MONITORING & EVALUATION REPORT

Of

Works Carried Out During 2011-12

In

FARIDABAD DISTRICT OF HARYANA

UNDER

STATE CAMPA SCHEME

Submitted to: Conservator of Forest cum Nodal Officer (Forest conservation) State CAMPA, Haryana Department of Forest, Govt. of Haryana Van Bhawan, Sector-6 Panchkula, Haryana



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March 2014

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Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Faridabad district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report partains to the works carried out under the State CAMPA Scheme in Faridabad district during the year 2011-12 by the two implementing authorities, viz., DFO (T) Faridabad and DFO (CFP) Faridabad.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Faridabad only. But the physical targets under the NPV component were achieved by both the implementing authorities.

During the year 2011-12, a physical target of plantation of 41.69 RKM, 20.00 Ha and 25 TGs was achieved against the allotted target of 41.69 RKM, 20.00 Ha and 25 TGs resulting in 100% achievement.

To assess the performance during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

Observations

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- The works of both the components were of good quality.
- The average survival of plantations was 57.69%.
- c. Out of 10 sites of CA plantations, the survival % was Excellent (>79%) at 4 sites, Very Good (70-79%) at 1 site, Good (60-69%) at 2 sites and poor (<50%) at 3 sites.
- d. Out of 3 sites of NPV plantations visited, the survival % was Excellent (>79%) at 1 site, Very Good (70-79%) at 1 site and poor (<50%) at 1 site.</p>
- c. The main shortcomings were:
 - i. Use of small sized plants instead of tall plants.
 - Approved design of TGs was not followed.
 - ili. Under planting, poor protection and poor maintenance
 - iv. In most of the sites of CA component, the area of plantations was < that and it is very difficult for a forest guard to protect and maintain such small plantations.

Constraints faced by the implementing authorities

As told, the constraints faced by the implementing authorities were:

1. Shortage of staff.

Very high biotic pressure.

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Very high pressure of development activities.

Suggestions for further improvement

- 1. The NAP project should be continued because it is helping in:
 - i. Enhancing the quality of degraded forcess,
 - il. Improving the tree cover in non-forest lands, and
 - iii. Mitigating the changing climate.
- 2. Under planting should be avoided.
- 3. Tail plants of 2m in height should be planted in tail plants model.
- 4. Protection should be improved.
- 5. Barbed wire/ tree guards should be used for the protection of plantations.
- 6. Funds for the maintenance of Tree Groves (TGs) must be provided in the 3^{rd} year.
- Land bank should be identified and all plantations of <1 ha area should be done at this land bank.

Grading (On a Scale of 1 to 10)

Quantitative Aspects	Physical	9

Qualitative Aspects	I.	Plantations	
		Quality	5
		Maintenance	4
		Sustainability	4

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(5 to <8)	(3 to <5)	(<3)
	-	Very Good	-	-

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GENERAL

- A.1 Name of District : Faridabad
- A.2 Name of State : Haryana

A.3 Name of Scheme

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State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt of India had issued guidelines on 2^{ed} July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- Compensatory afforestation;
- d. Environmental services, which include:-
 - Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - iii. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.
- Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

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The Governing Body of Haryana consists of the following:

1.	Chief Minister, Haryana	Chairperson
2.	Minister of Forests, Haryana	Member
3.	Minister of Finance, Haryana	Member
4.	Chief Secretary, Haryana	Member
5.	Principal Secretary (Finance), Haryana	Member
6.	Principal Chief Conservator of Forests, Haryana	Member
7.	Chief Wildlife Warden, Haryana	Member
8.	Principal Secretary (Forests), Haryana	Momber Secretary
A.5.3.3	Steering Committee	_
The St	cering Committee of Haryana consists of the following:	
I.	Chief Secretary, Haryana	Chairperson
2.	Principal Secretary (Finance), Haryana	Member
3.	Principal Secretary (Forests), Haryana	Member
4.	Chief Wildlife Warden, Haryana	Member
5.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member
6.	Representative of the Ministry of Environment and Furests,	Member
	Government of India	
7.	Two eminent NGOs nominated by the state Government	Members
8.	Principal Chief Conservator of Forests	Member Secretary
A.5.3.3	Executive Committee	
The Ex	ecutive Committee of Haryana consists of the following:	
1.	Principal Chief Conservator of Forests, Haryana	Chairperson
2.	Addl. Principal Chief Conservator of Forests (Forestry)	Member
3.	Chief Wildlife Warden, Haryana	Member
4.	Chief Conservator of Forests (Protection-I)	Member
5.	Chief Conservator of Forests (Protection-II)	Member
б.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
	Not below the rank of Addl. Secretary	Member
B .	Two eminent NGOs nominated by the state Government	Members
	for a period of 2 years at time who shall be eligible for re-ne	omination
9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Momber Secretary

A.5.4 Meetings

A.5.4.1 Governing Body

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The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1^{st} meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{sd} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2^{ed} meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1st meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1* meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Faridabad district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Faridabad district of Haryana State by the two implementing authorities, viz. DFO (T) Faridabad and DFO (CFP) Faridabad.

QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Faridabad district of Haryana State by the two implementing authorities, viz. DFO (T) Faridabad and DFO (CFP) Faridabad.

B.1 Physical Targets

B.1.1 Plantation

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ii 2 The physical targets of plantations allotted and achieved in Faridabad district during the year 2011-12 under the State CAMPA scheme were as given below:

	Net	P	hysical Targe	ts		
Component	Sub-component	Model	Implementing Authority	Fixed	Achieved	Ųındit
Compensatory Afforestation (CA)	-	Tali Pianta	DFO (T) Faridabad	21,69	21.69	RKM
Not Present Value (NPV)	Afforestation and management	Assisted Natural Regeneration]	20.00	20.00	Ha
	forest lands	Plantation of tail plants in linear forests		20.00	20.00	RKM
	Afforestation in community and public lands	Plantation of Trea Grooves (TGs)	DFO (CFP) Faridabad	25.0 0	25.00	Na.
	Т	otal		41.69	41.69	RKM
				20.00	20.00	Ha
				25.00	25.00	Na

Above table indicates that physical target of plantation of 41.69 RKM, 20.00 Ha and 25 TGs was achieved against the allotted target of 41.69 RKM, 20.00 Ha and 25 TGs resulting in 100% achievement.

QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out under the State CAMPA Scheme in Faridabad district during the year 2011-12 by the two implementing authorities, viz., DFO (T) Faridabad and DFO (CFP) Faridabad.

State CAMPA scheme has two components, viz.; Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Faridabad only. But the physical targets under the NPV component were achieved by both the implementing authorities.

During the year 2011-12, a physical target of plantation of 41.69 RKM, 20.00 Ha and 25 TGs was achieved against the allotted target of 41.69 RKM, 20.00 Ha and 25 TGs resulting in 100% achievement.

To assess the performance during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

C.1 Compensatory Afforestation

C.1.1 Tell Plants Model

In this model, plantations were raised by the DFO (T) Feridabad by achieving a target of 21.69 RKM at 10 sites. All the 10 sites were visited during March 2014 and the results of M&E were as given below:

Suitability of Land afforested

Lands of <] ha in area were not suitable for raising, protection and maintenance of plantation.

Suitability of Species planted

The species planted were suitable for the areas.

c. Size of plants planted

Plants of small size were planted instead of tall plants.

d. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Pit planting technique. But this technique was not so effective due to soil compection.

e. Survival of Plants

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Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % errived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 57%.

Out of 10 sites of CA plantations, the survival % was Excellent (>79%) at 4 sites, Very Good (70-79%) at 1 site, Good (60-69%) at 2 sites and poor (<50%) at 3 sites.

The main shortcomings were use of small sized plants in the name of tall plants, poor protection and under planting.

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in Annexure-a.

C.2 Net Present Value

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In this component, works were carried out in Faridabad district under the following 2 subcomponents:

- i. Afforestation and management of Government forest lands
- Afforestation in community and public lands

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out by DFO (T) Faridabad under the following 2 models:

- Assisted Natural Regeneration
- ii. Tall plants plantation in linear forests

Plantations of above 2 models were visited during Merch 2014 and the results of M&E were as given below:

C.2.1.1 Assisted Natural Regeneration

In this model, plantation works were carried out by the DFO (T) Faridabad by achieving a target of 20 ha at 1 site. M&E was carried out by visiting 1 site resulting in M&E of 100% sites and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

e. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Average survival of plantations was Poor (30%).

Detail of survival % and average beight and girth of plantations was as given in Amaccareb.

C.2.1.2 Tall Plants Plantation

In this model, plantations were raised by the DFO (T) Faridabad by achieving a target of 20 RKM at 1 site. M&E was carried out by visiting 1 site resulting in M&E of 100% sites and the results of M&E were as given below:

Suitability of Land afforested.

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was Very Good (70%).

The main shortcoming was use of small sized plants instead of tall plants and poor maintenance and protection.

Detail of survival % and average height and girth of plamations was as given in Annexureb.

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out by the DFO (CFP) Faridabad under the model Plantation of Tree Groove (TG) by achieving a target of 25 TGs in 3 villages.

M&E was carried out by visiting 10 TGs of 1 village resulting in M&E of 40% TGs and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation but raising of 10 TGs at 1 site of 1 village was not desirable.

b. Suitability of Species planted

The species planted were suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique,

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Survival of plantations was Excellent (80%).

The survival %, average height and average girth, etc. were as given in Annexwee-b.

C.3 Constraints faced by Implementing Authorities

As told, the constraints faced by the implementing authorities were:

1. Shortage of staff.

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- Very high biotic pressure.
- Very high pressure of development activities.

C.4 Suggestions for further improvement

- 1. The NAP project should be continued because it is helping in:
 - i. Enhancing the quality of degraded forests,
 - ii. Improving the tree cover in non-forest lands, and
 - ili. Mitigating the changing dimate.
- 2. Under planting should be avoided.
- 3. Tail plants of 2m in beight should be planted in tail plants model.
- 4. Protection should be improved.

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- 5. Barbed wire/ tree guards should be used for the protection of plantations.
- 6. Funds for the maintenance of Tree Groves (TGs) must be provided for 2 years.
- Land bank should be identified and all plantations of <i ha area should be done at this land bank.

