langate-Territorial	2020-21	77/Magam/Wogbal	N34489085, E74229162	15	15350	12484	81.3	3.2	2.8	595	13	1440	4500	
375	Kashmir	Langate-Territorial	2020-21	55/Waisa Kawnar/ Rajwar	N34.437511, E74160797	20	25000	16700	66.8	2.8	1.8	373	7	1215	6000	
376	Kashmir	Langate-Territorial	2021-22	42/Mawer/Sanzipora	N34.354836 E74.137808	10	5000	3108	62.1	2.7	2.4	183	9	503	3000	
377	Kashmir	Anantnag-Territorial	2019-20	105k/Kuthar/Bresnoo/Anantnag	N33.746829, E75.329329	7	11330	8809	77.7	5.6	7.8	371	8	1637	2100	
378	Kashmir	Anantnag-Territorial	2019-20	RB22/Chanchmar g/Zawoora	N337186, E74784276	14	21825	15134	69.3	6.2	5.4	156	2	1239	4200	
379	Kashmir	Anantnag-Territorial	2020-21	70/V- Soyan / Kokernag	N 33.567587 E 78.334841	17	22650	18052	79.6	3.2	3.6	243	4	1309	5100	
380	Kashmir	Anantnag-Territorial	2020-21	59b/k/Daksum/Razkan Larnoo/Anantnag	N33.630183, E75351581	20	24750	16502	66.6	3.2	3.5	321	6	1152	6000	
381	Kashmir	Anantnag-Territorial	2020-21	59/v/Verinag/Shanakerpora/VoyBamdora	N33.3719.5 E75.1056.6	20	6500	4726	72.7	3.3	3.1	476	5	717	6000	
382	Kashmir	Anantnag-	2020-	71/V/Kokernag/N	N33.558965,	23	32150	25088	78	4.2	4.6	276	8	1375	6900	



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	r	Territorial	21	allah Sonbrari/Soyan	E75333627											
383	Kashmir	Anantnag-Territorial	2021-22	58/V/Verinag/Sheilang Dooru	N33.579599, E75.237864	20	20850	14407	69.1	3.3	2.6	265	8	993	6000	
384	Kashmir	Anantnag-Territorial	2021-22	52k/Brarimooj/Daksum/Anantnag	N33.676133, E75.383032	15	24750	13686	55.2	2.6	2.4	281	3	1196	4300	
385	Kashmir	Anantnag-Territorial	2021-22	57a/v/Verinag/Zalmalgam Agnoo	N33.332937, E75.144578	20	29700	16424	55.3	2.3	1.6	152	2	975	6000	
386	Kashmir	Anantnag-Territorial	2021-22	61/V, Anderwan/Kokernag	N 33.59074, E 75.25828	13	16900	12169	72	2.8	3.1	277	10	1223	3900	
387	Kashmir	Awantipora - Territorial	2019-20	5k -Kahlil/Tral	N 33.988413, E 75.149640	30	46100	30195	65.4	2.9	3.5	423	6	1435	9000	
388	Kashmir	Awantipora - Territorial	2020-21	29/P - Gulshanpora/Tral	N 33.955466, E 75.071883	50	68800	50361	73.2	3.1	2.8	271	13	1292	15000	
389	Kashmir	Awantipora - Territorial	2021-22	1/C - Karmulla/Tral/Zappannadgi	N 33.940288, E 75.164723	55	56000	40006	71.4	2.2	1.6	166		893	4500	
390	Kashmir	Awantipora - Territorial	2021-22	20/N/Tral/Dranjan/Narastan	N34.051431, E75.096388	35	49150	37574	76.4	2.6	2.2	597	17	1688	10500	
391	Kashmir	Kulgam-Territorial	2019-20	28/N/Malwan/Kulgam	N 33.590187, E 75.026531	14	18300	12837	70.1	5.4	5.2	485	13	1415	4200	
392	Kashmir	Kulgam-Territorial	2020-21	V34A/JabaHallen/Veshow/Kulgam	N33601156, E74840267	20	24300	18111	74.5	2.6	2.4	154	3	1063	6000	
393	Kashmir	Kulgam-Territorial	2021-22	V33a/Veshow/Thakyard/Asnoor	N33.619693, E74822006	36	39950	30603	76.6	2.7	2.4	207	9	1066	10800	
394	Kashmir	Kulgam-Territorial	2021-22	27b/n/Kulgam/Wanador/Banimulla	N33.59222, E75.006775	15	23925	18733	78.3	3.2	2.4	241	6	1496	4500	
395	Kashmir	Lidder-Territorial	2019-20	18/L/Mattan/Reshkulbal.Wajoora	N33.851121, E75.31046	15	21000	12673	60.3	3.1	2.6	517	8	1370	4500	
396	Kashmir	Lidder-	2019-	7A/c/Pahalgam/Z	N34090205,	6.78	4000	2411	60.2	2.1	0.9			355	4610	





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	r	Territorial	20	ojipal	E75474807											
397	Kashmir	Lidder-Territorial	2020-21	7A/c/Pahalgam/Pissutop	34.055632, 75.360568	11.7	4295	2663	62	2.8	0.9			228	3538	
398	Kashmir	Lidder-Territorial	2020-21	9/L/Mattan/Brad	N33.795864, E75.293918	20	33000	19412	58.8	3.3	2.1	478	10	1459	4500, chain link 1500	
399	Kashmir	Lidder-Territorial	2021-22	20A/L/Mattan/Yachnard	N33.867568, E75.330961	24	26750	17633	65.9	2.9	1.6	219	4	958	7200	
400	Kashmir	Shopian-Territorial	2020-21	RB-1B/Shopian/Bohrihallan	N33.679127, E74792156	20	19725	15344	77.7	3.3	2.9	258	6	1031	6000	
401	Kashmir	Shopian-Territorial	2021-22	V1A/Veshow/Shopian	N33.679127, E74792156	50	54200	42926	79.2	5.2	4.8	458	17	1334	10500	
402	Kashmir	Shopian-Territorial	2021-22	RB/29/Thiarian/Romshi	N33.751508, E74.756467	30	24000	19020	79.2	1.4		156	11	801	3900	
403	Kashmir	Shopian-Territorial	2021-22	Ri10/Romshi/Shopian	N3346844, E07443056	20						263	9			
404	Kashmir	Bandipora-Territorial	2019-20	99-100/Kh/Khuihama/Panar	N34.484512, E74.693520	20	23450	14732	62.8	3.2	2.6	578	17	1332	6000	
405	Kashmir	Bandipora-Territorial	2019-20	124/Kh/Ajas/Kudara	N34.394896, E74.75861	8	13200	9569	72.5	3.1	1.8	349	5	1550	2400	
406	Kashmir	Bandipora-Territorial	2019-20	SC unit/Dudwan/Soil range	N34.302355, E74675673	15	21450	14328	66.8	3	2.1	185	9	1149	4500	
407	Kashmir	Bandipora-Territorial	2020-21	145/KH/Ajas/Aragam	N3.379473, E74716252	25	35450	18727	52.8	2.8	1.1	112		861	7500	
408	Kashmir	Bandipora-Territorial	2020-21	108/KH/Khuihama/Chitternar	N34.444177, E74.657643	15	15600	9940	63.7	3.3	2.1	367	8	1038	4500	
409	Kashmir	Bandipora-Territorial	2020-21	21-C/KH/Quil/Khuihama	N34.45012, E74.573597	20	29700	17178	57.8	4.2	1.1	121		980	6000	50
410	Kashmir	Bandipora-	2021-	22/KH/Khuihama	N34.45258	22	32950	20823	63.2	3.3	2.2	367	8	1321	6656	



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	r	Territorial	22	/Palapathri	E74.602392											
411	Kashmir	Pir Panjal Budgam-Territorial	2019-20	D-20A/Raithan/Kayawan	N33.877056, E74.644489	12	19800	14711	74.3	4.2	3.8	1135	15	2375	3600	
412	Kashmir	Pir Panjal Budgam-Territorial	2019-20	S-9/Tosamaidan/Sukhnag	N33.911804, E74.521722	50	48077	37265	77.5	2.5	1.8	345	11	1101	5000 cum barbed and 10000 chain link	
413	Kashmir	Pir Panjal Budgam-Territorial	2019-20	D/1/Suryasar/Do dhganga/Butkhod	N33.871143, E74.672507	15	24750	16718	67.5	3.6	3.3	689	13	1816	4500	
414	Kashmir	Pir Panjal Budgam-Territorial	2020-21	S-23/Sukhnag/Talapathari	N33.954887, E74.530036	25	31450	20499	65.1	3.1	1.9	162		982	8000	
415	Kashmir	Pir Panjal Budgam-Territorial	2020-21	D-33a/Raithan/Parihas-Dodpathri	N33.878083, E74.587793	67	40750	29191	71.6	3.3	2.8	778	17	1231	12000	
416	Kashmir	Pir Panjal Budgam-Territorial	2020-21	S/15/Sukhnag/Frasedoub	N33.906743, E74.552315	14	12000	12116	80.7	1.8	1.3	705	13	1583	4200	
417	Kashmir	Pir Panjal Budgam-Territorial	2021-22	N-2b/Dudganga/Ho odbal/Monoo	N33.825067, E74.743227	9	2200	1683	76.5	1.8	1.1	463	11	661	4500	
418	Kashmir	Sindh-Territorial	2019-20	69/Kawa Cherwan/Kangan/Sindh	N34.259063, E74.942126	10	16500	9047	54.8	2.7	1.8	77	2	984	3000	
419	Kashmir	Sindh-Territorial	2019-20	10/MBL-Birindara/Chatergol Bala/Manasbal	N34.322245, E74.868456	10	16500	8833	53.5	3.3	2.1	112	5	1000	3000	
420	Kashmir	Sindh-	2019-	36/A/Sonmarg/C	N34.144323,	20	24000	9352	38.9	2.6	2.3			468	6000	



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	r	Territorial	20	handanbadi	E 752545904											
421	Kashmir	Sindh-Territorial	2020-21	65/B/Bariparen Gagangeer/Sindh-Kangan	N34.282435, E75.182185	22	31300	19938	63.7	2.5	2	119		1025	1025	
422	Kashmir	Sindh-Territorial	2021-22	4B/MBL/Manasbal/Benhama	N34.28156, E74.767281	20	18750	10633	56.7	3	0.8	82		614	6000	52
423	Kashmir	Sindh-Territorial	2021-22	01/mbl/SC Manasbal/Koundbal Khojabagh	N34.246763, E74.680319	50	50000	34068	68.1	3	2.1	342	9	1032	36000	95
424	Kashmir	Tangmarg spl division	2019-20	63/B/Chukhaar/Gulmarg	N3431 E742918	18	29700	17552	59.1	1.8	1	124	8	1107	5400	
425	Kashmir	Tangmarg spl division	2021-22	Gulmarg/61, Ferozpera	N34.037013 E74.419932	25	41250	33838	82.1	3.4	2.7	424	13	1791	7500	
426	Kashmir	Tangmarg spl division	2021-22	63B/Badarkote, W ay Musag/Gulmarg	N3431 E742918	25	34800	25378	72.9	2.2		259	9	1283	7500	
427	Jammu	Doda- SF	2019-20	Waster Danger Nallah strip/marwah/kishtwer	N 33.303433 E 75.345124	0.62	500	254	50.8	2.5	2.6	27		437	2820	
428	Jammu	Doda- SF	2019-20	Dudwar-Chanti link road Strip-Ravi-Doda	N32.987841, E75.92.77.51	0.38	300	121	40.3	2.4	0.9	326	2	646	1625	
429	Jammu	Doda- SF	2019-20	Sharot-Haneja link road, Strip Sharot/Doda	N33.14.49.7, E75.74.99.1	0.53	400	163	40.8	3.5	2.8	233	3	543	2246	
430	Jammu	Doda- SF	2019-20	VW Lot Strip, Golibag/Bhaderwah, Doda	N33.15.65.5 E75.51.69.26	8	2800	1186	42.3	2.5	3.2	275	7	430	2400	
431	Jammu	Doda- SF	2019-20	43/Strip-Dohgru/Khuntvala/Korla road	N33.19.5702 E75.68.33.76	0.5	390	164	42.1	2.3	2.2	341	3	672	2060	
432	Jammu	Doda- SF	2019-	Strip Lower	N33.24.409,	0.51	400	142	35.6	2.5	3.2	382	6	667	2160	