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Annextare-a Assessment of CA Plantations Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60% - 69%, <u>Average 50% 59%, Poor<50%]</u>

Sr.		Name of		Target	Unit	Specter	Results of M&E						
rwa.	Site	Implementing Authority	Range			Penter	Longitades (Basi)	Letitudes (North)	Ay. Secretea I (%)	Av. Height (m)	Av. Girth (cab)	Grading	Remarka
ТаШІ	Plants Plantation	·											
I	Ballabgarh Sohna road km 16-17 L/Side	DF Ö (T) Feridahad	Ballabgarb	0.08	RKM	Papri	77 ⁴ 11'09.0'*	28 [*] 19'31.9''	80 /	1.0	NM	Excellent	Plants of small size were planted instead of tall plants.
2	Ballabgarh Chhainsa road km 10- 18 L&R	-dip-	-06-	0.08	RKM	Papri	77°26'03.9''	28 ⁹ 17'0.08''	100 /	1.0	NM	Excellent	· -do-
3	Badkhal Surajkund road km 2-6 1/side	-do-	Faridabad	0.07	RKM	Papri	77 ⁴ 17'03.6''	25 ⁰ 26'22_5''	80 /	1.7	мм	Excellent	-do-
4	Kheri Bhupani road	-do-	-do-	0.50	RKM	Papri	77 ⁴ 22'50.4''	28 ⁰ 25"24.4"	60 /	1.0	NM	Good	-do- Plants barlly damaged
5	Faridabad Tigaon road km I-2 L/side	-de-	-do-	0.23	RKM	Раргі	77 ⁹ 20'04.4''	28 ⁰ 24'47.0''	Ð	2.0	NM	Poor	-do-
6	Faridabad Tigson road Ion 4-5 R/aldo	-360-	~dc~	0.08	RKM	-	77 ⁹ 21'13.3"	28°23`51.7"	0	G	0	Poor	Plantation Solied

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7	DM read to old Faridabad road km 0-12 L/side	-90-	-do-	0.04	rkm	Papri	77 ⁸ 18'45.5"	28 ⁸ 25'58.2"	60	2.0	NM	Good	Plants of small size were planted instead of tail plants.
\$	Furidabad Gurgaon road km 7-8 L/side	-do-	-do-	0.97	якм	Papri	77 ⁹ 12'13.4''	28 [*] 24'30.3''	Ð	0	NM	Peer	Plantation failed
9	Gurgann Feeder RD 0- 30 L&R	-do-	-do-	19,52	RKM	Amaltas, Papri	77 ⁴ 19'26.1''	2 5° 26'23.3"	73	12	NM	V. Qood	Plants of small size were planted instead of tall plants. Under planting
10	Gurgaon Feeder RD 27-30 R/side	-40-	-do-	0.12	RKM	Peprt	77 ⁰ 19'31 <i>A</i> ''	28 [*] 26'10.6"	95	2.0	NM	Excellent	-da
		Total		21.69	RKM								

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Annexure-b

Assessment of NPV Plantations

Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Poor<50%)

Sr. No		Numa of		Tanget Achiever	Ualt	Species	Remits of M&E						
	Site	Implementing Authority	Range			,	Longitudea (East)	Latitodes (North)	Av, Survival	Av. Height	Av. Ginti	Grading	Remarka
									(%)	(m)	(cm)		
A	Afforestation	and manager	nent of Gov	vernment	forest	anda							
a	Assisted Natural Regeneration												
I	Faridabad Gurgaon road km 0-7	DFO (T) Paridabad	Faridabad	20	Ha	Рылі	77 ⁰ 13'35,6''	28*24`42.2''	Ð	1.0	NM	Poor	-
4	Tall Plants Plant	ation					-				•		
I	Manav Rachana T point to Palli crusher zono	DFO (T) Faridabad	Faridabad.	20	RKM	Papri, Siris	77°16'47.6"	28 ⁴ 26'47_5''	70	11	мм	V. Good	Plants of small size were planted instead of tall plants
В	Afforestation	ia community	/ And publi	c lands									
a	Tres Groves												
I	Shiv Temple Narhawali	DFO (CFP) Faridabad	Faciclabad	10	No.	Pipal, Arjun, Jamm, Shishan, Papri, Neen, etc.	•	-	80	3.0	10	Excellent	Approved design of TGs not followed.

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1 - DFO (T) Faridabad - CA - Tall Plants



Badkhal Surajkund road km 2-6 L/side

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Gurgaon Feeder RD 0-30 L&R



Gurgson Feeder RD 27-30 R/side

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DM road to old Paridabad road km 0-12 L/side



Ballabgarh Sohna road ion 16-17 L/Side



Ballabgarh Chhainsa road km 10-18 L&R





Faridabad Gurgaon road km 0-7

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Manav Rachana T point to Palli crusher zone

4 - DFO (CFP) Faridabad - NPV - TGa



Shiv Temple Nathewall

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Submitted to: Conservator of Forest cum Nodal Officer (Forest conservation) State CAMPA, Naryana Department of Forest, Govt. of Haryana Van Bhawan, Sector-6 Panchicula, Haryana



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Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2^{nd} July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Gurgaon district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Gurgaon district during the year 2011-12 by the two implementing authorities, viz., DFO (T) Gurgaon and DFO (CFP) Faridabad.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Gurgaon only. But the physical targets under the NPV component were achieved by DFO (CFP) Faridabad.

During the year 2011-12, a physical target of 105.59 RKM and 50 TGs of plantations was achieved against the fixed target of 105.59 RKM and 50 TGs resulting in >100% achievement.

To assess the plantation works during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

Observations

- The plantation works of both the components were of good quality.
- The average survival of plantations was 69.44%.
- c. Out of 17 sites of CA plantations visited, the survival % was Excellent (>79%) at 2 sites, Very Good (70-79%) at 7 sites, Good (60-69%) at 7 sites and average (50-59%) at 1 (Annexure a).
- The survival % of NPV plantation was Very Good (Annexure b).
- e. The main shortcomings in plantation works were:
 - Use of small stred plants in the tall plants model.
 - ii. Under planting.
 - III. No fencing of plants in the tall plants model.
 - Planting of 49 TGs at the same site without following the approved design of TGs.

Constraints faced by the implementing authorities

As told, the constraints faced by the implementing authorities were:

Shortage of staff,

:

- High biotic pressure.
- c. No fund for the maintenance of TGs in the 3rd year of planting.

Suggestions for further improvement

- 1. The NAP project should be continued because it is helping in:
 - Enhancing the quality of degraded forests,
 - H. Improving the tree cover in non-forest lands, and
 - iii. Miligating the changing climate.
- Physical and financial targets must be conveyed in time.
- Tall plants of 2m in height should be planted in tall plants model.
- 4. Barbed wire/ tree guards should be used for the protection of plantations raised under the tall plants model.
- 5. Funds for the maintenance of Tree Groves (TGs) must be provided for 3rd year of planting.
- Field staff should be posted as per cadre alloiment.

Grading

(On a Scale of 1 to 10)

Quantitative Aspects	Physical	9

Qualitative Aspects	i.	Plantations					
		Quality	6				
		Maintenance	5				
		Sustainability	5				

Overall Grading of the	Outstanding	Very Good	Good	Poor	
Project	(8 to 10)	(5 to <8)	(3 to <5)	(<3)	
		Very Good	-	-	

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Chapter A

GENERAL

- A.I Name of District : Gurgaon
- A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2rd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Alms and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- c. Compensatory afforestation;
- d. Environmental services, which include:-
 - Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - iii. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - iv. Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.
- Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

i.	Chief Minister, Haryana	Chairperson
2,	Minister of Forests, Heryana	Member
3,	Minister of Finance, Haryana	Member
4,	Chief Secretary, Haryana	Member
5.	Principal Secretary (Finance), Haryana	Member
б.	Principal Chief Conservator of Forests, Haryana	Momber
7.	Chief Wildlife Warden, Haryana	Member
8.	Principal Secretary (Forests), Harvana	Momber Secretary
A.5.3.	2 Steering Committee	,,
The S	zering Committee of Harvana consists of the following:	
1.	Chief Secretary, Harvana	Chairnerson
2.	Principal Secretary (Finance), Haryana	Member
3.	Principal Secretary (Forests), Haryana	Member
4.	Chief Wildlife Warden, Haryana	Member
5.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member
6.	Representative of the Ministry of Environment and Forests,	Member
	Government of India	
7.	Two eminent NGOs nominated by the state Government	Members
8.	Principal Chief Conservator of Forests	Member Secretary
A.5.3.	3 Executive Committee	
The E:	coutive Committee of Haryana consists of the following:	
1.	Principal Chief Conservator of Forests, Haryana	Chairperson
2.	Addl. Principal Chief Conservator of Forests (Forestry)	Member
3.	Chief Wildlife Warden, Haryana	Member
4.	Chief Conservator of Forests (Protection-1)	Member
5.	Chief Conservator of Forests (Protection-II)	Member
6.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
	Not below the rank of Addl. Secretary	Momber
8.	Two eminent NGOs nominated by the state Government	Members
	for a period of 2 years at time who shall be eligible for re-no	mination
9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary
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A.5.4 Meetings

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A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held,

A.5.4.2 Steering Committee

The 1^{st} meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{ad} June, 2010 at 3.30 PM under the Chaitpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2nd meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana, In this meeting, the action taken report on 1^m meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Gurgson district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in Gurgaon district of Haryana State by the two implementing authorities, viz. DFO (T) Gurgaon and DFO (CFP) Faridabed.

QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the plantation works done during the year 2011-12 in Falwal district of Haryana State by the two implementing authorities, viz. DFO (T) Gurgaon and DFO (CFP) Faridabad.

B.1 Physical Targets

B.1.1 Plantation

The physical targets of plantations allotted and achieved in Gurgaon district during the year 2011-12 under the State CAMPA scheme were as given below:

	Na	Physical Targets				
Component	Sub-component	Model	Implementing Authority	Fixed	Achieved	Unit
Compensatory Afforestation (CA)	-	Tall Plants	DFO (T) Gurgaon	70.39	70.39	RKM
		Ridge Plantation		35.20	35.20	RKM
Nat Present Value (NPV)	Affectstation in community and public lands	Plantation of Tree Grooves (TOs)	DFO (CFP) Faridabad	50.00	50.00	No.
	Т	105,59	105.59	RKM		
				50.00	50.00	No

Above table indicates that during the year 2011-12, a physical target of 105.59 RKM and 50 TGs of plantations was achieved against the fixed target of 105.59 RKM and 50 TGs resulting in >100% achievement.

QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the plantation works done during the year 2011-12 in Gurgaon district of Haryana State by the two implementing authorities, viz. DFO (T) Gurgaon and DFO (CFP) Faridabad.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Gurgaon only. But the physical targets under the NPV component were achieved by DFO (CFP) Faridabad.

During the year 2011-12, a physical target of 105.59 RKM and 50 TGs of plantation was achieved against the fixed target of 105.59 RKM and 50 TGs resulting in >100% achievement.

To assess the performance during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

C.1 Compensatory Afforestation

C.1.1 Tall Plants Model

In this model, plantations were raised by the DFO (T) Gurgaon by achieving a larget of 70.39 RKM at 12 sites. The 11 sites were visited during March 2014 and the results of M&E were as given below:

Suitability of Land afforcated.

Lands were suitable for raising plantations.

Suitability of Species planted

The species planted were suitable for the area.

Techniques of Planting Used and their Effectiveness

The technique of planting used was the Pit planting technique. But this technique was not so effective due to soil compaction.

d. Survival of Planta

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 67.45%.

Out of 11 sites of Tall plants model of CA component, the survival % was Very Good (70-79%) at 4 sites and Good (60-69%) at 7 sites.

The main shortcomings were use of small sized plants in the name of tall plants.

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in Assessmenta.

C.1.2 Ridge Model

In this model, plantations were raised by the DFO (T) Gurgaon by achieving a target of 35.20 RKM at 6 sites. All the 6 sites were visited during March 2014 and the results of M&E were as given below:

a. Sultability of Land efforested

Lands were suitable for raising plantations.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of plenting used was the Ridge planting technique. This technique is very effective in raising successful plantation in low lying areas.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extant of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 72.17%.

Out of 6 sites of Ridge model of CA component, the survival % was Excellent (>79%) at 2 sites, Very Good (70-79%) at 3 sites and average (50-59%) at 1 site.

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in *Annexure-a*.

C.2 Not Present Value

In this component, works were carried out in Gurgaon district under the sub-components - Afforestation in community and public lands

C.2.1 Afforestation in community and public lands

In this sub-component, works were carried out by the DFO (CFP) Faridabad under the model Plantation of Tree Groove (TG) by achieving a target of 50 TGs in 2 villages.

M&E was carried out by visiting 49 TGs of 1 village resulting in M&E of 98% TGs and 50% villages and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation but planting of 49 TGs at 1 site of a village was not desirable.

b. Suitability of Species planted

The species planted were suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. This technique was not so effective due to soil compaction. For early establishment of plantation, the Auger Hole planting technique should be used.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Survival of plantations was Excellent (75%).

The survival %, average height and average girth, etc. were as given in Annexare-b.

C.3 Constraints faced by Implementing Authorities

As told, the constraints faced by the implementing authorities were:

- Shortage of staff.
- b. High biotic pressure.
- c. No fund for the maintenance of TGs in the 3rd year of planting.
- C.4 Suggestions of Implementing Authorities for Further Improvement
- i. Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- ii. Norms, especially for earth work, must be increased.
- iii. Staff must be provided as per Cadre Allotment.
- Funds must be provided for the maintenance of TOs for 3 years.

C.5 Suggestions of Evaluator

- The NAP project should be continued because it is helping in:
 - Enhancing the quality of degraded forests,
 - Improving the tree cover in non-forest lands, and
 - c. Mitigating the changing climate,
- Physical and financial targets must be conveyed in time,
- 3. Tail plants of 2m in height should be planted in tail plants model.
- Barbed wire/ tree guards should be used for the protection of plantations reised under the tall plants model.
- Funds for the maintenance of Tree Groves (TGs) must be provided for 3rd year of planting.
- Field staff should be posted as per cadre allotment.

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Annexure-a Assessment of CA Plantations Orading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60%- 69%, Average 50%- 59%, Poor<50441

Sr.	Name of			Target	Ueit	Species	Results of M&E							
IND.	Site	Inspicementin g Authority	Range	ed	i	pfumted.	Longliudes (East)	Latitudes (North)	Av. Surviva I (%)	Av. Height (m)	Av. Girth (cm)	Grading	Remarks	
۸.	Tall Plants Plant	tatico			L	L	·	L	1	<u> </u>		L	L	
I	Harchandpur Distributory RD 0-tail L&R	DFO (T) Gurgaon	Sohna	21.00	RKM	Bakain, Papri	77°9°27.9''	28 ⁴ 16'3737''	67	- 0.7	NM	Good	Small sized plants were planted instead of tall plants.	
2	PSR road km 17-25 L&R	-40-	-do-	t 0.00	RKM	Shisham, Atjuo, Lesaura	77*06'42.5''	28 ⁰ 14'01.0''	65	1.5	NM	Good	do	
3	Garhi-wazidpur Hurchandpur app. Road km D-5 L&R	-dio-	-da-	4.00	RKM	Bakain, Papri	77 °06 °06.6'*	27*17'51.1**	76	2.0	NM	V. Good	-da-	
4	Sohna Dhani app. Road kro 0-5 L&R	-do-	~do-	4.90	RKM	Papri, Bakain	77°03'37.4''	28°16"27.7"	60	1.4	NM	Good	-40-	
5	Dinmeia Berka app. Read km 0-3 L&R	-do -	-do-	2.00	RKM	Papri	77°04*2.6**	28 [*] 17'24.1''	62	1.5	NM	Good	-dio-	
6	GA road km 26-28 L&R	-do-	-do-	1.5 0	RKM	Bakain, Papri	77°03`56.4''	28 ⁰ I3'44.4''	68	1.5	NM	Good	-do-	
7	Soine Baiuda Kharoda road km 0-5 L&R	-do-	-do-	4.00	RKM	Bakain	77*05'08.7"	25°14'58.2"	71	3.0	12	Y. Good	Under planting	
Şr.		Name of		Target	t Vatt	t Species	Results of M&E							
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110.	Ske	Implementin g Authority	• Range	ed		planted	Longitudes (Kast)	Lafitudes (North)	Av. Sarviva L (%)	Av. Height (m)	Av. Girta (cm)	Grading	Renae iq.	
8	PSR road len 25-32 Lahr	-do-	-40-	2.50	RKM	Baksin, Papri, Khairi	77*06*04.0**	28°14'11,9"	64	2,0	NM	Good	Small sized plants were planted instead of tall plants.	
10	Haili Mandi Kulana roed km 4-8 L/side	-do-	Enili Mandi	2.00	RKM	Bakain, Shisham	76°44*52.7**	28°12'29.0''	70	2.3	8	V. Good	-do-	
11	Mau Malpura road 0-2 L&R	-da-	Halli Mandi	2.00	RKM	Bakain, Pupri, Shiaham	75 ⁴ 45"28.6"	28 ⁴ 14'20.0''	67	2.0	NM	Good	-40-	
12	Shersahsuri Marg km 0-4 LåzR	-do-	Haili Maudi	6.00	RKM	Bakain, Neem, Shisham	76*46*23.8**	28°19'09.0''	72	2.3	Iů	V. Good	-do-	
		Total		70.39	RKM									
₿,	Ridge Plantation								· · · · ·					
I	Shersahauri Marg km 3-4 L&R	DPO (T) Gurgaon	Helli Mandi	1.00	RKM	Bakain, Papri	76°45'21.8''	28 ⁹ 18'12.7''	80	3.0	15	Excellent	-	
2	Shersahauri Marg, km 9-10 L&R	-do-	Haili Mendi	0.50	RKM	9akain	76042'20.0'	•	50	1.2	мм	Average	Pour protection	
3	GA road km 16-19 Lakk	-do-	Sohna	5.8 2	RKM	Papri, Frash	77"4"08.0"	28*19'36.2''	76	2.0	NM	V. Good	-	
4	Wazidpur Famknagar road km 12-24	-do-	Gurgaon	12.38	RKM	Bakain, Pepri,	76°54'16.9"	2 8°25'17.3''	80	3.0	10	Excellent	-	

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Şe.		Name of		Turget	Unit	Species			Ra	ntits of M	æ e		
	Site	Implementia g Anthority	Range	ed	i	puentee.	Longitudes (East)	Latitudes (North)	Av. Surviva 1 (%)	Av. Heigh((m)	Av. Girth (cm)	ന്നെയ്തു	Remarks
	LÆR		1	<u> </u>		Ailanthus				! −			
5	Sultenpur Farukimagar road km 17-20 L&R	-40-	Gurgaco	4.50	RKM	Papri, Shisham, Ailanthus	76 ⁴ 50°40.9"	28°27'15.7"	72	3.0	17	V. Good	-
6	Gargaon Seitempur Farukhnagar road km 5-17 L&R	-do-	Gurgaon	8.00	RKM	Bakain, Papri, Kikar, Ailantha,	76°52'41.3''	2 5° 27'55.2"	75	2.5	15	V. Gapd	<u>·</u>
	· · · · · · · · · · · · · · · · · · ·	Total		39.20	RKM				•				
	6	. Total		105.59	RKM					-			

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Annexure-b

Assessment of NPV Plantations Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60% - 69%, Average 50% -59%, Poor<50%]

Sr. No.	Name of		Target	Uat	Species	Remits of MAE								
	Site	implementin g Authority	Range	d		parate	Longitudes (Bast)	Latitudes (North)	Ay, Sarviva 1 (%)	Ay. Height (m)	Av. Girth (cm)	Gradiag	Remarks	
A	Afforestation in community and public lands													
	Tres Groves										_			
1	Bhondsi Police Training Cemer	DFO (CFP) Faridabed	Solma	49	No.	Pipal, Jamun, Neam, Pilkhan, etc.	77 ⁸ 05'43 <u>-</u> 5''	28 ⁶ 22'30.1"	75	I. 3	NM	V. Good	Approved darign of TGs oot followed.	