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			20	Muhjni/Bhaderwah	E75.471846											
433	Jammu	Doda- SF	2020-21	Damber V.W.Lot/Marwah/Kishtwar	N 33.275146 E 75.352136	5	4000	2623	65.5	4.3	3.8	89	2	616	1500	
434	Jammu	Doda- SF	2020-21	Upper Kandni Strip / Sarror/Kishtwar	N 33.122685 E 75.475668	1	1380	642	46.5	2.8	2.5	76		718	1800	
435	Jammu	Doda- SF	2020-21	Hornari V W Lot/Kishtwar	N 33.213743 E 75.501696	5	1700	649	38.2	3.2	2.4	78		209	1500	
436	Jammu	Doda- SF	2020-21	38/k /Sarror /Chitrool, Kishtwar	N 33.123022 E 75.482409	24.7	17800	6906	38.8	2.05	2.4	43		323	7400	
437	Jammu	Doda- SF	2020-21	V.Wlot/Ichair/Doda	N32.98.29.8, E75.93.41.6	7.7	6000	2892	48.2	2.5	2.1	268	6	649	2700	50
438	Jammu	Doda- SF	2020-21	VW Lot- Bitolla/Doda	N33.0958.9, E75.85.04.6	6	4800	2551	53.1	3.7	4.9	359	4	788	1800	50
439	Jammu	Doda- SF	2020-21	57/Bhalesa/Dudwar/Doda	N32.98.65.1, E75.93.03.2	5.4	3200	1647	51.4	2.5	3.2	362	6	673	1620	40
440	Jammu	Doda- SF	2020-21	6/Janglwad/Bagrana/Doda	N32.12.79.6, E75.78.06.5	7	4200	2031	48.3	2.3	3.3	387	8	685	2100	50
441	Jammu	Doda- SF	2020-21	6/Janglwad/Galidraman/Doda	N33.13.08.6, E75.78.03.04	8	4800	2093	43.6	3.5	3.4	311	6	579	2400	50
442	Jammu	Doda- SF	2021-22	18/Kishtwar-1/Sarror	N33.093103 E75.0480129	22	21000	8948	42.6	2.3	2.1	73	3	483	7700	80
443	Jammu	Jammu- SF	2019-20	Strip Migrant Camp/Jagti colony sec 2/Jammu	N344845.9, E0745436.8	0.08	175	107	61.1	4.2	4.6			1337	466	
444	Jammu	Jammu- SF	2019-20	Vijaypur/RSP/Jammu	32.3435.4, 074,41.25.1	0.27	1050	431	41	3.1	2.7			596	3000	



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445	Jammu	Jammu- SF	2019-20	Strip Baddi Amma Road/ left side	N32.35.53.7, E075.03.10.0	0.44	700	393	56.1	6.3	3.9	274	5	1172	1190	
446	Jammu	Jammu- SF	2019-20	Strip Baddi Amma Road/ right side	N32.36.076, E74.03.21.0	0.5	700	438	62.5	8.2	6.7	388	7	1271	1190	
447	Jammu	Jammu- SF	2019-20	Strip Arnia to Allaha, Vijaypur	N32.30.48.7, E74.53.24.5	0.136	1200	631	52.5	6.5	7.2	128	2	769	3200	
448	Jammu	Jammu- SF	2019-20	Strip Shiba Chak to Allah, Vijaypur	N32.30.56.5, E74.5049.5	0.147	1100	404	36.8	7.6	4.6	164	3	915	3200	
449	Jammu	Jammu- SF	2019-20	Strip Nandpur to Chambiyal Tiklinia /Left side	N32.3048.7 E74.5324.5	0.1	1200	717	59.7	8.2	6.4	132	3	305	3200	
450	Jammu	Jammu- SF	2019-20	RDF unit Tuta Di Kohi/Jammu/Sidhara	N32.45.07.7, E074.57.48.1	11	4000	2342	58.5	6.4	3.7	557	12	782	3100	
451	Jammu	Jammu- SF	2019-20	Strip Suchaitgarh Flora-III, Vijaypur	N32.34.38.1, E7441.21.6	0.18	750	283	37.7	9.6	8.7	153	2	727	2000	
452	Jammu	Jammu- SF	2019-20	Strip Arnia to Allaha, Bishnas	N32.30458 E74.53263	.1km	1000	604	60.4	4.2	3.3	112	2	716	3000	
453	Jammu	Jammu- SF	2020-21	Strip Migrant Camp/Jagti colony sec 4/Nagrota	N344845.9, E0745436.8	0.08	200	127	63.5	3.3	2.9			587	414	
454	Jammu	Jammu- SF	2020-21	Strip Raja Gate to Ranjeet gate-II, Chanota/Akhnur	N32.50.27.3, E74.26.28.6	2.5	1500	868	57.8	4.2	2.8	265	4	616	3000	
455	Jammu	Jammu- SF	2020-21	Strip Raja Gate to Ranjeet gate-I, Chanota/Akhnur	N32.50.27.8, E74.26.286	2.5	1500	846	56.4	4.7	2.2	312	6	656	2860	
456	Jammu	Jammu- SF	2020-21	VWL Dhaleri, Akhnur	N32.50.27.8, E74.26.28.6	20	7000	4416	63.1	4.6	3.8	296	8	525	6000	
457	Jammu	Jammu- SF	2020-	VWL-	N32.51.13.1,	11	6000	3468	57.8	4.5	2.6	348	9	672	3500	



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			21	Troti/Akhnur	E74.3121.0											
458	Jammu	Jammu- SF	2020-21	Hajuribag/Sahar/Hajuribag	N32.738451, E074.838833	0.144	106	67	63.2	3.3	2.3	76		541	500	
459	Jammu	Jammu- SF	2020-21	18/K//Chamoti/D rabshalla	N33.15643, E7581593	12	8700	3721	42.7	3.3	1.8	385	5	700	3000	99.4
460	Jammu	Jammu- SF	2021-22	Strip Masjid nr. Chodi panchayat ghar/City/Gandhi nagar	N32.67.89.81, E74.96.55.58	0.03	35	20	57.1	4.1	2.5	36		703	300	
461	Jammu	Jammu- SF	2021-22	42/s-II/Mohorgarh/Nud/ Vijaypur	N32511385, E74864167	16	5500	2913	52.9	2.8	1.8	336	5	523	4000	
462	Jammu	Jammu- SF	2021-22	35/S/Janda/Vijaypur	N3267321, E75.11041	11.5	5000	3066	61.3	2.7	1.8	228	3	498	3500	
463	Jammu	Jammu- SF	2021-22	Strip Kolhey Masha to Ghomusha/Vijaypur/ Samba	N32.559985 E74.965517	.05 km	800	520	65	2.9	2.1	67		587	2000	
464	Jammu	Jammu- SF	2021-22	Strip Barian to Bara/Vijaypur	N32.558234 E75.054383	.02 km	200	139	69.5	2.9	2.2	44		183	850	
465	Jammu	Jammu- SF	2021-22	VWLOT-Dhoon-III/Bajalta, Jammu	N324323.9, E0745852.2	12.5									4000	50
466	Jammu	Jammu- SF	2021-22	CA/W/Jammu	N32.43.23.9, E74.58.52.2	12.5									4000	
467	Jammu	Jammu- SF	2019-20	Strip Nandpur Kotli-1/ Bishnas/Vijaypur-Samba	N325133.04, E74891142	0.136	1200	781	65.1	6.7	9.3	41		783	3200	
468	Jammu	Jammu- SF	2019-20	Strip Nandpur Kotli-2/ Bishnas/Vijaypur-	N32509393, E74902919	0.136	1100	634	62.8	7.8	8.6	43		704	3000	



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				Samba												
469	Jammu	Jammu- SF	2020-21	Strip Kaliyana/Vijaypur , Jammu-Samba	N32511488, E74864193	0.13	500	309	61.8	8.5	12.6	138		514	1000	
470	Jammu	Kathua- SF	2019-20	SF/k/Logate more/Gurba Chack-2	N 32413232 E75492838	0.8	1400	1012	72.4	5.3	5.8	172		437	2000	
471	Jammu	Kathua- SF	2019-20	Strip Gurba Chack, Nr Railway track-1	N 3224464, E752939	0.8	1400	1039	74.3	4.7	5.8	332	6	1371	2000	
472	Jammu	Kathua- SF	2020-21	10KTH/ Thein CR	N324477.24, E757194.88	0.9	1000	744	74.4	3.5	3.6	119		863	2800	
473	Jammu	Kathua- SF	2020-21	14/Blr/Strip Kohg, Basohli	N32.651752 E75.523967	0.6	2000	1221	61	2.2		141		1362	2000	
474	Jammu	Kathua- SF	2021-22	VWLat, Village Kachir/Mandli/ Basohli	N 32.660085 E 75.388779	5.5	3000	1851	61.7	2.7	2.5	276	4	617	3800	
475	Jammu	Poonch- SF	2019-20	151/M /Tota Gali/Surankote	N 33.570359 E 74.241612	2.5	2800	1931	68.9	3.3	3.1	316	3	1091	1600	
476	Jammu	Poonch- SF	2019-20	VLW /Dhokri/ Haveli	N 33.7996 E 74.116492	8	7200	4443	61.7	2.6	2.1	213	5	773	2400	
477	Jammu	Poonch- SF	2019-20	Strip 153 /Tota Gali/Surankote /Balakote	N 33.573664 E 74.240166	2.5	2700	1726	63.9	2.8	2.3	88		778	1650	
478	Jammu	Poonch- SF	2019-20	Strip 157 M/Kallar/Balakote/Surankota	N 33.594894 E 74.259091	2.5	2800	1870	66.7	4.3	3.2	212	5	965	1750	
479	Jammu	Poonch- SF	2019-20	BSF Chak Salootri/ Jhullas/ Haveli Poonch	N 33.727316 E 74.014899	3	3400	2417	71	3.4	2.7	312	3	1121	2000	
480	Jammu	Poonch- SF	2019-20	53/H/Mandi/Kenu/Haveli	N33.736462 E 74.230588	10	6165	4129	66.9	3	2.7	285	4	710	2900	
481	Jammu	Poonch- SF	2019-	Khari Dharmsal	N 33.736524	9	5000	3181	63.6	3.5	3.1	282	5	640	2800	



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			20	Border Area /Haveli Poonch	E 74.037907											
482	Jammu	Poonch- SF	2020-21	93B-H/Haveli/ Dhurran	N 33.817437 E 74.219301	14	6500	4386	67.4	2.8	2.4	297	4	614	4200	50
483	Jammu	Poonch- SF	2020-21	30/M/Surankote/ Ghazana	N 33.580568 E 74.267304	16	7500	5503	73.3	2.9	2.6	238	6	588	4800	
484	Jammu	Poonch- SF	2020-21	31/M/Balakote/S urankote/ Kallar Mors	N 33.594661 E 74.257253	2	1600	1158	72.3	3.2	2.6	274	5	858	1200	
485	Jammu	Poonch- SF	2021-22	41/S/Chambra/S urankote	N 33.630306 E 74.319136	22	11000	7266	66	2.9	2.5	273	6	609	6500	75
486	Jammu	Poonch- SF	2021-22	110/H /Salotri/Haveli Poonch	N 33.730528 E74.011114	33	14000	10117	72.2	3.1	2.9	517	9	832	10500	
487	Jammu	Rajouri- SF	2019-20	136/N/Nadyala Lower/Lamberi	N33.262269, E74.254342	10	4500	2907	64.6	2.6	1.2	292	3	586	3100	
488	Jammu	Rajouri- SF	2019-20	Strip Chnigus/Lamberi	N33218506, E74234574	2.2	1300	832	64	2.8	1.7	75		453	2000	
489	Jammu	Rajouri- SF	2019-20	95/R/Hayatpora/ Rajouri/Manjakote	N33.440779, E74.252963	20	4500	2502	55.6	4.3	5.4	392	5	522	3100	
490	Jammu	Rajouri- SF	2019-20	Strip Rajouri to Dhanwan road/Doongi	N33.347204, E74.2260087	2.2	1400	779	55.6	4.3	3.5	226		580	2000	
491	Jammu	Rajouri- SF	2019-20	Strip Rajouri to Samyan road/Doongi	N332053447, E047133450	2.2	1300	878	67.6	3.8	2.9	241		641	2000	
492	Jammu	Rajouri- SF	2020-21	31/D/Lamberi/Dh armsal/Rajouri	N33.14305 E74.404951	20	6300	4621	73.3	3.3	2.5	342	3	576	6000	33
493	Jammu	Rajouri- SF	2020-21	Strip Keri on Border Road/Khalabhat/ Rajouri	N33.33419, E74.234338	1.75	1100	832	75.6	3.6	2.9	84		559	1500	