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PSR soed km 17-25 L&R

Annexure-c

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Sohna Baluda Kharoda road km 0-5 L&R

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Shersahsuri Marg km 3-4 L&R

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Haili Mandi Kulana road km 4-8 L/side

Mau Malpura road 0-2 L&R



Bhondsi Police Training Center

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Monitoring & Evaluation Report

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Of

Works Carried Out During 2011-12

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Mahendergarh District of Haryana

Under

State CAMPA Scheme

February 2014

Monitoring & Evaluation Report

Of

Works Carried Out During 2011-12

In

Mahendergarh District of Haryana

Under

State CAMPA Scheme

February 2014

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	b. Assessment of NPV Plantations	18
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Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Mahendergarh district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Mahendergarh district during the year 2011-12 by the two implementing authorities, viz., DFO (T) Mahendergarh and DFO (CFP) Rewart.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Mahendergarh only. But the physical targets under the NPV component were achieved by both the implementing authorities, viz., DFO (T) Mahendergarh and DFO (CFP) Rewart.

During the year 2011-12, a physical target of 126.73 RKM, 30 Ha, 40 TGs, 1 building and water harvesting structures was achieved against the fixed target of 101.02 RKM, 20 Ha, 40 TGs, 1 building and water harvesting structures resulting in >100% achievement.

To assess the performance during February 2014, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

Observations

- a. In most of the sites, the area of plantations was <1ha and it is not possible for a forest guard to protect and maintain such small plantations.</p>
- b. The works of both the components were of good quality.
- c. The average survival of plantations was 63.49%.
- d. Out of 31 sites of CA plantations, the survival % was Excellent (>79%) at 5 sites, Very Good (70-79%) at 8 sites, Good (60-69%) at 7 sites, average (50-59%) at 4 sites and poor (<50%) at 7 sites.</p>
- e. Out of 8 sites of NPV plantations visited, the survival % was Excellent (>79%) at 3 sites, Very Good (70-79%) at 2 sites, Good (60-69%) at 2 sites and poor (<50%) at 1 site.
- f. Most of the plantations were affected by frost.
- g. The main shortcomings in forest land plantations were:
 - Use of small sized plants instead of tall plants.
 - ii. Under planting.
 - lil. Poor protection

Constraints faced by the implementing authorities

As told, the constraints faced by the implementing authorities were:

- Delay in allotment of physical and financial targets,
- Non-availability of funds for the maintenance of TGs.
- Non-availability of additional funds for fighting against the drought.
- Non-availability of additional funds for the maintenance of frost-affected plantations.

Surgestions for further improvement

- The NAP project should be continued because it is helping in:
 - Enhancing the quality of degraded forests.
 - li. Improving the tree cover in non-forest lands, and
 - III. Mitigating the changing climate.
- Physical and financial targets must be conveyed in time.
- Under planting should be stopped.
- Tall plants of 2m in height should be planted in tall plants model.
- 5. Protection should be improved.
- Barbed wire/ tree guards should be used for the protection of plantations as sufficient funds were allotted for fencing.
- 7. Funds for the maintenance of Tree Groves (TGs) must be provided for 3 years.
- 8. Additional funds should be provided for the maintenance of frost affected plantations.
- Land bank should be identified and all plantations of <1 ha area should be done at this land bank.

Grading

(On a Scale of 1 to 10)

Quantitative Aspects	Physical	9

Qualitative Aspects	1.	Plantations						
·		Quality	6					
		Maintenance	5					
		Sustainability	5					
	2	Other Works						
•		Quality						
		Maintenance	8					
		Sustainability	7					

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(5 to <8)	(3to.<5)	(<3)
·. ·.		Very Good	-	

Chapter A

GENERAL

- A.1 Name of District : Mahendergath
- A.2 Name of State _____: Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

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A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
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 - iii. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - iv. Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.

e. Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

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3	Minister of Finance, Haryana	Member
4	Chief Secretary, Haryana	Member
5	Principal Secretary (Finance), Harvana	Marahaa
6	Principal Chief Conservator of Porests Harmon	Member
7	. Chief Wildlife Warden Hermon	Momber
R	Principal Sourcetary (Research) II	Member
* 5 7	2 Standard Course to	Member Secretary
74.363 77 4		
I ne s	oreering Committee of Haryana consists of the following:	
1.	Chief Secretary, Haryana	Chairperson
2.	Principal Secretary (Finance), Haryana	Member
3.	Principal Secretary (Forests), Haryana	Member
4.	Chief Wildlife Warden, Haryana	Momber
5.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member
6,	Representative of the Ministry of Environment and Forest	6. Member
_	Government of India	
7.	Two eminent NGOs nominated by the state Government	Members
8.	Principal Chief Conservator of Foresta	Member Secretary
A.5.3.	3 Executive Committee	
The E	xecutive Committee of Haryana consists of the following:	
1.	Principal Chief Conservator of Forests, Haryana	Chairperson
2.	Addl. Principal Chief Conservator of Forests (Forestry)	Member
З.	Chief Wildlife Warden, Haryana	Member
4,	Chief Conservator of Forests (Protection-1)	Member
5.	Chief Conservator of Forests (Protection-II)	Member
6	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
	Not below the rank of Addl. Secretary	Member
8.	Two eminent NGOs nominated by the state Government	Members
	for a period of 2 years at time who shall be eligible for re-n	mination
9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary

A.5.4 Meetings

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1st meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{nd} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2^{n4} meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Chilati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1^{st} meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The I[®] meeting of the Executive Committee was held on 04.05.2010

The 2rd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Mahendergarh district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Mahendergarh district of Haryana State by the two implementing authorities, viz. DFO (T) Mahendergarh and DFO (CFP) Rewari.

QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Mahendergarh district of Haryana State by the two implementing authorities, viz. DFO (T) Mahendergarh and DFO (CFP) Rewari.

B.1 Physical Targets

B.1.1 Plantation

The physical achievement in Mahendergath district during the year 2011-12 under the State CAMPA scheme by the DFO (T) Mahendergath and DFO (CFP) Rewari is as given below:

	Na		Pi	ysical Targe	tı 🗌	
Component	Sub-component	Model	Jupicmenting Authority	Fixed	Achieved	Unit
Compensatory Afforestation (CA)	-	Tall Plants	DFO (T) Mahendergarh	91.02	106,73	RKM
Net Present Value (NPV)	Afforestation and	Assisted Natural Regeneration		20.00	30.00	Ha
	Government forest lands	Plantation of tall plants in linear foreats		10.00	10.00	RКМ
-	Afforestation in community and public lands	Plantation of Tree Grooves (TGs)	DFO (CFP) Rewari	40.00	40.00	No.
	Т	otel		101.0 2	126.73	rkm
				20.00	30.00	Ha
		,		40.00	40.00	No

Above table indicates that during the year 2011-12, a physical target of 126.73 RKM, 30 Ha and 40 TGs was achieved against the fixed target of 101.02 RKM, 20 Ha and 40 TGs resulting in >100% achievement.

B.1.2 Other Works

Physical achievement of other works by the DFO (T) Mahendergerh under the NPV component is as given below:

- Construction of one building (Guard Hut) for the frontline staff.
- Construction of water harvesting structures.

QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Mahendergarh district of Haryana State by the two implementing authorities, viz. DFO (T) Mahendergarh and DFO (CFP) Rewari.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Mahendergarh only. But the physical targets under the NPV component were achieved by the two implementing authorities, viz., DFO (T) Mahendergarh and DFO (CFP) Rewari.

During the year 2011-12, a physical target of 126.73 RKM, 30 Ha, 40 TGs, 1 building and water harvesting structures was achieved against the fixed target of 101.02 RKM, 20 Ha, 40 TGs, 1 building and water harvesting structures resulting in >100% achievement.

To assess the performance during January 2014, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&B were as given below:

C.1 Compensatory Afforestation

In this component, plantations were raised by the DFO (T) Mahendergarh by achieving a target of 106.73 RKM under the Tall Plants model at 31 sites. All the 31 sites were visited during February 2014 and the results of M&E were as given below:

a. Suitability of Land afforested

Lands of <1 ha in area were not suitable for raising, protection and maintenance of plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

Techniques of Planting Used and their Effectiveness

The technique of planting used was the Pit planting technique. But this technique was not so effective due to soil compaction.

d. Survival of Planis

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 62%.

Out of 31 sites of CA plantations, the survival % was Excellent (>79%) at 5 sites, Very Good (70-79%) at 8 sites, Good (60-69%) at 7 sites, average (50-59%) at 4 sites and poor (<50%) at 7 sites.

The main shortcomings were use of small sized plants in the name of tall plants, poor protection and under planting.

The tall plant means a plant of minimum 2 m in height at the time of planting. But at most of the visited sites, even after 2 years of planting, the plants are of less than 2 m in height. It clearly indicates that small sized plants were planted in the name of tall plants in the tall plants model, which is a serious irregularity.

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in *Annexure-a*.

C.2 Not Present Value

In this component, works were carried out in Mahendergarh district during the year 2011-12 under the following 2 sub-components:

i. Afforestation and management of Government forest lands

Afforestation in community and public lands

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out under the following 2 models:

- i. Assisted Natural Regeneration
- Plantation of tall plants in linear forests.

Plantations of above 2 models were visited during February 2014 and the results of M&E were as given below:

C.2.1.1 Assisted Natural Regeneration

In this model, plantation works were carried out by the DFO (T) Mahendergath by achieving a target of 30 he at 4 sites. M&E was carried out by visiting 2 sites resulting in M&E of 50% sites and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Average survival of plantations was 69%,

The survival % was very good (70-79%) at 1 site and good (60-69%) at another site,

Plantations at both sites were frost affected.

Detail of site wise survival % and average height and girth of plantations was as given in *Annexure-b*.

C.2.1.2 Tall Plants

In this model, plantation works were carried out by the DFO (T) Mahendergarh by achieving a target of 10 RKM at 2 sites. M&E was carried out by visiting 1 site resulting in M&E of 50% sites and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils,

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was 30%,

Plantation was frost affected.

The main shortcoming was use of small sized plants instead of tall plants and poor maintenance and protection.

Detail of survival % and average height and girth of plantations was as given in Annexure-

C.1.2 Afforestation in community and public lands

In this sub-component, works were carried out by the DFO (CFP) Rewari under the model Plantation of Tree Groove (TG) by achieving a target of 40 TGs in 10 villages.

M&E was carried out by visiting TGs of 4 villages resulting in M&E of 40% villages and the results of M&E were as given below;

Suitability of Land afforested

Land was suitable for raising plantation but raising of 9 to 11 TGs in 1 village is not desirable.

b. Suitability of Species planted

The species planted were suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. This technique is not so effective due to soil compaction. For early establishment of plantation, the Auger Hole planting technique should be used.

d. Sorvival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival of plantations was 77%.

Survival % was excellent (>79%) in 2 villages, very good (70-79%) in 1 village and good (60-69%) in 1 village

Plants were affected by frost.

The village wise survival %, average height and average girth, etc. were as given in Annexure-b

C.2.3 Other Works

Physical achievement of other works by the DFO (T) Mahendergarh under the NPV component is as given below:

1. Construction of one building (Guard Hut) for the frontline staff.

Construction of water hervesting structures.

C.2.3.1 Construction of building

In this model, 1 building (Guard Hut) was constructed in RF Sohla by the DFO (T) Mahchdergarh. M&E was carried out by visiting this building resulting in M&E of 100% buildings and the results of M&E were as given below:

Location of Building

This building was constructed in RF Sohla.

b. Status of Building (completed or not)

Construction of this building has been completed.

c. Measurement Book (MB)

MB was maintained for labour component only.

d. Completion Report (CR)

CR has not sent.

e. Maintenance of Building

This building was being properly maintained.

f. Quality of Building

Quality of building was good.

g. Use of Building

This building was being used as guard but.

C.2.3.2 Construction of water harvesting structures

Location

Constructed in Berundla PL at the following longitudes and latitudes

Longitudes	Latitudes
.76°02°58.0"	27°57'20.1"
76 ⁶ 03'1.2"	27°57'31.9"
76°03'5.1"	27°57'33.7"
_76°03`5.6''	27"57'34.0"
76"03'6.2"	27 57'34.3"

b. Status (completed or not)

Construction has been completed.

c. Measurement Book (MB)

MB was not maintained,

d. Completion Report (CR)

CR has not sent.

f. Quality

Quality was good.

C.3 Constraints faced by Implementing Authorities

As told, the constraints faced by the implementing authorities are as given below:

- Delay in allotment of physical and financial targets,
- Non-availability of funds for the maintenance of TGs.
- c. Non-availability of additional finds for fighting against the drought.
- Non-availability of additional funds for the maintenance of frost-affected plantations.

C.4 Suggestions of Implementing Authorities for Further Improvement

- Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- Norms, especially for earth work, must be increased.
- iii. Staff must be provided as per Cadre Allotment.
- Funds must be provided for the maintenance of TGs for 3 years.
- C.5 Suggestions of Evaluator
- The NAP project should be continued because it is helping in:
 - Enhancing the quality of degraded forests,
 - ii. Improving the tree cover in non-forest lands, and
 - Mitigating the changing climate.
- Physical and financial targets must be conveyed in time.
- Under planting should be stopped and protection should be improved.
- 4. Tall plants of 2m in height should be planted in tall plants model.
- 5. Funds for the maintenance of TG must be provided for 3 years.
- Additional funds should be provided for the maintenance of frost affected plantations.
- Land bank should be identified and all plantations of <1 ha area should be done at this land bank.

Annexure-a Assessment of CA Plantations Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60% - 69%, Average 50% -59%, Poor<50%]

Sr. Na		Name of		Target	Unit	ait Species planted	Results of M&R							
	Site	Implementin g Anthority	Range	ed	ed .		Longitades (East)	Latitudes (North)	Av. Sarviva I (%)	Av. Eleight (m)	Av. Girth (cm)	Gradiag	Remarks	
Telli	Plants	_	_			· -		•		_	<u> </u>		·	
Note clear.	- Yall plant means ly indicates that sm	a plant of minime wil sized plants w	m 2 m in heigi ere planted in :	ht at the th the name g	ne of pla f tall pla	nting. But at htt in the tai	t most of the visite I piants model, w	d sites, even after hich is a serious \$	2 years of regularity.	planting, t	he plant	are of less	than 2 m in height. It	
1.	Nemaul Singhana road KM: 9-16.5 L/R	DFO (T) Mabandergarh	Namaul	4.32	RKM	Pepri	75 ⁰ 59. B '58,0''	28405.6'39.0''	. 40	0.5	NM	Poor	Pour protection	
2.	Nernaul City Near CL Public School	-do-	-do-	0.11	-đo-	Papri	76°06'0.04''	28 ⁰ 03.0°50.1"	34	0.7	NM	Poor	Eccroachroent	
3.	Namaal Singbana road KM: 3-4 L/S	-do-	-đo-	0.15	-40-	Papei	76*04*53.1**	28°04''27.0''	49	1.0	NM	Foor	Under planting.	
. 4	Semen Bank Namuni 80-82, 82=2/7, 3/5, 4/9	-de-	-do	° 0.10	-diçə	Papri	76 ⁹ 07'53,5''	. 28 ⁴ 03'4.08''	60	0.7	NM	Good.,	Pour protection	
5	Namani Rewari Road KM: 34- 35 R/S	-da-	-do-	0.16	-do-	Bakein	76 * 17'07.8''	28 ⁰ 07*02.6**	95	б.Q	25	Excellent		
б	Nemaol City Court road	-de-	-đo-	0.204	- do - ·	Рарді	7 6° 06'32.7''	28°03'30.2″	70	2.7	10	Very good	•	

1 7	Mohendaranti		14.1.1	1								_	
	Reward Road KM: D-S L/S	-00-	ganh	15.6	-40-	Papri Neon	76°08'49.9''	28°17'08.0''	B I	1.3	· NM	Excellent	Under planting
8	Mahendorgarh Kanina Roud KM: 0-1 R/S	-do-	-40-	0.11	- d o-	Papri	· 76°08'37.4''	28°16'56.8''		1.2 -	NIM	Bacellent	
9	R.F. Nangal Mala Comp. No. 8		-db-	0.8	. -do -	Papri	76°03'29.9"	28°22'04.1"	- 55	1.5	NM	Broellent	Frost afflacted
10	Mahendargarh Kanina Road KM: 0-7 R/S	-do-	- d o-	7.5	-do-	Papri Neem	76 ⁶ 08°49,9"	28°17.0°08.0"	79	1.5	NM	Very good	
[[Mahendergarti Kanina Road KM: 7-8 R/S	-do-	-do-	0.14	- d e-	Papri Necan	76°12.0°50.0"	28 ⁴ 18,0*01,6**	70	1.6	NM	Very good	Under planting
12	Mahendergarh Kamina Roed KM: 0-1 L/S	-đ o- _	-00-	0.11	-dic-	Pagini	76°08.0°24.4**	28 [*] 16.0'55.5"	95	1.0	NM	Excellent	
13	R.F. Duloth Comp. No. 1	-do-	-do-	Q.11	-do-	Pepri	76 ⁴ 05 ³ 2.9"	28 ⁰ 11'48 <u>.2</u> '' ·	72	1.0	NM	Very good	Frost affected
14	R.F. Salimahad Comp. No. 1	-do-	`-đo-	0.1 1	-do-	Papri -	75°09.0°39.5*	28"16.0'29.0"	60	0.6	NIM	Good	Pour protection
15	R.F. Khairoti Comp. No, 6	-do-	-do-	19.3	-å-	Papri	76 ⁴ 05'13'2''	25°11.0'45,4"	68	0.7	NM	Good	Prost affected
16	R.F. Duloth Comp. No. 6	-do-	-dc-	3.6	, -do -	Papri	75°06'05**	28 ⁰ '48.3"	70	1.5	NM	Very good	Frost affected
17	R.F. Duloth	-do-	· -do-	2.04	-do-	Papri	76 ⁹ 05'10,1''	26"11*48.3**	65	1.0		Good	Frust affected

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[Comp. No. 6												-
18	R.F. Salimabad Comp. No. 2	-do-	-¢o-	0.12	-do-	Papri	76°09.8'8,8''	28 ⁰ 15.5'03.0'*	30	0.5	NM	Poor	Under planting
19	R.F. Salimabad Comp. No. 2	-00-	-do-	21.1	-đo-	Papri	76°1.0'04.9'*	28°)6.0'51.6"	65	0,6	NM	Good	Under planting
20	R.F. Sohla Comp. No. 5	-00-	-do-	22.5	-20-	Papri	76'03'5.8''	28°13'16.2"	76	2.0	4	Very	
21	Naman] Mahendorgarh Road KM: 21- 22 L/S	-do <u>-</u>	-do-	0.16	-da-	Papri	76"08"25.2"!	28 ⁴ 14"26.0"	T2	1.5	мм	Very good	
22	R.F. Salimabad Comp. No. 4	-do-	-do-	6.2	-de-	Pupri	76*09,0*43,3**	28°16.0'46.4"	57	0.5	NDM	Average	Under planting
23	Mahendergarb Kanina Resd RM: 16-17 R/S	-do-	-do-	0.13	-dc-	Papei	76*16.0'59.7"	28 ⁴ 19,0'39,7''	71	1.5	NM	Very good	<u> -</u> -
24	R.F. Nangat Mahi Comp. No. 1	-de-	-do-	0.62	-de-	Papri	76"03"34,8"	28 ⁶ 23'21.3''	58	1.0	NM	Avenage	From affected
25	Nayagaco Pachaota Road KM: 0-1 L/S	-dz- ,	Nangal Chaudhary	0.75	-da-	Papri	76 ⁴ 00'32.5''	27°53'58_5"	60	2.0	J.8	Good	
26	Namaul Kotputli Road KM: 31	-do-	-40-	0.15	-do-	Papri	26°10'5.7"	27°49'19,6"	56	3.0	9	Average	-
27	Narnani Rambass Road KM: 7-8 L/S	-40-	-da	0.11	-d o-	Papri	76°01'27,4''	26°01'44.1"	30	•_•	NM	Poor .	Frast affected
	_ · _		<u> </u>		,								