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494	Jammu	Rajouri- SF	2020-21	9/R/Jatote/Rajouri/Doongi	N33315568, E74222488	22	4125	2881	69.8	3.5	2.8	317	4	452	6600	
495	Jammu	Rajouri- SF	2020-21	Strip Chowkian bagh road/Rajouri	N33.469404, E74.309666	1.75	1100	712	64.7	4.2	3.9	175		582	1500	
496	Jammu	Rajouri- SF	2020-21	VWL/Rajouri/Dodasan/Jabrian	N33.469381, E74.30971	10	3000	1246	41.5	2.8	2.5	108	2	235	3000	
497	Jammu	Rajouri- SF	2021-22	15/R/Kerikote/Rajouri-Doongi	N33.34555, E74222537	15	5200	3585	68.9	3.8	2.6	483	11	733	4500	
498	Jammu	Rajouri- SF	2021-22	160/K/Solki/Kalakote/Lamberi/Rajouri	N33159008, E74428135	40	9325	6370	68.3	3.1	1.9	167	5	331	6600	75
499	Jammu	Rajouri- SF	2021-22	157/K/Lamberi/Patera/Kalakote	N33.189086, E74.414046	16	4050	1765	43.5	2.9	1.8	317	6	433	4800	22
500	Jammu	Ramban- SF	2019-20	Alinbass Strip/Ramban	N 33.3306 E 75.281993	5	2800	2069	73.8	3.1	3.3	22		436	1500	
501	Jammu	Ramban- SF	2020-21	VLW Panchal/Ramban	N 33.346455 E 75.260303	20	8000	5425	67.8	2.8	2.4	95		366	2820	
502	Jammu	Ramban- SF	2020-21	VWL Alinbass/Ramban	N 33.331105 E 75.200036	7	3100	1986	64.1	3.5	4.1	31		315	2300	
503	Jammu	Ramban- SF	2020-21	18/Rbd/Strip Downside - Adhal/Ramban	N 33.339372 E 75.272676	3	2100	1436	68.3	2.8	3.6	27		506	2000	
504	Jammu	Ramban- SF	2020-21	38/Gool/Batote// Sangalden	N33.262277, E75.071706	18	7500	5032	67.2	3.5	3	346	6	631	6000	100
505	Jammu	Ramban- SF	2021-22	VWL Chompora/Banihal/Ramban	N 33.437637 E 75.181882	6.5	3000	2191	73	2.5	2.3	149		486	2000	30
506	Jammu	Ramban- SF	2021-22	18/Rbn/Ramban/ Maligam	N33.348453, E75.311402	9	2500	1569	62.7	2.3	1.7	296	6	476	2700	
507	Jammu	Ramban- SF	2021-22	54/BNL/Ramban/ Chamalwas	N33.379548, E75.213281	10	3000	2059	68.6	2.7	1.4	463	5	674	3000	
508	Jammu	Ramban- SF	2021-	34/Gool/Gujjar	N33.246506,	18	6000	2992	49.8	2.3	1	316	6	488	5500	



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			22	Gali/Batote/Sangalden	E75.040579											
509	Jammu	Ramban- SF	2021-22	07/Gool/Sumber/G-Batote	N33.262747, E75120747	17	5300	3246	61.2	3	2.6	405	6	602	5100	
510	Jammu	Udhampur - SF	2019-20	V.W.L Dobad Bassi, Ramnagar	N32.47424 E75.19363	8	5000	3580	71.6	3.6	3.4	186	7	640	2400	
511	Jammu	Udhampur - SF	2019-20	Strip Satarari, Majalta	N32.745713, E75.164025	0.6 km	1200	785	65.4	4.3	3.3	397	9	1191	1200	
512	Jammu	Udhampur - SF	2019-20	Ghordi, Strip2/tripathi mohalla	N32.89.2831 , E75.250693	0.5	1000	653	65.3	4.8	4.2	113		766	1000	
513	Jammu	Udhampur - SF	2019-20	Ghordi, Strip1/tripathi mohalla	N32893541, E75251699	0.5	1000	614	61.4	4.6	4.1	43		657	1000	
514	Jammu	Udhampur - SF	2020-21	Majalta/Strip baryalta-9/Udhampura	N32.716819, E75.174856	0.05	290	187	64.4	8.2	6.7	706	5	893	440	
515	Jammu	Udhampur - SF	2020-21	Majalta-Strip bariyata-X/Udhampur/Briyalta	N3271684, E75174815	0.09	490	330	67.3	7.7	8.1	724	5	1054	680	
516	Jammu	Udhampur - SF	2020-21	Majalta, Strip cherni Phari-II/Udhampur	N32711397, E75181285	0.08	400	290	72.6	5.3	4.6	759	0	1049	600	
517	Jammu	Udhampur - SF	2020-21	Majalta, VWL Seoi/Udhampur	N323855.3, E0751702.1	10	4000	3100	77.5	5.6	4.9	548	0	858	3000	
518	Jammu	Udhampur - SF	2020-21	Tikri block, VWL Nambra JIB, Udhampur	N329268, E130404	10	1250	740	59.2	3.3	2.9	167	4	245	1000	
519	Jammu	Udhampur - SF	2021-22	88/D,VWL Bartyagala, Udhampur	N33.050216, E7525907	6	3000	2292	76.4	1.3	0.68	217	2	601	3200	25
520	Jammu	Udhampur -	2021-	Ghordi,	N 32924337,	10	4500	3052	67.8	2.3	2.2	174	3	482	6500	50



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		SF	22	VWL/Kosan/Ram nagar	E75259673											
521	Kashmir	Anantnag-SF	2019-20	78/V/Kokernag/Halapora	N33219 E 752142	10	7350	5255	53.2	4.2	3.2	526	6	1057	3000	
522	Kashmir	Anantnag-SF	2019-20	76/V/ Vailoo/ Kokernag	N 33.56538 E 75.35981	16	12150	9259	76.7	6.2	4.9	750	13	1342	4800	
523	Kashmir	Anantnag-SF	2020-21	Kehrebal/Kokernag/Kanghal	N33.70831N , E7522031E		150	114	76.2	2.2	1.8					
524	Kashmir	Anantnag-SF	2020-21	5/N/Quazigund	N 33.551086 E 74.948293	24	17200	9830	57.1	4.2	4.8	231	4	645	7200	
525	Kashmir	Anantnag-SF	2020-21	4/V/Qazigund/Manzmoh to Tanjloo strip	N33.564226, E7516752	.5km	900	868	76.2	1.5				868	3150	
526	Kashmir	Anantnag-SF	2020-21	5/V/Quazigund	N33.559158, E75.181565	15	11200	7403	66.1	5.1	4.2	325	6	824	4500	
527	Kashmir	Anantnag-SF	2021-22	3/LDR/Seer Hamdam/Khoweripara	N 33.779082 E 75.255247	20	15400	10740	69.7	3.7	2.7	287	8	832	6000	
528	Kashmir	Baramulla-SF	2019-20	114/Ajas Kodara/Bandipora	N34.41564, E74776032	10	7810	5712	73.1	2.8	2.1	232	6	809	3000	
529	Kashmir	Baramulla-SF	2020-21	23k/Zaloor/Sopore/Gujjar Pati	N34.416268, E74381714	15	9500	7163	75.4	3.6	3.8	554	11	1042	4500	
530	Kashmir	Baramulla-SF	2020-21	81/KH/Check Mantrigam/Bandipora	N34.4697, E74635957	20	10480	5856	55.8	2	1.6	388	4	685	6000	
531	Kashmir	Baramulla-SF	2021-22	22KH/Ninglee/Bandipora/Check Panzigam	N34.446428, E74620243	15	10850	7874	72.5	2.1	1.7	124		649	4500	
532	Kashmir	Baramulla-SF	2021-22	73/Bala Hewan/Baramulla	N34.178433 E74.329157	15	11000	6674	60.6	2.7	1.6	257	4	706	4500	
533	Kashmir	Kupwara-	2019-	11/Rajwar Strip-	N 34.441355	0.75	6900	4221	61.1	1.6	1.2	376	5	1149	2900	



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	r	SF	20	Chappran Bowan/ Wadderbeat/Handwara	E74.25553	km										
534	Kashmir	Kupwara-SF	2019-20	Strip Shahlal/ Handwara/Khahidora	N34.375346, E74181074	1km	4200	3263	77.6	2.6	2.4	173	3	859	3100	
535	Kashmir	Kupwara-SF	2019-20	121-NL/Kupwara/Strip Doban Zangli	N74.163594, E34321635	1 km	7200	4680	65	3.4	2.8	416	6	1275	3100	
536	Kashmir	Kupwara-SF	2020-21	48/NH/Kralpora/ Kupwara	N345183N, E7412093E	15	10400	6433	61.8	2.8	2.3	269	4	702	4500	
537	Kashmir	Kupwara-SF	2020-21	58/DH/Gulgam/Allesmodam	N34.54.32N, E74.3.505	17	11900	7944	66.7	2.1	1.7	312	4	783	5100	
538	Kashmir	Kupwara-SF	2021-22	81/Magam Nagri/Handwara	N34.475797, E74251817	10	7500	5745	76.6	2.5	2.8	516	11	1102	3000	
539	Kashmir	Kupwara-SF	2021-22	70/b-nh/Cheramundi/ Magam/Handwara	N34.473204, E74184648	15	10400	8098	77.8	3.2	2.5	383	7	930	4500	
540	Kashmir	Pulawama/Shopian-SF	2021-22	RB-27/Kathallan/ Shopian	N 33.714102 E 74.444920	12	12784	9536	74.6	2.8	2.2	456	7	1258	3600	
541	Kashmir	Pulawama/Shopian-SF	2021-22	RB-28/Kathallan Nagbal/ Shopian	N 33.721531 E 74.748876	7	5600	4335	77.4	2.5	2.1	348	11	978	2100	
542	Kashmir	Pulwama-SF	2019-20	38-Dadoo Hari/ Shikargah/Awanti pora	N 33.86542 E 75.093617	10	8000	5661	70.7	3.6	4.3	152		718	3000	
543	Kashmir	Pulwama-SF	2019-20	33 Mandakpal/Shars hali/Lethpora/Aw antipora	N 34.815113 E 75.029107	10	8000	5529	69.1	3.5	4.7	112	2	667	3000	
544	Kashmir	Pulwama-SF	2020-21	Strip plantation railway station /Kakapora	N 33.954286 E 74.91205	0.5kms	2400	1761	73.3	1.1					3000	