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28	Nemaial Nangat Chundhery Road KM: 13- 14 L/S	-do	-da-	0.10	-dc-	Papri	76°00'03,4**	27 °5 7*51.3**	20	0.5	NM	Peer	· ·
29	Nizanpur Khetri Road KM: 108-109 L/S	-do-	-do-	0.09	-do-	Papri	75*59120.911	27*58'7.8''	40	1.2	NM .	Роос	
30	Nizampur Khetri Road KM: 1-2 L/S	-de-	-đo-	0.05	-do-	Papri	75 ⁰ 59'30,5''	- 27*58'9.9''		1.5	NM	Average .	Frost affected
31	Namau) Kotputi . Road KM: 20-21 R/S	-de-	-30-	0.16	-do-	Рарті	76°06'57.7**	27 ⁰ 53'52 <u>.</u> 3''	62	1.2	NM	Good	
Total	· · · ·		'	106.75	RKM			·					·

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Assessment of NPV Plantations

Grading on the basis of survival % [Excellent >79%, Vary good 70% -79%, Good 60% - 69%, Average 50% -59%, Poor <50%]

Sr. No.		Name of		Target	Jun	Species				Results of	MÆE		. <u> </u>
	Site	Implementing Authority	Range			Prentec	Longitudes (East)	Latitudes (North)	Av. Survival	Av. Height	Av. Ginth	Grading	Remarka
*	Afforestation	and menager	nent of Go	vernment	forest	lands .			(~)		(only		
*	Assisted Natural	Regeneration							_				
1.	R.F. Duloth Comp No. 6	DFQ (T) Maheoder garh	Mahander garb	- 10.0	H1 •	Papri	76 ⁴ 05'05''	28°11'49.0"	60	0.7	NM	Good '	Frost affected
. 2	R.F. Schia Comp No. 5	-do-	-do- -	10.0	- Ha	Nean	76 * 03*3_5**	28°13'28.6''	78	1.0	NM	Very good	Prost affected
b.	Tall Plants		-										•
I	Moktuta Bundh KM: 0-tail	\$	Nangal Chaodhary	5.0	RKM	Paprí	75 ⁰ 56153.611	27°55'10.0''	30	0.5	NM ···	Poor	Frost affected Poor maintenance Poor projection
B	Afforestation	in community	and publi	ic lands				<u>_</u>					
	Tree Groves		·							. —			
1.	Govt. PHC Center Bhojawaa	DFO (CFP) Revari	Kanina	. 3	: No.	Misc. species	76 ⁰ 18118.0"*	28°14'47.0"	· 65	1.5	NM	Good	Prost affected

2.	Village Bami Storeti	-do-	-do-	۶	Na.	Mise. Species	75*57*41.4**	28°19'53''	75	2.0	4.0	Very good	All the 9 TG were a
3.	Satiwala Pond Oadarwas	-60-	-de-	2	No.	Mise. Apecies	76 00'59,1''	28*18*43.0**	80	1.5	NM	Excellent	-
•	l			3	No.		76°01'00.2"	25*18*41,2**	85	2.0	4	Excellent	· · ·
	Penchayat Land Dhadhot	-00-	-do-	1	No.	Mise. species	76 ⁹ 01159.11	25°16'6.3"	80	2,5	5	Escellent	

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Mahandergarh Kanina Road KM: 0-1 L/S



Mahendergath Kanina Road KM: 0-7 R/S

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Mahendergarh Kanina Road KM: 7-8 R/S



Maheodergarh Kanina Road KM: 16-17 R/S



R.P. Salimabed Comp. No. 2





R.F. Khuroli Comp. No. 6





R.F. Duloth Comp. No. 6



R.F. Sokia Comp. No. 5

MONITORING & EVALUATION REPORT

Of

Works Carried Out During 2011-12

In.

NEWAT DISTRICT OF HARYANA

UNDER

STATE CAMPA SCHEME

Submitted to: Conservator of Forest cum Nodal Officer (Forest conservation) State CAMPA, Haryana Department of Forent, Govt. of Haryana Van Bhawan, Sector-6 Panchkula, Haryana



AFC INDIA LIMITED NORTHERN REMORAL OFFICE: 81/9, IIRD FLOOR, COMMUNITY CENTRE JANAEFURI, NEW DELHI-140068 FROME: 011-45791190-96, FAX: 91-45791169 EMAIL: AFCDELHIØAFCINDIA.ORG
Monitoring & Evaluation Report

Of

Works Carried Out During 2011-12

In

Mewat District of Haryana

Under

State CAMPA Scheme

March 2014

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Executive Summary

Ministry of Environment and Forests (MoEP), Govt. of India had issued guidelines on 2^{nd} July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-F1-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Mewat district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Mewat district during the year 2011-12 by the two implementing authorities, viz., DFO (T) Mewat and DFO (CFP) Faridabad.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (1) Mewat only. But the physical targets under the NPV component were achieved by both the implementing authorities.

During the year 2011-12, a physical target of 145.65 RKM and 70 Ha of plantation and 4 buildings was achieved against the fixed target of 145.65 RKM and 70 Ha of plantation and 4 buildings resulting in >100% achievement.

To assess the plantation works during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

Observations

- a. The plantation works of both the components were of Average quality.
- The average survival of plantations was 52.57%.
- c. Out of 4 sites of CA plantations, the survival % was Very Good (70-79%) at 2 sites, Good (60-69%) at 1 site and poor (<50%) at 1 site.</p>
- d. Out of 3 sites of NPV plantations visited, the survival % was Very Good (70-79%) at 1 site, poor (<50%) at 1 site and zero at 1 site.</p>
- e. The main shortcomings in plantation works were:
 - Use of small sized plants in the tall plants model.
 - Poor protection and maintenance of plantations.
 - tii. Total failure of 70 ha biodrainage plantation

Constraints faced by the implementing authorities

As told, the constraints faced by the implementing authorities were as given below:

- Shortage of staff.
- b. Delay in allotment of physical and financial targets

Suggestions for further improvement

- 1. The NAP project should be continued because it is helping in:
 - t. Enhancing the quality of degraded forests,
 - ii. Improving the tree cover in non-forest lands, and
 - iii. Mitigating the changing climate.
- Physical and financial targets must be conveyed in time.
- Tall plants of 2m in height should be planted in tall plants model.
- 4. Barbed wire/ tree guards should be used for the protection of plantations raised under the tall plants model.
- Staff must be provided as per cadre allotment.
- 6. Action should be taken against the defaulters for failure of biodrainage plantation.

Grading

·	<u>(On a Scale of 1 to 10)</u>	
Quantitative Aspects	Physical	9

Qualitative Aspects	1. Plantations	
	Quality	4
	Maintenance	3
	Sustainability	
	2 Other Works	
	Quality	8
	Maintenance	
	Sustainability	1

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(5 to ≤8)	(3 to ≤S)	
		Very Good	- (* 40 - 0)	- (5)

4

GENERAL

- A.J Name of District ; Mewat
- A.2 Name of State : Haryana
- A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govi. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Alms and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- b. Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- Compensatory afforestation;
- Environmental services, which include:
 - i. Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - Regulating services such as climate regulation, discase control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - iii. Non-material benefits obtained from ecosystems, splritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.
- e. Research, training and capacity building.

A.5.3 Constitution

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The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

1. Coler Minister, Haryana	
2. Minister of Foresta, Haryana	Chairperson
3. Minister of Finance, Harvana	Momber
4. Chief Secretary, Harvara	Member
5. Principal Secretary (Finance), Herman	Member
6. Principal Chief Conservator of Formation	Member
7. Chief Wildlife Warden, Harmone	Member
8. Principal Secretary (Potesta) Manua	Member
A.5.3.2 Steering Committee	Member Secretary
The Steering Committee of Harvana apprint	-
1. Chief Secretary, Harvans	
2. Principal Secretary (Finance) Manual	Chaimerson
3. Principal Secretary (Forests), Harmon	Member
4. Chief Wildlife Warden, Harvana	Member
5. Conservator of Forests (FC) & Nodel Officer (FC)	Member
6. Representative of the Ministry of Environment of the	Member
Government of India	Member
7. Two eminent NGOs nominated by the state Gauge	
 Principal Chief Conservator of Forests 	Members
A.5.3.3 Executive Committee	Member Secretary
The Executive Committee of Harvana containty and	
1. Principal Chief Conservator of Party	
2. Addl. Principal Chief Company in the	Chairperson
3. Chief Wildlife Warden Harman	Member
4. Chief Conservator of Forests (Protection D	Member
5. Chief Conservator of Forests (Protection In	Member
6. Conservator of Forests (Planning)	Member
7. Representative of Finance Department	Member
Not below the rank of Addl. Secretary	Member
 Two eminent NGOs nominated by the state Gamma 	Member
for a period of 2 years at time who shall be eligible for	Members
 Conservator of Forests (FC) & Nodal Officer (RCA) 	Unation
March (CCA)	ember Secretary

A.5.4 Meetings

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1st meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{nd} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2^{ad} meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Scoretary Haryana. In this meeting, the action taken report on 1st meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The Ist meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013.

A.5.5 Implementation

Implementation of State CAMPA scheme in Mewat district of Haryana State was started in the year 2010-11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in Mewat district of Haryana State by the two implementing authorities, viz. DFO (T) Mewat and DFO (CFP) Faridabad.

7

QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the plantation works done during the year 2011-12 in Mewat district of Haryana State by the two implementing authorities, viz. DFO (T) Mewat and DFO (CFP) Faridabad.

B.1 Physical Targets

B.1.1 Plantation

The physical targets of plantations allotted and achieved in Mewat district during the year 2011-12 under the State CAMPA scheme were as given below:

	Nan	Physical Targets				
Component	Sub-component	Model	Implementing Authority	Pixed	Ashieved	Unit
Compensatory Afforestation (CA)	-	Tall Plants	DFO (T) Mewat	125.65	125.65	RKM
Not Preseru Afform Value (NPV) and ma of Gov forest (Afforestation and management of Government forest lands	Plantation of tall plants in linear forests		10,00	10.00	RKM
		Ridge plantation to linear forests		10,00	10.00	якм
	Afforestation in community and public lands	Biodrainage	DFO (CFP) Faridabad	70.00	70.00	He
	т	145.65	145.65	RKM		
				70.00	70,00	Ha

Above table indicates that during the year 2011-12, a physical target of 145.65 RKM and 70 Ha of plantations was achieved against the fixed target of 145.65 RKM and 70 Ha resulting in >100% achievement.

B.1.2 Other Works

Four buildings were constructed under NPV component by DFO (T) Mewat against the allotted target of 4 buildings resulting in 100% achievement.

QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report partains to the plantation works done during the year 2011-12 in Mewat district of Haryana State by the two implementing authorities, viz. DFO (T) Mewat and DFO (CFP) Faridabad.

State CAMPA scheme has two components, viz.; Compensatory Afforestation (CA) and Not Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Mewat only. But the physical targets under the NPV component were achieved by both the implementing authorities.

During the year 2011-12, a physical target of 145.65 RKM and 70 Ha of plantation and 4 buildings was achieved against the fixed target of 145.65 RKM and 70 Ha of plantation and 4 buildings resulting in >100% achievement.

To assess the performance during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

C.1 Compensatory Afforestation

C.1.1 Tall Plants Model

In this model, plantations were raised by the DFO (T) Mewat by achieving a target of 125.65 RKM at 4 sites. All the 4 sites were visited during March 2014 and the results of M&E were as given below;

Suitability of Land afforested.

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the areas.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Pit planting technique. But this technique was not so effective due to soil compaction.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 63.25%.

Out of 4 sites of CA plantations, the survival % was Very Good (70-79%) at 2 sites, Good (60-69%) at 1 site and poor (<50%) at 1 site.

The main shortcomings were use of small sized plants in the name of tall plants and poor protection.

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in Annexure-q.

C.2 Net Present Value

In this component, works were carried out in Mewer district under the following 3 subcomponents:

- i. Afforestation and management of Government forest lands.
- Afforestation in community and public lands

Other Works (Construction of buildings)

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out by DFO (T) Mewat under the following 2 models:

i. Ridge plantation in linear forests

ii. Tall plants plantation in linear forests

Plantations of above 2 models were visited during March 2014 and the results of M&E were as given below:

C.2.1.1 Ridge Plantation

In this model, plantations were raised by the DFO (T) Mewat by achieving a target of 10 RKM at 1 site. M&E was carried out by visiting 1 site resulting in M&E of 100% sites and the results 3 of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Ridge planting technique. This technique is very effective in raising successful plantations in low lying areas.

d. Survival of Plants

4

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was Very Good (70%).

Detail of survival % and average height and girth of plantations was as given in *Annexure-b*.

C.2.1.2 Tall Plants Plantation

In this model, plantations were raised by the DFO (T) Mewat by achieving a target of 10 RKM at 2 sites. M&E was carried out by visiting 1 site resulting in M&E of 50% sites and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very offective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was Poor (45%).

The main shortcoming was use of small sized plants instead of tail plants, poor maintenance and protection.

Detail of survival % and average height and girth of plantations was as given in Annexure-

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out by the DFO (CFP) Faridabad under the model Biodrainage by achieving a target of 70 Ha on farmers' land of Ujina village.

M&E was carried out during March 2014 and the results of M&E were as given below:

a. Suitabliity of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Ridge planting technique. This technique is very useful in raising successful plantation in low lying areas.

d. Survival of Plants

This is the only district of Haryana in which biodrainage plantation was found failed. Reasons of failure may be investigated and action abould be taken against the defaulters.

C.2.3 Other Works

Following 4 buildings were constructed at Forest complex Nuh. M&E was carried out during March 2014 and the results of M&E were as given below:

C.2.3.1 RO Residence

Location of Building

This building was constructed at forest complex Nuh

b. Status of Building (completed or not)

Construction of this building has been completed.

c. Measurement Book (MB)

MB was maintained for labour component only. MB was not issued by the DFO.

d. Completion Report (CR)

CR has been sent by RO to DFO.

e. Maintenance of Building

This building was being properly maintained.

f. Quality of Building

Quality of building was good.

g. Use of Building

This building was being used as RO residence.

C.2.3.2 Forester Quarter No.-1

a. Location of Building

This building was constructed at forest complex Nuh

States of Building (completed or not)

Construction of this building has been completed.

c. Measurement Book (MB)

MB was maintained for labour component only. MB was not issued by the DFO.

d. Completion Report (CR)

CR has been sent by RO to DFO.

c. Maintenance of Building

This building was being properly maintained.

f. Quality of Building

Quality of building was good.

Use of Building

This building was being used as Forester Quarter.

C.2.3.3 Forester Quarter No.-II

a. Location of Building

This building was constructed at forest complex Nuh

b. Status of Building (completed or not)

Construction of this building has been completed,

c. Measurement Book (MB)

MB was maintained for labour component only. MB was not issued by the DFO.

d. Completion Report (CR)

CR has been sent by RO to DFO,

e. Maintenance of Building

This building was being properly maintained.

f. Quality of Building

Quality of building was good.

g. Use of Building

This building was being used as Forester Quarter.

C.2.3.34 Forest Guard Hut

a Location of Building

This building was constructed at forest complex Nuh

Status of Building (completed or not)

Construction of this building has been completed.

Measurement Book (MB)

MB was maintained for labour component only. MB was not issued by the DFO.

d. Completion Report (CR)

CR has been sent by RO to DFO.

c. Maintenauce of Building

This building was being properly maintained.

f. Quality of Baßding

Quality of building was good.

g. Use of Building

This building was found unused.

C.3 Constraints faced by Implementing Authorities

As told, the constraints faced by the implementing authorities were as given below:

- Shortage of staff,
- d. Delay in allotment of physical and financial targets

C.4 Suggestions of Evaluator

- The NAP project should be continued because it is helping in:
 - i. Enhancing the quality of degraded forests,
 - Improving the tree cover in non-forest lands, and
 - iii. Mitigating the changing climate.
- Physical and financial targets must be conveyed in time.
- Tall plants of 2m in height should be planted in tall plants model.
- Barbed wire/ tree guards should be used for the protection of plantations raised under the tall plants model.
- Staff must be provided as per cadre allotment.
- Action should be taken against the defaulters for failure of biodrainage plantation.

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Annexure-a Assessment of CA Plantations Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Poor<50%]

Sr.	Name of			Target	et Unit	Target Unit	Species	Results of M&E					
	Site	Jup <u>iementin</u> g Authority	Range	ed			Longitudes (East)	Latitudes (North)	Av. Surviva 1(%)	Av. Height (m)	Av. Girth (cm)	Gradiag	Remarks
Tell)	Phants						•				•	•	
3	Chandeni Drain RD 0-ani	DFO (T) Mewat	Nub	14.00	RKM	Papri, Pilkhan, Shiaham	77°04.9'	28404_5*	45	0,5	NM	Poor	Plants of small size were planted instead of tall plants.
2	Reserve Forest Palla & Palla Sec. 4425	-00-	-do-	51.00	RKM	Papei, Ronj,	76 ⁴ 58'15,4''	28°07"23.5"	75	0.7	NM	V. Good	da-
3	Rojka Meo RF	-da-	-do-	42,65	RKM	Papri, Shisham, Siria, Gular, Kikar, Neam, Amba, Jal	77*03*179**	25°12'47.0"	73	1,7	NM	V. Good	-do-
4	Gurgaon – Alwar Road	-de-	-da-	18.00	RKM	Aistenia, Chukrasia, Kanak Champa, Pišchan, Bakain	77"03 '40.3''	2 5° 13'02''	60	2.3	8	Good	-do-
		Total		125.65	RKM			-					———————————————————————————————————————

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Annexure-b

Assessment of NPV Plantations

Orading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60% - 69%, Average 50% -59%, Poor 50%]

Sr.		Name of		Target	Unit	Species	Results of M&E .			-			
	Site	Implementin g Authority	Range	d		i pžanteci	Longitades (East)	Latitades (North)	Av. Sarviva I (%)	Av. Height (#1)	Av. Girth (cm)	Greding	Rebarks
A	Afforestation and management of Government forest lands												
1	a Tall Plants Plantation												
1	Chandeni Drah RD 36-39	DFO (T) . Mewai	Խոր	7.00	RKM	Papri, Pilkhan, Shisham	77 ⁴ 01.2*	25°06.7'	45	0.5	NM	Poor	Plants of small size were planted instead of tall plants. Most of the plants were browsed,
b.	Ridge Plantation					· •	•	1					· · · ·
1	Gurgaon - Atwar Road KM 55-58.5 L&R	DPO (T) Mewat	Nah	10-00	RKM	Közar	76058,31.9	28007'38.6'	70	1.0 j	NM	V. Good	
B	Afforestation in community and public lands												
a	Biodrainage												
Ľ	Farmers' land of Ujina Village	DFO ((CFP) Feridabad	Salma	70.00	Ha	Cional Eucalyptus		-	Zero (0)	NA	NA	Poor	Action must be taken against the defaulters.

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Gurgaon - Alwar Road



Annexure-c

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Reserve Forest Palla & Palla Sec. 445





Chendeni Drain RD 36-39



Gurgaon -Alwar Road KM 55-58.5 L&R

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4 - DFO (T) Mewat - NPV - Baildings



RO Residence at Forest Complex Nuh

Forester Quarter-I at Forest Complex Nuh



Forester Quarter-II at Forest Complex Nuh

Forest Guard Hut at Forest Complex Nuh

MONITORING & EVALUATION REPORT

Of

Works Carried Out During 2011-12

Ìn

PALWAL DISTRICT OF HARYANA

UNDER

STATE CAMPA SCHEME

Submitted to: Conservator of Forest cum Nodel Officer (Forest conservation) State CAMPA, Haryana Department of Forest, Govt. of Haryana Van Bhawan, Sector-6 Panchkula, Haryana



APC INDIA LIMITED

NORTHERN REGIONAL OFFICE: 81/9, DERD PLOOR, COMMUNITY CENTRE JANAEPURI, NEW DELHI-110056 PHORE: 011-45791190-96, FAX: 91-45791189 RMAIL: AFCDELHIMAFCINDIA.ORG

Monitoring & Evaluation Report

Of

Works Carried Out During 2011-12

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Palwal District of Haryana

Under

State CAMPA Scheme

March 2014

Contents

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- Chapter B	Quantitative Analysis	-
Chapter – C	Qualitative Analysis	9
Annexare	a. Assessment of Plantations	. 14
	b. Photos	16

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Executive Summary

Ministry of Environment and Forests (MoEF), Govi. of India had issued guidelines on 2^{nd} July 2009 for establishing CAMPAs 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), Net Present Yalue (NPY), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Palwal district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Palwal district during the year 2011-12 by the two implementing authorities, viz., DFO (T) Palwal and DFO (CFP) Faridabad.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Palwal only. But the physical targets under the NPV component were achieved by both the implementing authorities.