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				/Awantipora												
545	Kashmir	Pulwama-SF	2021-22	Ri-23B Anderwail/awantipora	N 33.786053 E 74.678924	30	24000	16632	69.3	2.5	2.3	319	7	880	9000	
546	Kashmir	Srinagar SF, Budgam	2019-20	16/S Shalkani, Budgam, Khog	N33.904088, E74.567755	0.4 Km	650	605	93	1.3	2.8	213		818	2700	
547	Kashmir	Srinagar SF, Budgam	2019-20	Ri32, Sonbanger, Chadoria	N33.810567, E74.734050	0.38 Km	600	552	92	1	0.41	478	8	1030	2500	
548	Kashmir	Srinagar SF, Ganderbal	2019-20	Alasteng water plant road, Gbl, Strip	N34.197089, E74.124163	0.1 Km	359	341	94.9	3.5	1.3			341	1500	
549	Kashmir	Srinagar SF, Ganderbal	2021-22	22/M, Wangath Naranang, Ganderbal	N34.349453, E74.967959	10	9637	8413	87.3	0.8	0.32	766	11	1618	4250	
550	Kashmir	Srinagar- SF	2020-21	Camp Strip- Bemina Byepasa/Srinagar	N34.07666, E74.766336	0.30km m	475	392	82.5	4	4.6	381	18	719	2000	
551	Kashmir	Srinagar- SF	2021-22	S1A/Budgam/Riyar	N33.882481, E74.608122	0.45km m	475	381	80.1	0.9		362	7	750	2000	
552	Jammu	Chenab Kishtwar-WL	2019-20	47/Tunnel Nallah/Ramban-Batote	N33500101 E75707043	10	6900	3297	47.8	3.5	1.3	293	9	632	2900	90
553	Jammu	Chenab Kishtwar-WL	2019-20	47/Bn-Banihal/Ramban-Batote	N33.494559 E75.206444	10	6900	3873	56.1	2.2	1	178	2	567	2900	50
554	Jammu	Jammu- WL	2019-20	Comp-5/Kholian/Wildlife Nandini	N32.855833 E74.95688	6.5	2500	1628	65.1	5.4	4.8	383	9	642	2000	50
555	Jammu	Jammu- WL	2019-20	Comp-4/Paloura/Nandini	N32.760643 E74.859918	10	1000	579	57.9	5.5	4.8	378	6	442	2900	
556	Jammu	Jammu- WL	2019-20	Comp-1R/Baikhad/Nandini	N32.822785 E74.9826	8	2500	1578	63.1	5.6	4.3	327	7	531	2000	



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557	Jammu	Jammu- WL	2021-22	Comp-4/Paloura/Nandini	N32.760758 E74.859954	10	1000	732	73.2	3.1	2.3	414	7	494	2900	
558	Jammu	Jammu- WL	2021-22	Comp-3R/Ramnagar	N32.780576 E74.884675	10	1000	674	67.4	2.6	1.8	452	7	526	2900	
559	Jammu	Jammu- WL	2021-22	Comp-2R/Ramnagar	N32.747602 E74.874356	10	1000	683	68.3	2.7	1.7	521	5	594	2900	
560	Jammu	Jammu- WL	2021-22	7/Lattatop/Udhampur	N32.92635 E7544459	20	5000	2947	58.9	1.8	1.3	592	7	746	6000	
561	Jammu	Kathua- WL	2019-20	1/J5R/Jashrota, Kathua	N32.465857 E75.409721	2.5	3000	1985	66.1	4.2	5.6	534	3	1331	2808	
562	Jammu	Kathua- WL	2019-20	12-Kth, Karola-Thein	N32.424767, E75713889	4	2950	2275	77.1	3.7	2.6	372	4	945	2000	
563	Jammu	Kathua- WL	2020-21	7/JDR/Mansar/Kakrai	N 32713102, E75157628	20	14000	9530	68.1	4.3	4.6	374	11	862	6232	80
564	Jammu	Kishtwar- WL	2019-20	24e/D/Dachhan/Kiyaar/Gumyan	N33.580670, E75.859970	5	5000	3448	68.9	1.8		178	6	873	3448	
565	Jammu	Kishtwar- WL	2019-20	29e/D/Dachhan/Nanth/Handal	N33.553368, E76.005042	5	6035	4250	70.4	0.8		288	7	1145	4250	
566	Jammu	Poonch- WL	2019-20	46/R/Sachera/Rajouri	N33237.1, E741846.1	3.71	2200	1480	67.2	3.3	2.9	376	8	783	2800	
567	Jammu	Poonch- WL	2019-20	47/R/Sachera/Rajouri	N332138.9 E741846.8	3.5	2300	1595	69.3	3.6	3.1	338	6	800	2000	
568	Jammu	Poonch-Rajouri WL	2019-20	Comp-32/SKT/Tatkutti WL sanctuary	N33.611674 E74.420145	20	13300	5371	40.3	4.7	4.2	316	9	593	6000	
569	Jammu	Poonch-Rajouri WL	2019-20	Shachera Coonservation Reserve	N33.804488 E74.34733	15	4500	2184	48.5	5.4	4.5	423	7	576		
570	Jammu	Poonch-Rajouri WL	2019-20	46/ R/Sachera	N33.21.37.1, E0741846.1	10	1500	963	64.2	5.3	4.2	396	4	496		
571	Jammu	Poonch-Rajouri WL	2020-21	Shachera Coonservation	N33.804488 E74.34733	10	1634	1126	68.9	3.8	3.2	361	6	480		



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				Reserve												
572	Jammu	Poonch- WL	2021-22	46/R/Rajouri/Sachera	N33.21.47.8, E0741836.8	3.19	3268	2465	75.4	2.6	2.4	346	2	1121	1500	
573	Jammu	Poonch-Rajouri WL	2021-22	Comp-12/SKT/Tatkutti WL sanctuary	N33.611674 E74.420145	12	5000	3172	63.4	2.6	2.3	424	4	692	4200	
574	Jammu	Udhampur-WL	2020-21	109/Sudmahadev coservation reserve/Mantalai	N33.01382, E7534843	10	1500	746	51.1	2.7	1.8	439	8	522	4336	
575	Kashmir	Central Division Srinagar-WL	2021-22	Check Kharhajan/Khrew	N34.080118, E75.002525	33	33500	14802	44.2	2.3	1.4	829	13	1291	11000	
576	Kashmir	Central Wildlife	2021-22	Khrew Khonmoh CR	N34.080118 E75.002525	33	33500	24854	74.2	2.1	1.9	465	6	1224	11000	
577	Kashmir	South WL - Lidder, Anantnag	2021-22	47C /Maidanwali area/ Lidder/Antannag	N 33.954291 E 75.522902	7	8636	3247	37.6	3.5	3.2	189	4	657	3000	
578	Jammu	Doda- DSCO	2020-21	37/Keshwan-Carlan/Doda	N33.16.92.0, E75.79.87.0	10	9960	3854	38.7	2.6	1.8	343	2	730	3000	90
579	Jammu	Doda- DSCO	2021-22	43/Bt/Batote/Gharad Meutra-III	N33.12.24, E75.13.51	10	5000	3516	70.3	1.3		313	4	668	3000	150
580	Jammu	Jammu- DSCO	2020-21	02/N/Barsoo/Panchgrahi	N35.32.52.2 E74.54.23.9	13	6000	3313	55.2	4.1	2.8	309	2	566	4000	60
581	Jammu	Kathua- DSCO	2019-20	43/J/Kathua/Saganu	N32538107, E75439851E	16	8000	5919	73.7	6.9	8.9	972	18	1360	6000	200
582	Jammu	Kathua- DSCO	2021-22	27/k/Janglote/Maggar Khad	N 323795, E75559555	10						892	9	901	4000	300
583	Jammu	Poonch- DSCO	2019-20	167/H/Nangali/Haveli	N33.774395 E74152593	8.834	6000	2953	49.2	4.3	3.4	382	4	702	5000	90
584	Jammu	Poonch- DSCO	2020-21	4/S/Dograin/Suranakote	N33.628066, E74.462862	6.3	6000	3362	55.6	3.5	3	373	3	909	3000	90
585	Jammu	Poonch-	2020-	167/H/Nangali/Di	N33.764331,	27	6000	3358	55.9	5.2	3.9	442	7	573	4000	100



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		DSCO	21	ngla Janyar/Haveli	E74.15019											
586	Jammu	Rajouri-DSCO	2019-20	86/87/R/Ghambir Keri//Rajouri	N33.518469, E74.299357	10	4000	2492	62.3	5.2	4.5	367	4	620	3100	90
587	Jammu	Rajouri-DSCO	2020-21	53/D/Saleri/Nowshera	N33.097913, E74.502925	15	6000	4585	76.4	4.1	3.8	317	5	628	4500	90
588	Jammu	Rajouri-DSCO	2021-22	44/D/Balshma/Nowshara	N33.087049, E74.451155	32	8000	6384	79.8	3.8	2.9	417	7	624	9000	150
589	Jammu	Ramban-DSCO	2019-20	46/Gool/Barakund, Karara/Sangaldan	N33.241322, E75.133883	10	7005	5423	77.4	4.3	3.6	633	9	1184	3500	427 cum , crates 99cum
590	Jammu	Ramban-DSCO	2020-21	48/G/Kardolla Failti/Ghandri/Batote	N33.172378, E75.305321	10	7923	4802	60.6	2.3	1.5	446	9	935	3000	89 cum , 11 crates
591	Jammu	Reasi- DSCO	2019-20	15GG/Zone Reasi/Mahore/Khil Thuksan	N3305411, E7445955	8.27	8000	4656	58.2	3.7	3.2	368	3	934	4500	90cum, 15 nos crates
592	Jammu	Reasi- DSCO	2020-21	4/G/G/Zone reasi/Gangote Dogian	N33.32442, E7483881	20	3675	2246	61.1	3.1	2.7	425	4	541	19500	100
593	Jammu	Samba-DSCO	2019-20	55/D/Samba/Sarna Patyari	N3237550, E07507074	22.1	10850	7988	73.6	6.5	7.2	397	11	769	6000	223
594	Jammu	Samba-DSCO	2020-21	44/D, Sanio Da Devri, Gangedinad, Naikli,	N32.39054, E75.09262	13	6500	4515	69.4	6.2	5.8	574	4	925	4000	66





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				Samba												
595	Kashmir	Anantnag DSCO	2019-20	Harkhan Daksum	N33.606172, E75.455321	6	2242	1362	60.7	7	3.9	498	5	730	1500	
596	Kashmir	Anantnag DSCO	2019-20	38-N, Waltengo, Pachgam/Kulgam	N 33.540259 E 75.096768	10	2242	1737	77.4	3.6	4.3	128		302	3000	
597	Kashmir	Anantnag DSCO	2020-21	4/V Pachan Digwari, Durro, Manzmoh Dengawari	N33.3254, E75.0857	10	10000	6765	67.6	5.2	3.8	677	7	1361	3000	90
598	Kashmir	Anantnag DSCO	2020-21	55/K -Hallan/ Anantnag	N 33.657742 E 75.360833	10	15340	11926	77.7	5.5	5.2	337	6	1536	3000	
599	Kashmir	Anantnag DSCO	2021-22	Miain Pachgam/Kulgam/Anantnag	N33.547642, E75131165	9	10000	7001	70	4.8	5.2	178	2	958	2700	
600	Kashmir	Bandipora-DSCO	2020-21	38K/Kechnusa/Bandipora	N34.400433 E74.50201	10	8000	4192	52.4	3.2	2.8	255	6	680	3000	80
601	Kashmir	Baramulla-DSCO	2019-20	23/K/Zaloor/Sopore	N34.418047, E74369337	10	6000	4231	70.5	5.8	2.4	263	6	692	3000	90cu m, crates 12 nos.
602	Kashmir	Baramulla-DSCO	2020-21	23/K/Zaloor	N34.415972, E74.366378	10	6000	4167	69.4	3.6	2.8	252		669	3000	
603	Kashmir	Budgam-DSCO	2019-20	S-24/Lassipora Habeer/Khag	N33.959752, E74579766	10	5000	3406	68.1	2.2	1.1	218		559	3000	87 cum, crates 30 nos
604	Kashmir	Budgam-DSCO	2020-21	Ri/32/Nagbal/Budgam	N33.801097E7 4.721077	10	1600	1037	64.8	2.9	2.1	448	4	556	3000	
605	Kashmir	Pulwama-DSCO	2020-21	5/K, Doodmara Tral/Pulwama	N33980632 E75161043	6	6940	3750	54	1.6	0.9	279	3	907	2000	
606	Kashmir	Pulwama-DSCO	2020-21	V2B/Vashu/Pulwama	N33.664504, E74765315	13	12460	6539	52.5	3.4	2.5	482	13	998	3000	
607	Kashmir	Srinagar-DSCO	2020-21	50/Manasbal/Budnagar	N34.191536, E74.874357	10	14000	7378	52.7	3.2	2.8	133	2	873	3000	
608	Kashmir	Srinagar-	2020-21	9/G/Gandiwasan/G	N34.1026,	10	13000	6049	46.5	2.8	1.6	187	3	795	3000	



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		DSCO		anderbal/Wasan	E74.5147											
609	Kashmir	Srinagar-DSCO	2021-22	50/MBL/Khimber/Srinagar	N34.206612, E74.868159	10	12000	5521	46	2.7	1.4	221		773	3000	
610	Kashmir	Srinagar-DSCO	2021-22	3/Manasbal/Chathar/Ganderbal	N34.269873, E74.743068	30						364	2	366	315093	
611	Jammu	Jammu-Agrostology	2019-20	28/B/Panjoli/Jammu	N 324349.6, E07500.3.49	10	1000	733	73.3	3.6	4.8	639	9	722	3300	
612	Jammu	Jammu-Agrostology	2019-20	32b/ Yansoo , Udampur	N32.47181 E75.13593	10	1000	726	72.6	2.5	2.4	545	17	635	3300	
613	Jammu	Jammu-Agrostology	2020-21	73/R, Jophad , Kiya ,Udampur	N 32.44173 E 075.2650.6	8	1200	911	75.9	1.9	1.7	370	9	493	3960	
614	Jammu	Jammu-Agrostology	2020-21	26/B, Padoon-II	N32.39161, E75.01396	6	1200	756	63	2.7	1.9	462	3	591	2500	
615	Jammu	Jammu-Agrostology	2020-21	9/B/Parmandal/Chirik	N32.39.38.6, E075.0045.1	10	1000	538	53.8	3.4	2.8	676	16	746	3000	
616	Jammu	Jammu-Agrostology	2020-21	2 Thakarai-Pakalan/Doda/Kishtwar	N32.3312.96, E75.70.4955	5	1000	559	55.9	2.8	3.2	398	7	517	3960	
617	Jammu	Jammu-Agrostology	2020-21	2 Thakarai-Kurhana/Doda/Kishtwar	N33.32.98.7E75.70.49.55	7	1000	568	56.8	2.9	3.4	512	9	602	3960	
618	Jammu	Jammu-Agrostology	2021-22	4/N/Jagti/Simbalehar	32.51.091, 074.51.50.0	14	1000	453	45.3	1.8	1.6	682	6	720	5400	
619	Jammu	Kathua-Agrostology	2020-21	43/M , Raipar-II , Mahanpur, Kathua	N32.331063 E75.363705	15	1500	1151	76.7	2.6	3.2	411	13	501	4500	
620	Jammu	Poonch-Agrostology	2019-20	145/M/Chajhapatri/Poonch	N33.590634, E74.096416	10	1000	447	44.7	6.2	5.7	325	4	374	3300	
621	Jammu	Poonch-Agrostology	2020-21	199/M/Ghani/Poonch	N3342631, E0702087	6	1000	449	44.9	5.5	6.3	183	3	261	3300	
622	Jammu	Rajouri-Agrostology	2019-20	95/WSR/TEK/Rajouri	N33.346671, E74.193672	10	1000	589	58.9	5.1	3.4	166	2	227	3300	
623	Jammu	Rajouri-Agrostology	2020-21	16/R/Ponthal/Rajouri	N33.346773, E74.209147	12	1200	738	61.5	4.7	3.8	185	3	249	3960	
624	Jammu	Ramban-Agrostology	2019-20	51bnl/Banihal/Shabanbas	N33.414303, E75.217851	10	1000	397	39.7	3.9	3.1	130		170	3300	
625	Jammu	Ramban-Agrostology	2021-22	10/Ramban/Tatka Neel	N33.371457, E75.746292	10	1000	552	55.2	3.2	2.5	375	7	437	3300	



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626	Jammu	Reasi-Agrostology	2020-21	78/K/Reasi/Mandali-II/Bhaga	N33.050847, E74.813359	6	1000	554	55.4	2.3	1.9	416	3	511	3300	
627	Jammu	Reasi-Agrostology	2021-22	77/K/Reasi/Dasanu/Bhaga	N33.060404, E74.802508	6	1000	649	64.9	4.3	3.6	478	6	592	3300	
628	Jammu	Samba Agrostology	2020-21	52/D, Sadral-II	N32.3908, E75.0244	8	1500	1053	70.2	4.2	3.7	892	13	1037	3960	
629	Kashmir	Budgam-Agrostology	2020-21	N/6/Gogjipathri/Tramun	N33.856639, E74679962	10	1000	6383	63.8	2.2	1.8	564	7	1209	3300	
630	Kashmir	Kashmir-Agrostology	2020-21	61/GUL/baderkoot/Baramulla	N34.044494, E74.412441	16						467	3	470	4995	
631	Kashmir	Kashmir-Agrostology	2021-22	47/GUL/Baramulla	34.058886, 74.411601	15						341	5	346	4500	
632	Kashmir	Kashmir-Agrostology	2021-22	Ri/26/Yousmarg/Budgam	N33.79585, E74.677225	12						561	3	564	3600	
633	Kashmir	Kashmir-Agrostology	2021-22	02/N/Gadran Nandimarg/Kulgam	N33.549965, E74918897	15						385	4	389	4500	
634	Kashmir	Kashmir-Agrostology	2019-20	Ri/31/Budgam/Yousmarg	N33.81676, E74.682763	1	2960	1867	63.1	3.9	1.4	357		2224	1300	
635	Kashmir	Kashmir-Agrostology	2020-21	23/K/Zaloora/Baramulla	N34.418585, E74378013	14	1400	924	66	3.9	3.2	267	2	335	4662	
636	Kashmir	Kashmir-Agrostology	2020-21	RB/29/Gatipora/Pulwama	N33.744697, E7476318	20	2000	1230	61.5	3.8	2.3	337	8	960	6000	
637	Kashmir	Kashmir-Agrostology	2021-22	N-3/Gadran Nandimarg/Kulgam	N33.548522, E74.919076	10	1000	469	46.9	3.3	1.7	386	3	436	3000	
638	Kashmir	Kupwara-Agrostology	2020-21	13/K/Kupwara/Kandi	N34.444664, E74356675	10	1000	562	56.2	2.7	1.8	679	8	743	3300	
639	Kashmir	Shopian-Agrostology	2020-21	RB-19/Methwani/Shopian	N334136049E 744219317	12	1200	738	61.5	5	4.2	402	2	466	3996	
640	Kashmir	Srinagar-Agrostology	2020-21	51/K/Anantnag/Gurdraman	N33.684141, E75384692	20	2000	1257	62.8	5.5	3.4	579	12	654	6600	
641	Kashmir	Srinagar-Agrostology	2020-21	N-5/Nandimarg/Kulgam	N 33.3354.0 E 74.5749	20	2000	1217	60.8			243	2	306	6600	
642	Jammu	ETF	2019-20	19/B-II,bsl, Sonari Tirdi,Basohli	N32.293170 E075.4642.7	8	3000	2153	71.7	5.6	5.8	772	9	1050	2500	
643	Jammu	ETF	2019-20	30/J-1 ,Chirla	N32.332468	15	5000	2939	58.7	1.5		536	13	745	4500	



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				Nallah, Nagana	E75.50199 E											
644	Jammu	ETF	2019-20	18/bsl, Pruthu-III	N32.284559, E75.462117	8	2000	1333	66.6	2.5	2.1	163	8	338	2000	
645	Jammu	ETF	2020-21	18C-Garnol, Plasi, Basohli	N32.304711, E75.464090	10	5600	3623	64.7	2.2	1.7	632	7	1001	4900	40
646	Jammu	ETF	2021-22	53/54D-Nud Mananu/Sarna	N32.65735 E75.10685	20	8000	4692	58.6	2.9	2.4	613	4	852	6500	100
647	Jammu	ETF	2021-22	55/56D-Nud Mananu/Sarna	N32.65893 E75.11362	25	9000	6253	69.4	2.2	1.3	587	6	843	6500	100
648	Jammu	ETF	2021-22	2/Kaloo/Samba	N32.62446 E75.16113	9.95						515	5		7500	
649	Jammu	ETF	2021-22	2/Mala-Kaloo/Samba	N32.59555 E7496087	57					13.3	602	7		10000	
650	Jammu	NH-1A-Batote	2019-20	70/Udh/Shajalta/Batote	N32.944496, E75.153856	7	6000	3330	55.5	2.7	1.2	514	5	995	2000	60
651	Jammu	NH-1A-Batote	2019-20	28/Peeraha/Batote	N33.176595, E75.307272	13	6500	2686	41.3	3.1	2.3	402	7	616	3900	50
652	Jammu	NH-1A-Batote	2019-20	55/BNL/Wagan Sherbeeri/Banihal	N33.3689 E75.191275	7	3000	1551	51.7	2.7	1.9	376	9	607	2000	60
653	Jammu	NH-1A-Batote	2020-21	55bnl/sector/Hangani	N33.368501 E75191438	14	16000	7098	44.3	2.2	1.8	497	6	1010	4000	90
654	Jammu	NH-1A-Batote	2020-21	22/Nashri/Batote	N33.131664, E75.293654	5	2500	1335	53.4	3.3	2.1	176	4	447	1700	60
655	Jammu	NH-1A-Batote	2020-21	22/BH/Nashri Tunnel-II/Batote-Udhampur sector	N33.129554, E73.292125	7	13000	6609	50.8	3.2	1.8	603	11	1558	2300	
656	Jammu	NH-1A-Batote	2020-21	70UDH/Thald-II/Batote1NH	N32.959408, E75164392	7	9500	4432	46.6	3	2.5	578	8	1219	2000	90
657	Jammu	NH-1A-Batote	2020-21	47bnl/Hingni/Ramban-Banihal	N33.352822 E75.174168	14	16000	9587	59.9	2.9	2.4	502	6	1192	4000	
658	Jammu	NH-1A-Batote	2021-22	36rbn/Panthyal/Banihal	N33.32944 E75.204329	9	13000	7092	54.5	0.8		243	7	1038	2800	
659	Jammu	NH-1A-Batote	2021-22	70/Udh/Batote/Kamorh	N32.98189, E75.186295	7	9500	4812	50.6	3.2	1.8	254	4	945	2000	
660	Jammu	NH-1A-Batote	2021-22	22/BH/Batote/Nashri main	N33.144265, E75.303486	17	18000	6373	35.4	3.1	1.1	324	5	704	5000	210
661	Jammu	NH-1A-	2021-22	14/BH/Nr. Nashri	N33.129707,	8	4000	2869	71.7	3.4	2.8	476	4	839	2500	



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		Batote		Tunnel/Gammi/Batote	E7.295286												
662	Jammu	MFP	2019-20	20/Kandi/Kalidhar-Tanda	N 32.59521 E 07444205	20	9500	5231	55.1	5.1	4.2	586	11	859	6000		
663	Jammu	MFP	2019-20	6J/Mansar-II, Chani/Majalta/Kathua	N 33.41151 E 07510371	20	10000	4194	41.9	2.9	1.4	385	3	598	6000		
664	Jammu	MFP	2020-21	19/A/Seen Thakran/Udhampur	N 32920343 E 07500513	15	7000	3776	53.9	1.9	1.5	627	12	891	4500	60	
665	Jammu	MFP	2020-21	19/A/Udh/Seen Thakran-III	N 33.55160 E 07400196	4	1500	763	50.8	4.3	3.8	569	6	766	2000		
666	Jammu	MFP	2020-21	1/B/Ramkot, Kandharnu	N 32.37380 E 07522250	15	7000	4188	59.8	3.9	1.6	621	11	911	4500	60	
667	Jammu	MFP	2021-22	18/U, Mand, Guddan Sangial	N 33.54358 E 07501185	60	20500	12280	59.8	1.3		673	7	885	10800		
668	Jammu	MFP	2021-22	38/KDR/ Kalidhar, Chowri Chura	N 33001414 E 074393722	20	12000	6935	57.7	2.2	1.4	563	9	919	7000		
669	Kashmir	Planning & Publicity	2019-20	18/Rajwar-Langate/ North Parythrum	N34.392688, E74179997	15	60000	16921	28.2	0.7		388	12	1528	4000		
670	Kashmir	Planning & Publicity	2020-21	34/MBI/Manasbal	N34.2855, E74.9201	12	48000	14305	29.8	0.8		236	7	1435	3600		
671	Kashmir	Planning & Publicity	2021-22	47B/Chontibagh Drug Farm	N340347.9 E742512.4	10	40000	25211	63.1	1		226	4	2751	2500		
672	Kashmir	Planning & Publicity	2021-22	12 mbl													
673	Kashmir	WUCMA	2020-21	35/K/Kandi	N34.397662, E74.503842	27	27000	17269	63.9	3.1	1.8	287	9	936	10059		
674	Kashmir	WUCMA	2021-22	35/K/Gogerpati	N34.393615, E745068	27	27000	15996	59.4	3.2	1.8	179	4	775	10059		
675	Jammu UF	*Jammu- UF	Sites-117				49775	31445	63.2	4.1	3.5						
				<b>Total Plants</b>			469563	2945046	62.7								
		*List of sites of Jammu Urban Forestry is appended in Annexures-2															



## ANNEXURE- 2

### Plantation Sites Evaluated of Urban Forestry Division of Jammu

Sr. no.	District/dept	Year	Name of the unit-Forest Comptt/Range	Coordinates (Lat/Long)	Number of plants planted
1	Urban F Jammu	2019-20	Channi Himmat Sec 3	N320 69'02.11" E 740 88'08.21"	120
2	Urban F Jammu	2019-20	Sainik Colony Sec A	N320 40'36.29" E 740 54'06.32"	310
3	Urban F Jammu	2019-20	Ratnuchak Nr. Mandir	N32° 39'21.40" E 74° 54'37.65"	180
4	Urban F Jammu	2019-20	Sheep Husbandry JhalloChak	N32° 38'59.85" E 74° 53'48.48"	200
5	Urban F Jammu	2019-20	Sanik Colony Sector D Park No. 6	N320 40'26.88" E 740 54'40.10"	55
6	Urban F Jammu	2019-20	Sanik Colony Sector C open Plantation	N32° 40'57.02" E 74° 54'38.71"	150
7	Urban F Jammu	2019-20	Mahamaya Part- II	N32°43'50.0" E74°53'26.0"	1200
8	Urban F Jammu	2019-20	Tawi Herbal Eco Part- I & II	N32°43'50.0" E74°53'26.0"	9600
9	Urban F Jammu	2019-20	Jeevan Nagar Gowshalla	N32°40'31.74" E74°50'54.46"	120
10	Urban F Jammu	2019-20	Bablina Colony-III	N32°39'43.98" E74°51'30.76"	100
11	Urban F Jammu	2019-20	JkResotTrikutanagar	N32°41'54.05" E74°52'27.85"	200
12	Urban F Jammu	2019-20	Trikuta Nagar	N32°42'10.44" E74°52'35.67"	85
13	Urban F Jammu	2019-20	M/H road Belicharana	N32°41'52.88" E74°50'28.50"	125
14	Urban F Jammu	2019-20	Simbal camp near Police Line boundary wall-II	N32°38'17.7" E74°47'31.4"	80
15	Urban F Jammu	2019-20	Simbal camp near Police Line boundary wall-V	N32°38'17.7" E74°47'31.4"	60
16	Urban F Jammu	2019-20	Soil Conservation Training school Miran Sahib	N32°39'21.14" E74°48'40.63"	110



Sr. no.	District/dept	Year	Name of the unit-Forest Comptt/Range	Coordinates (Lat/Long)	Number of plants planted
17	Urban F Jammu	2019-20	Trikuta Nagar Marble Market	N32°42'10.44" E74°52'35.67"	35
18	Urban F Jammu	2019-20	Jeevan Nagar Babliana	N32°41'40.70" E74°50'42.38"	25
19	Urban F Jammu	2019-20	Plantation in tree Guards (New & Old)	-	400
20	Urban F Jammu	2019-20	Gandhi Nagar N/ Sahini house	N32°41'32.38" E74°52'36.83"	60
21	Urban F Jammu	2019-20	Cremation Ground Bhagwati Near Bridge	N32°43'22.3" E74°50'33.3"	200
22	Urban F Jammu	2019-20	Temple Bhagwati Nagar	N32°43'16.7" E74°50'19.4"	35
23	Urban F Jammu	2019-20	BantalabPattiya	N32°47'08.95" E74°50'15.15"	105
24	Urban F Jammu	2019-20	Bantalab Opp. H/o Dr. O.P. Bhagat	N32°47'05.63" E74°50'09.58"	10
25	Urban F Jammu	2019-20	SwaranVihar Lane No. 4	N32°46'14.26" E74°49'16.27"	110
26	Urban F Jammu	2019-20	SwaranVihar Opposite S.P. Rukwal	N32°46'02.37" E74°48'53.51"	6
27	Urban F Jammu	2019-20	Adarsh Nagar Bantalab Nr. Mandir	N32°46'31.55" E74°49'18.22"	40
28	Urban F Jammu	2019-20	Rajinder Nagar Sector 2	N32°46'24.44" E74°49'10.65"	40
29	Urban F Jammu	2019-20	Roop Nagar Road Nr. AapShambu Mandir	N32°46'08.32" E74°50'45.89"	25
30	Urban F Jammu	2020-21	Sainik Colony Sector-A, H.No 79 & 163.	32.67 5539 74.90 1858	230
31	Urban F Jammu	2020-21	Sainik Colony Sec. B Lane No 1, Sec. C & D, H.No 478.	32.67 9608 74.89 8164	90
32	Urban F Jammu	2020-21	Sainik Colony Sec E H.No 508, 493, 359, 430, 433.	32.67 1891 74.90 5795	95
33	Urban F Jammu	2020-21	Sainik Colony Sec.FH.No 536, 230, 190, 50, 156, 542, 352, 351.	32.66 8446 74.90 3254	124
34	Urban F Jammu	2020-21	Nitesh ViharDatti Mandir.	32.68 9471 74.92 5844	160



Sr. no.	District/dept	Year	Name of the unit-Forest Comptt/Range	Coordinates (Lat/Long)	Number of plants planted
35	Urban F Jammu	2020-21	Channi Himmat Sec.1 H.No. 353, 261, 145. Sec4 H.No.541 opp. Ritz Hotel.	32.67 0539 74.89 9727	80
36	Urban F Jammu	2020-21	Datta Talab JalloChak.	32.64 8432 74.93 0409	200
37	Urban F Jammu	2020-21	Galaxy College, Sainik Colony Sec F H.No. 593, 129, 419 & 215.	32.66 7017 74.91 0669	110
38	Urban F Jammu	2020-21	Shiv Temple Channi Rama Part I, II, III, IV & V)	3242.44 7453.382	295
39	Urban F Jammu	2020-21	Near Wave Mall.	3242.886 7453.123	72
40	Urban F Jammu	2020-21	Institution Plantation		8160
41	Urban F Jammu	2020-21	Gandhi Nagar Opposite Gurudwara	N32°42'05.1" E74°51'08.22"	25
42	Urban F Jammu	2020-21	Gurukul Institute near Valmiki Chowk. Part I,II,III & IV	N32°42'12.8" E74°51'08.98"	85
43	Urban F Jammu	2020-21	Trikuta Nagar (Patnitop) Paramouth insurance private ltd. Part I & II	N32°41'4.90" E74°52'07.96"	23
44	Urban F Jammu	2020-21	Trikuta Nagar Opp. Jatinder singh House. Part I,II,III,IV & V	N32°41'7.52" E74°52'04.72"	63
45	Urban F Jammu	2020-21	Railway Station near Hotel Satyam. Part I & II	N32°42'1.46" E74°52'07.31"	37
46	Urban F Jammu	2020-21	Satwari near military Farm House	N32°41'65.09" E74°50'72.08"	105
47	Urban F Jammu	2020-21	Railway station Part I, II & III	N32°42'40.03" E74°52'73.00"	300
48	Urban F Jammu	2020-21	Chatha University	N32°39'21.16" E74°48'40.63"	1600
49	Urban F Jammu	2020-21	Satwari (MH Side)	N32° 41'85.08" E74° 50'48.07"	150
50	Urban F Jammu	2020-21	Govt. High School Udhaywala	N32°44'0.50" E74°48'5.17"	140
51	Urban F Jammu	2020-21	Roop Nagar Fire Station Front	N32°47'18.34" E74°49'21.05"	90
52	Urban F Jammu	2020-21	SwarnVihar near shiv temple Different parts	N32°46'27.25" E74°49'41.92"	60





Sr. no.	District/dept	Year	Name of the unit-Forest Comptt/Range	Coordinates (Lat/Long)	Number of plants planted
53	Urban F Jammu	2020-21	Bantalab Lane No. 7 sukkinhar	N32°46'49.47" E74°48'28.31"	135
54	Urban F Jammu	2020-21	Roop Nagar Sec. 5 RC Gupta Retd. CCF	N32°46'30.36" E74°50'47.87"	130
55	Urban F Jammu	2020-21	GolePanj Peer-1	N32°43'4.60" E74°49'8.34"	100
56	Urban F Jammu	2020-21	Seora Camp	N32°71'79.25" E74°80'43.55"	120
57	Urban F Jammu	2020-21	Main Road Muthi Camp near Pulli	N32°45'24" E74°49'07"	40
58	Urban F Jammu	2020-21	Main Road Muthi Camp near Bua Palace	N32°46'04" E74°50'04"	20
59	Urban F Jammu	2020-21	Paloura along Nallah upper SidhGoriya Temple	N32°45'25" E74°50'21"	100
60	Urban F Jammu	2021-22	MAM Study circle Near Gujjar Trust	N. 32,68',64, 68' E. 74,90',63 78'	55
61	Urban F Jammu	2021-22	H.no-456 Sec-C Sainik Colony	N. 32,68',38, 39' E. 74,91',25 58'	30
62	Urban F Jammu	2021-22	Near K.D Eye Hospital Sec-C Sainik Colony	N. 32,68',36, 16' E. 74,90',90 77'	20
63	Urban F Jammu	2021-22	Sec-C Extn. Near Nallah Sainik Colony Grand Resort	N. 32,68',59, 43' E. 74,91',93 22'	85
64	Urban F Jammu	2021-22	NideshVihar Near Nallah	N. 32,68',77, 72' E. 74,92',21 94'	87
65	Urban F Jammu	2021-22	The Grand Road Sunjwan	N. 32,69',04, 04' E. 74,92',23 86'	53
66	Urban F Jammu	2021-22	Opposite The Grand Resort	N. 32,68',09, 96' E. 74,92',65 41'	45
67	Urban F Jammu	2021-22	Sec-D Nallah Side Sainik Colony	N. 32,68',16, 23' E. 74,91',39 03'	252
68	Urban F Jammu	2021-22	Lazeez Food Court Sec-D Sainik Colony	N. 32,67',91, 43' E. 74,90',93 27'	80
69	Urban F Jammu	2021-22	Opp. H.No-97 Sec-G Sainik Colony	N. 32,67',12, 23' E. 74,90',09 69'	23



Sr. no.	District/dept	Year	Name of the unit-Forest Comptt/Range	Coordinates (Lat/Long)	Number of plants planted
70	Urban F Jammu	2021-22	Ram Mandir Sec-G	N. 32,67',20, 94' E. 74,90',12 25'	18
71	Urban F Jammu	2021-22	Sec-G Nallah Side Sainik Colony	N. 32,67',41, 34' E. 74,90',06 69'	149
72	Urban F Jammu	2021-22	Sec-A Near Nallah Sainik Colony	N. 32,67',75, 8' E. 74,90',11 47'	239
73	Urban F Jammu	2021-22	Shiv Mandir Sunjwan		75
74	Urban F Jammu	2021-22	H.No-21 Sec-7 Channi Himmat	N. 32,68',63, 51' E. 74,90',00,75'	40
75	Urban F Jammu	2021-22	Nitesh Vihar Part-I	N. 32,68',70, 84' E. 74,90',26,22'	40
76	Urban F Jammu	2021-22	Nitesh Vihar Neary Murty Home	N. 32,68',56, 91' E. 74,92',19,41'	30
77	Urban F Jammu	2021-22	Near Canteen RatnoChak	N. 32,66',33, 98' E. 74,92',29,38'	141
78	Urban F Jammu	2021-22	Nitesh ViharSainik Colony - II	N. 32,68',69, 52' E. 74,92',27,34'	139
79	Urban F Jammu	2021-22	Widow Park Sec-D Sainik Colony	N. 32,67',75, 72' E. 74,91',21,24'	155
80	Urban F Jammu	2021-22	Near Jal Bhawan Transport Nagar	N. 32,32',753' E. 74,53',102'	92
81	Urban F Jammu	2021-22	Near JK Bank ATM Channi Rama	N. 32,42',37' E. 74,53',237'	72
82	Urban F Jammu	2021-22	Near ITBP Camp ChanniRamma	N. 32,42',241' E. 74,53',191'	68
83	Urban F Jammu	2021-22	Near Water Tank ChanniRamma	N. 32,42',226' E. 74,53',184'	48
84	Urban F Jammu	2021-22	Near Gorkha Gate Gorkha Nagar	N. 32,42',369' E. 74,52',544'	105
85	Urban F Jammu	2021-22	Lane No-26 , Sidhra	N. 32,76',719' E. 74,89',659'	31
86	Urban F Jammu	2021-22	Near 21 Bn ITBP ChanniRamma	N. 32,42',06' E. 74,53',281'	29



Sr. no.	District/dept	Year	Name of the unit-Forest Comptt/Range	Coordinates (Lat/Long)	Number of plants planted
87	Urban F Jammu	2021-22	NideshVihar Bankers Enclave	N. 32,68',78,05' E. 74,92',35,09'	99
88	Urban F Jammu	2021-22	Institutional Plantation		7365
89	Urban F Jammu	2021-22	Qasim Nagar, Shani Mandir	32.43 9.8600 74.53 23.1470	120
90	Urban F Jammu	2021-22	Shiv Mandir Qasim Nagar Part -I	32.43 7.0068 74.53 5.5868	150
91	Urban F Jammu	2021-22	Municipal Bathroom Strip Qasim Nagar Part-I	32.43 12.5184 74.52 52.8888	146
92	Urban F Jammu	2021-22	Balidan Stamb Part-I	32.71 8751 74.87 5726	120
93	Urban F Jammu	2021-22	University Back Side Part-I	32.43 16.2696 74.52 20.5464	70
94	Urban F Jammu	2021-22	Railway Road Part-I	32.42 25.2288 74.52 33.2688	100
95	Urban F Jammu	2021-22	Police Line Road Part-II	32.42 39.3228 74.52 .03	40
96	Urban F Jammu	2021-22	Shamshan Ghat Strip(Lee Garden)	32.41 25.584 74.48 52.0415	190
97	Urban F Jammu	2021-22	Kunjwani Air Force Part-II	32.66 4996 74.86 8409	50
98	Urban F Jammu	2021-22	Bali Charana Crusher	32.42 20.1744 74.50 11.2848	110
99	Urban F Jammu	2021-22	Ashok Nagar Satwari	32.69 0177 74.85 111.8	40
100	Urban F Jammu	2021-22	Shiv Temple Miransahib	32.64176935 74.81033388	170
101	Urban F Jammu	2021-22	TaliMorh Canal -II	32.63761351 74.80081543	158
102	Urban F Jammu	2021-22	CID Office,Miransahib	32.64064812 74.8042945	140
103	Urban F Jammu	2021-22	Kullian	32.6310948 74.77887846	202
104	Urban F Jammu	2021-22	Plantation in Tree Guards		100
105	Urban F Jammu	2021-22	Shanshan Ghat Bhagwati Nagar-II	N. 32,71',95, 27' E. 74,84',46 82'	150



Sr. no.	District/dept	Year	Name of the unit-Forest Comptt/Range	Coordinates (Lat/Long)	Number of plants planted
106	Urban F Jammu	2021-22	Shamshan Ghat Padyali Chack Strip-II	N. 32,76',75, 84' E. 74,76',33 88'	60
107	Urban F Jammu	2021-22	Shamshanghat Bhagwati Nagar sewage plant	N. 32,72',26, 12' E. 74,83'33 50'	10
108	Urban F Jammu	2021-22	Gole Panjpeer -I	N. 32,72',56, 59' E. 74,82',96 71'	30
109	Urban F Jammu	2021-22	View point Sec 8 Roopnagar Park	N. 32 777181' E. 74' 849258	100
110	Urban F Jammu	2021-22	Radio Station Bantalab-II	N. 32 786729' E. 74' 822861	90
111	Urban F Jammu	2021-22	Bamboo house near Shiv Park & JDA Club	N. 32 771393' E. 74' 843454	200
112	Urban F Jammu	2021-22	K V school Bantalab	N 32 778289 E 074825371	59
113	Urban F Jammu	2021-22	Sec 9 Roopnagar	N 32 775361 E 74 805210	80
114	Urban F Jammu	2021-22	Infront of army Quarter Raipur-II	N. 32 800723 E. 74' 817814	50
115	Urban F Jammu	2021-22	Power Station Raipur	N. 32 797038 E. 74' 819243	35
116	Urban F Jammu	2021-22	Institutional Plantation		6895
117	Urban F Jammu	2021-22	THEP Plantation		3700
<b>Total plants planted</b>					<b>49755</b>
<b>Number of plants survived</b>					<b>31445</b>
<b>Average Survival percentage</b>					<b>63.2%</b>
<b>Average height of live plants</b>					<b>4.1 ft</b>
<b>Average height of collar diameter of live plants</b>					<b>3.5 cm</b>



### ANNEXURE-3

#### Plantation Work in Process under CAMPA

Sr. no.	Region	District/ Division/ Dept	Year	Name of the unit-Forest Compt
1	Jammu	Batote- T	2021-22	Shukrana Lair
2	Jammu	Batote- T	2021-22	Kanyala / Surnikund
3	Jammu	Bhaderwah- T	2021-22	53/K
4	Jammu	Bhaderwah- T	2021-22	12/Jai
5	Jammu	Billawar-T	2021-22	Thakound
6	Jammu	Billawar-T	2021-22	Korithial
7	Jammu	Doda- SF	2021-22	Jura vwl
8	Jammu	Doda- SF	2021-22	Bulchiter vwlot
9	Jammu	Doda- Territorial	2021-22	Comptt 4/Kesh
10	Jammu	Doda- Territorial	2021-22	Comptt. 1/Kesh
11	Jammu	Kathua- Agro	2021-22	12/Bsl Raipur Kathua
12	Jammu	Kathua DSCO	2021-22	52/Bara
13	Jammu	Kathua- Territorial	2021-22	44J/Bindi Nali-Jasrota
14	Jammu	Kishtwar- Territorial	2021-22	20c/Dhobipura-Nagseni
15	Jammu	Kishtwar- Territorial	2021-22	16K-Kishtwar
16	Jammu	Mahore- Territorial	2021-22	91/Padeni-Gulab Garh
17	Jammu	Mahore- Territorial	2021-22	106/Pattian-Arnas
18	Jammu	Nowshera- T	2021-22	124/Lamman-Dhaleri
19	Jammu	Nowshera- T	2021-22	85/BissiKalakote-Dhaleri
20	Jammu	Rajouri- SF	2021-22	24R/Keri Rajouri
21	Jammu	Ramban- SF	2021-22	37/Btt Ext. II
22	Jammu	Ramban- SF	2021-22	54/BnlUpperside
23	Jammu	Ramban- Territorial	2021-22	46/Sc Banihal
24	Jammu	Samba- T	2021-22	3D/Basanter-Devak
25	Jammu	Udhampur DSCO	2019-20	Bapp (Co-109/D)
26	Jammu	Udhampur DSCO	2021-22	72/U-Udhampur
27	Jammu	Udhampur-SF	2021-22	29A/Bari-Ramnagar
28	Jammu	Udhampur-SF	2021-22	87K/Kopara-Katra
29	Jammu	Udhampur-SF	2021-22	Kosan



Sr. no.	Region	District/ Division/ Dept	Year	Name of the unit-Forest Compt
30	Kashmir	Anantnag DSCO	2021-22	NAGAM-Noorabad/6N
31	Kashmir	Bandipora- Agro	2021-22	115-116/Kh-Kudara
32	Kashmir	Bandipora-T	2021-22	144/Kh, Mulkhuihama
33	Kashmir	Baramulla JV	2021-22	33a/Banali-Boniyar
34	Kashmir	Budgam- Agro	2021-22	Ri-31 Yousmarg
35	Kashmir	Budgam-T	2021-22	08/N-1b, Chari- sharief- Dudhganga
36	Kashmir	Kamraj- T	2021-22	38/Trimukhan Top, Lolab-South Lolab
37	Kashmir	Kulgam- DSCO	2021-22	Guncur Waltango
38	Kashmir	Kulgam- DSCO	2021-22	Miacin Pachgam
39	Kashmir	Kupwara DSCO	2021-22	Co 70- AB Punzua
40	Kashmir	Kupwara DSCO	2021-22	Punzwa-Nihari/70AB
41	Kashmir	Kupwara DSCO	2021-22	Toolihallan Sedow Co -V2B
42	Kashmir	Lidder- T	2021-22	4ac/Lidder/Chandawari
43	Kashmir	Shopian- Territorial	2021-22	RB30/Muri Zrakun/Rambiara
44	Kashmir	Sindh- Territorial	2021-22	65b/Sindh/Raisen
45	Kashmir	Tangmarg- T	2021-22	29/Gulmarg



## ANNEXURE-4 Evaluation Format of Plantations, Fencing and SMC Works

### 1. General Information

- a. Division:
- b. District:
- c. Range:
- d. Beat:
- e. Compartment no.:

### 2. Information of the Plantation Site

- a. Name of the Plantation Site:
- b. GPS Location of Plantation Site of main gate:
- c. GPS coordinate of centre location:
- d. Year of Plantation/activity:
- e. Area of Plantation recorded (ha):    Area of Plantation actual using GPS (ha):
- f. Type of Plantation (Block, Linear, Gabion):

### 3. Expenditure Incurred on the Planting Site

Cost Estimate (Rs.)	Expenditure Incurred (Rs.)

### 4. Map of Planting Site

- a. Prepared
- b. Not prepared

### 5. Plantation Journal

- a. Whether plantation journal has been maintained and posted up to date?



- b. Whether a surveyed sketch of the plantation has been pasted in the plantation journal?
- c. Whether inspecting officials of the implementing agency like DFO, CF, CCF, APCCF or PCCF have recorded their observations/comments in the plantation journal?

**6. Quantitative Assessment**

**a. Survival and Growth of Plantation**

Sr. No.	Species	No. of Plants Planted	No. of Live Plants	No. of Dead Plants	Survival %	Average height of Live Plants (ft)
1						
2						
3						
4						
5						
Total						

**b. Details of Regeneration/ saplings of native/main species: In 0.1 ha plot**

Sr. No.	Species	R1	R2	R3	R4	Total	Plants Per Ha

**c. Details of Root Stock of native/main species: In 0.1 ha plot**

Sr. No.	Species	R1	R2	R3	R4	Total	Plants Per Ha





#### d. Summary of Artificial, Root Stock and Natural Regeneration

No. of plants planted in artificial regeneration	No. of live plants of artificial regeneration	No. of live plants of natural regeneration	No. of live plants of Root Stock	Total No. of live plants (Artificial, Natural and Root stock)	Survival %	Av. height of live plants (in ft)

#### 7. General Observations

- Whether site selected for project was good \_\_\_\_\_
- Whether species planted at the site was suitable \_\_\_\_\_
- Economic benefit (Fodder/fuel/NTFP/\_\_\_\_\_) to local inhabitants \_\_\_\_\_
- Overall outcome/impact of the project on the local people / watershed  
\_\_\_\_\_
- Whether the area of plantation is fully/partially covered \_\_\_\_\_
- Any other comment:
  - Medicinal plants:
  - Grasses growing:
  - Weeding:
  - Pruning:
  - Biodiversity enrichment:

#### 8. Status of Fencing for each plantation site

Barbed wire fencing					
Barbed Fencing Id/No.	Length in Measurement book	Actual length in field	% variation (+/-)	Present status- Intact/Worn out	Effectiveness of the fence (Very /moderate/not effective)
Chain Link wire fencing					
Chain Fencing	Height xLength in	Actual height	% variation (+/-)	Present status- Intact/Worn	Effectiveness of the fence (Very



Id/No.	Measurement book	Length in field		out	/moderate/not effective)

### 9. Status of Soil and Moisture Conservation (SMC) Works

<b>DRSM</b>			
DRSM ID No.	Size (Width x Depth x Length) as per Measurement book	Actual Size (Width x Depth x Length) in field	% Variation (+/-)
<b>Crate</b>			
Crate ID No.	Size (Width x Depth x Length) as per Measurement book	Actual Size (Width x Depth x Length) in field	% Variation (+/-)
<b>WHS</b>			
WHS ID No.	Size (Width x Depth x Length) as per Measurement book	Actual Size (Width x Depth x Length) in field	% Variation (+/-)

*Note: 30% sampling of all Fencing and SMC works is to be done*

**Field Officer**

Signature :  
Date :  
Name :

**Field Evaluator**

Signature :  
Date :  
Name :

**Critical comments of Third Party**

**1. Project constraints/Limitations:**

What were the constraints/limitations faced by the project authority based on evaluator? Specify \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_



**2. Suggestions for improvement:**

Whether there is any scope of improving the project output?

Specify \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Whether the project authorities have felt any need of improving upon any particular activity on methodology?

Specify \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Whether the people of the project area feel any need to improve any particular aspects of the project?

Specify \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Whether the project should be continued on same lines or some modifications are necessary?

Specify \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Any other relevant recommendations

**Field Evaluator**

Name :

Signature :

Date :



## ANNEXURE-5 Evaluation Format of Civil Works

### 1. General Information

- a. Division:
- b. District:
- c. Range:
- d. Beat:
- e. Compartment no.:

### 2. Quantitative assessment

#### A. Wildlife Habitat Improvement:

<b>Wildlife Habitat Improvement</b>				
Habitat Development ID No.	Area(Width x Length) as per Measurement book	Actual Size (Width x Length) in field	% Variation (+/-)	Remarks(Presence or indirect signs-pellets, dung, nest, sighting record of all work done in Wildlife Habitat Improvement)

#### B. Civil Works:

<b>Civil Works</b> <b>(Office, Residential quarter, Barricade, Forest Camp, Pump House etc.)</b>	
Building ID no.	
Site location	Good / Fair/ Poor
Intending the service purposes	Good / Fair/ Poor
Structurally sound and free of cracks	Good / Fair/ Poor
Free of dampness and leakage	Good / Fair/ Poor
Overall finish and look	Good / Fair/ Poor
<b>Civil Works</b>	



<b>(Office, Residential quarter, Barricade, Forest Camp, Pump House etc.)</b>	
Building ID no.	
Site location	Good / Fair/ Poor
Intending the service purposes	Good / Fair/ Poor
Structurally sound and free of cracks	Good / Fair/ Poor
Free of dampness and leakage	Good / Fair/ Poor
Overall finish and look	Good / Fair/ Poor

**3. Comments on the internal monitoring system:**

a. What kind of reporting mechanism is put in place?

Whether reports are periodically / regularly submitted?

b. Internal monitoring comments:

**4. Whether the work site registered online at <http://egreenwatch.nic.in> ?**

Yes/no

**5. Protection and maintenance of assets created**(The agency should analyze the kind of measures including watch and ward taken to protect the assets created under CAMPA. The quantity equality of such measures and their effectiveness need to be brought out):

**6. Maintenance of records:**

- Nursery journal: Upto date- Yes/No
- Plantation journal: Upto date- Yes/No
- Measurements book: Upto date- Yes/No

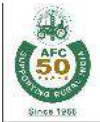
**7. Programme constraints & limitations:** Constraints/Limitations/ Fund flow:\_\_\_\_\_

**8. Suggestions for management:**

Name of Evaluator:

Signature

Date:



## ANNEXURE-6 Evaluation Format of Equipment's

### 1. General Information

- a. Division:
- b. District:
- c. Range:
- d. Beat:
- e. Compartment no.:

### A.Equipment's:\*

Equipment's and Vehicle Status				
Sr. no.	Equipment's	Total no. purchased	No. of working units	No. of nonfunctional units
1	Computer			
2	GPS			
3	Lab equipment's			
4	Vehicle			
5	Camera			
6	Xerox machine			
7	Printer			
8	Smart TV			
9	Drone			
10	Other specify			
	<b>Total</b>			

\*Note: This information needs to be collected from the Divisional office level only

Name of Evaluator:

Signature

Date:



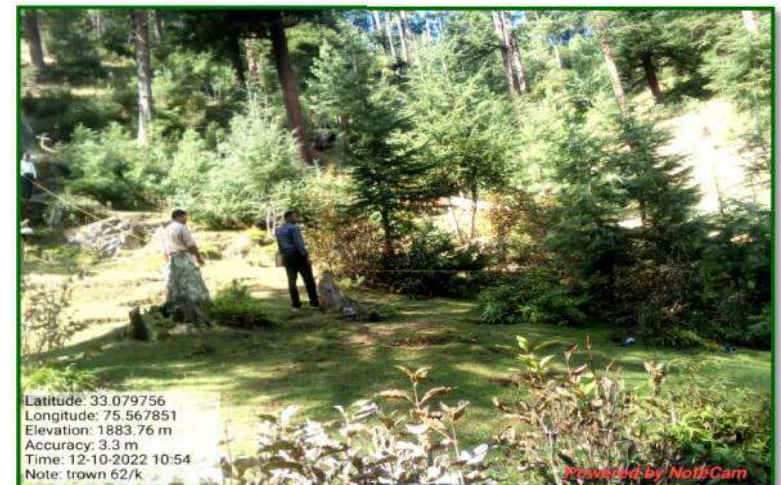
Palahi, Basohli Territorial



74G, Batote Territorial



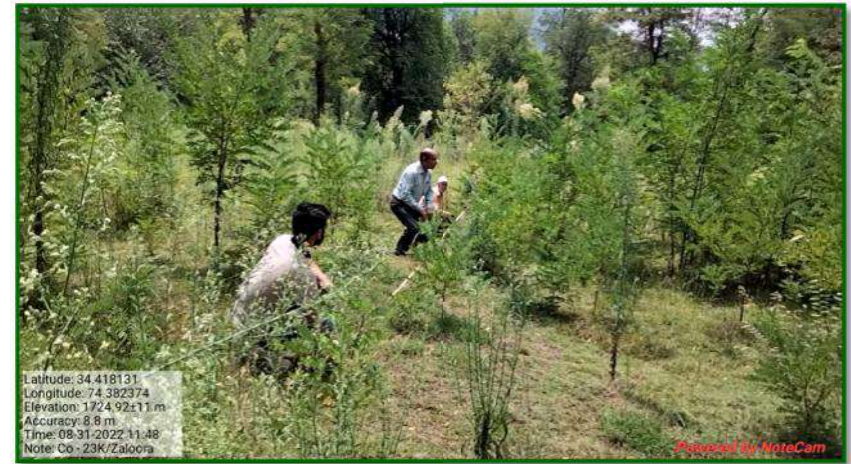
59K, Chikrilia Draman, Rajouri Territorial



62K, Trown, Bholderwa Territorial



Chowkian Bagh, Rajouri Social Forestry



23K Zaloora, Baramulla Social Forestry



41/S, Chambara, Poonch Social Forestry



Garuba Chak, Udhampur Social Forestry





12, KTH, Karola, Kathua WL



Khrew Khonmoh, Central WL



29E/d, Kishtwar WL



7 JDR, Kakrai, Udhampur WL



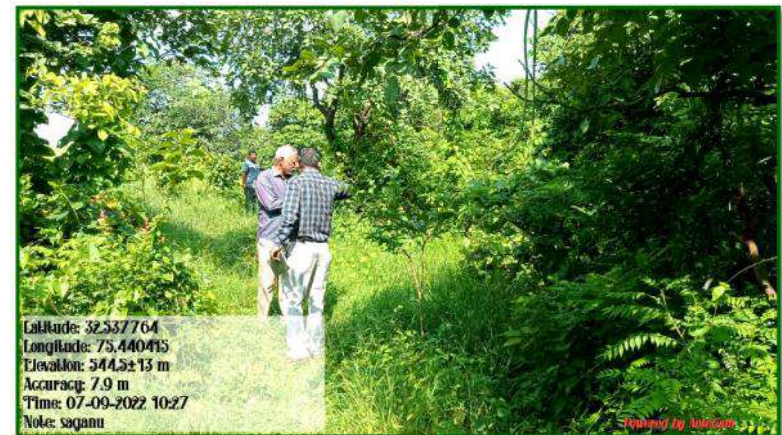
Khag, Budgam, DSCO



18K, Chamoti, Kishtwar DSCO



Magar Khad, Kathua DSCO



Saganu, Jammu DSCO



22 Nashri, NH1A Batote



70, udh, NH1A, Udhampur



55 Bnl, NH1A, Batote



14bt, NH1A, Batote



Shopian Agrostology



Thakrai-II, Doda Agrostology



Simbelhar, Jammu Agrostology



Chirik, Jammu Agrostology



18U, Seen Thakran, Jammu MFP



20 Kandi, Jammu MFP



Kandharnu, Kathua, Jammu MFP



38 KDR, Chowki Chourab, Jammu MFP



Bantalab, Jammu Urban Forestry



University, Jammu Urban Forestry



Sainik Colony, Jammu Urban Forestry



Mahamaya, Part-II, Jammu Urban Forestry



35 K, Gogerpatti, WUCMA, Kashmir



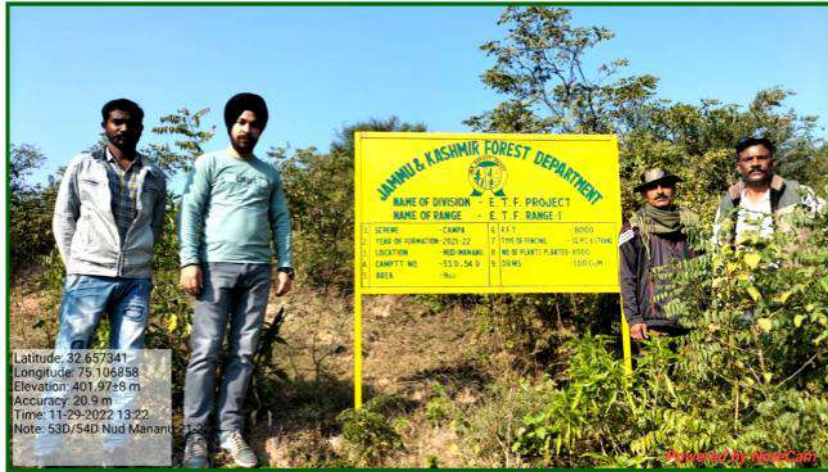
35 K, Kandi, WUCMA, Kashmir



18, Rajwar, Planning & Publicity



47b, Chontibag, Planning & Publicity



53D Nud Mananu, ETF



56D, Nud Mananu, ETF



Hut Nursery, Basohli Territorial



Challan Nursery, Billawar Territorial





Range office cum residence, Manda, Jammu WL



Jasrota office cum residence, Jammu WL



Watch Tower, Tawi Eco Park, Jammu



Gas cylinder, Kishtwar WL

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Submitted by:



**AFC India Limited**

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Corporate/Head Office: I-103, 3<sup>rd</sup> Floor, Kirti Nagar, New Delhi - 110015

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