During the year 2011-12, a physical target of 41.69 RKM and 25 TGs of plantations and 2 buildings was achieved against the fixed target of 41.69 RKM and 25 TGs of plantations and 2 buildings resulting in >100% achievement.

To assess the plantation works during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

Observations

- a. The plantation works of both the components were of very good quality.
- The average survival of plantations was 80.8%.
- c. Out of 5 sites visited, the survival % was Excellent (>79%) at 4 sites and Good (60-69%) at 1 site.

Constraints faced by the implementing authorities

As told, the constraints faced by the implementing authorities were:

- Shortage of staff.
- High biotic pressure.
- No fund for the maintenance of TGs in the 3rd year of planting.

Suggestions for further improvement

- The NAP project should be continued because it is helping in:
 - Enhancing the quality of degraded forests,

- ii. Improving the tree cover in non-forest lands, and
- i. Mitigating the changing climate.
- Physical and financial targets must be conveyed in time.
- 3. Staff must be provided as per Cadre Allotment.
- Funds for the maintenance of TG must be provided for 3rd year.
- 5. Measurement Book should be properly maintained.

Grading

(On a Scale of 1 to 10)_

Quantitative Aspects Physical 9	
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Qualitative Aspects	1,	Plantations				
		Quality	8			
		Maintenance	5			
		Sustainability	6			
	2	Other Works				
		Quality	8			
		Maintenance	8			
		Sustainability	7			

Overall Grading of the	Outstanding (8 to 10)	Very Good	Good	Poor	
Project		(5 to <\$)	(3 to <5)	(<3)	
-	-	Very Good	-	-	

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GENERAL

- A.1 Name of District : Palwal
- A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forasts (MoEF), Govt, of India had issued guidelines on 2^{ad} July 2009 for establishing CAMPAs in the States/UTs and putting in place a finding mechanism for enhancing forest and tree cover and conservation and management of wildlife by utilizing funds received towards Compensatory Afforestation (CA), Net Present Value (NPV), etc., currently available with the Adhoe CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Alma and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- b. Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- c. Compensatory afforestation;
- Environmental services, which include:-
 - Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - iii. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - Supporting such other services necessary for the production of cosystem services, biodiversity, nutrient cycling and primary production.
- Research, training and capacity building.

A.5.3 Constitution

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The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

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A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

 Minister of Forests, Haryana Member Minister of Financa, Haryana Member Chief Secretary, Haryana Member Principal Secretary (Finance), Haryana Member Principal Chief Conservator of Forests, Haryana Member Chief Wildlife Warden, Haryana Member Principal Secretary (Forests), Haryana Member 	1.	Chief Minister, Haryana	Chairperson
 Minister of Financa, Haryana Member Chief Secretary, Haryana Member Principal Secretary (Finance), Haryana Member Principal Chief Conservator of Forests, Haryana Member Chief Wildlife Warden, Haryana Member Principal Secretary (Forests), Haryana Member 	2.	Minister of Forests, Haryana	Member
4. Chief Secretary, HaryanaMember5. Principal Secretary (Finance), HaryanaMember6. Principal Chief Conservator of Forests, HaryanaMember7. Chief Wildlife Warden, HaryanaMember8. Principal Secretary (Forests), HaryanaMember Secretary	3.	Minister of Financa, Haryana	Member
 5. Principal Secretary (Finance), Haryana Member 6. Principal Chief Conservator of Forests, Haryana Member 7. Chief Wildlife Warden, Haryana Member 8. Principal Secretary (Forests), Haryana Member Secretary 	4.	Chief Secretary, Haryana	Member
 6. Principal Chief Conservator of Forests, Haryana Member 7. Chief Wildlife Warden, Haryana Member 8. Principal Secretary (Forests), Haryana Member Secretary 	5.	Principal Secretary (Finance), Haryana	Member
7. Chief Wildlife Warden, HaryanaMember8. Principal Secretary (Forests), HaryanaMember Secretary	6.	Principal Chief Conservator of Forests, Haryana	Member
8. Principal Secretary (Forests), Haryana Member Secretary	7.	Chief Wildlife Warden, Haryanz	Member
-	8.	Principal Secretary (Forests), Haryana	Member Secretary

A.5.3.2 Stearing Committee

The Stearing Committee of Haryana consists of the following:

1.	Chief Secretary, Heryana	Chairperson								
2.	Principal Secretary (Finance), Haryana	Member								
3.	Principal Secretary (Forests), Haryana	Member								
4.	Chief Wildlife Warden, Haryana	Member								
5.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member								
6.	Representative of the Ministry of Environment and Forests,	Member								
	Government of India									
7.	Two eminent NGOs nominated by the state Government	Members								
8.	Principal Chief Conservator of Forests	Member Secretary								
A.5.3.3 Executive Committee										
The Ex	ecutive Committee of Haryana consists of the following:									
1.	Principal Chief Conservator of Forests, Haryana	Chairperson								
2.	Addl. Principal Chief Conservator of Forests (Forestry)	Member								
3.	Chief Wildlife Warden, Haryana	Member								
4.	Chief Conservator of Forests (Protection-I)	Member								
5.	Chief Conservator of Forests (Protection-II)	Member								
6.	Conservator of Forests (Planning)	Member								
7.	Representative of Finance Department	Member								
	Not below the rank of Addl. Secretary	Member								
8.	Two eminent NGOs nominated by the state Government	Members								
	for a period of 2 years at time who shall be eligible for re-n	omination								
9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary								

A.5.4 Meetings

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1st meeting of the Steering Committee of the State CAMPA of Haryana was held on 2st June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Seoretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2^{nd} meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1^{nd} meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

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Implementation of State CAMPA scheme in Palwal district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the plantation works done during the year 2011-12 in Palwal district of Haryana State by the two implementing authorities, viz. DFO (T) Palwal and DFO (CFP) Faridabad.

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QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the plantation works done during the year 2011-12 in Palwal district of Haryana State by the two implementing authorities, viz. DFO (T) Palwal and DFO (CFP) Faridabad.

B.1 Physical Targets

B.1.1 Plantation

The physical targets of plantations allotted and achieved in Palwal district during the year 2011-12 under the State CAMPA scheme were as given below:

	Nac	Physical Targets				
Component	Sub-component	Model	Implementing Authority	Fixed	Achieved	Unit
Compensatory Afforestation (CA)	-	Tell Planis	DPO (T) Palwal	0.25	0,25	RKM
Net Present Value (NPV)	Afforestation and management of Government	Plantation of tall plants in linear forests		5.00	5.00	RKM
		Ridge plantation in linear forests		40.00	40.00	RKM
	Afforestation in community and public lands	Plantation of Tres Grooves (TGs)	DFO (CPP) Faridabad	25.00	25.00	Nto.
	То	45.25	41.69	RKM		
		25,00	25.00	Nə		

Above table indicates that during the year 2011-12, a physical target of 41.69 RKM and 25 TGs of plantations was achieved against the fixed target of 41.69 RKM and 25 TGs resulting in >100% achievement.

B.1.2 Other Works

Two buildings were constructed at forest complex Palwal under the NPV component by the DFO (T) Palwal against the allotted target of 2 buildings resulting in 100% achievement.

Chapter-C

QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in Palwal district of Haryana State by the two implementing authorities, viz. DFO (T) Palwal and DFO (CFP) Faridabad.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Paiwal only. But the physical targets under the NPV component were achieved by both the implementing authorities.

During the year 2011-12, a physical target of 41.69 RKM and 25 TGs of plantations and 2 buildings was achieved against the fixed target of 41.69 RKM and 25 TGs of plantations and 2 buildings resulting in >100% achievement.

To assess the performance during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

C.1 Compensatory Affortstation

C.I.I Tail Plants Model

In this model, plantations were raised by the DFO (T) Palwal by achieving a target of 0.25 RKM at 1 site. This site was visited during March 2014 and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation -

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Pit planting technique. But this technique was not so effective due to soil compaction.

d. Survival of Plants

1.5

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Survival of plantation was Excellent (88%).

Detail of survival %, average height and average girth were as given in Annexare-a.

C.2 Net Present Value

in this component, plantations were raised in Palwal district under the following 2 subcomponents:

- Afforestation and management of Government forest lands.
- Afforestation in community and public lands

iii. Other works

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out by DFO (T) Palwal under the following 2 models:

ii. Ridge plantation in linear forests

iii. Tall plants plantation in linear forests

Plantations of above 2 models were visited during March 2014 and the results of M&B were as given below:

C.2.1.1 Ridge Plantation

In this model, plantation was raised by the DFO (T) Palwal by achieving a target of 40 RKM at 1 site. M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E were as given below:

Suitability of Land afforested.

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

e. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Ridge planting technique. This technique is very effective in raising successful plantation in low lying areas.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was Excellent (90%).

Detail of survival % and average height and girth of plantations was as given in Annexarea

C.2.1.2 Tell Plants Plantation

In this model, plantations were raised by the DFO (T) Falwal by achieving a target of 5 RKM at 1 site. M&E was carried out by visiting 1 site resulting in M&E of 100% sites and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

×,

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was Good (66%).

The main abortcoming was achievement of target in non-forest area.

Detail of survival % and average height and girth of plantations was as given in Annexure-A

C.2.2 Afforestation in community and public lands

In this sub-component, plantations were raised by the DFO (CFP) Faridabad under the model Plantation of Tree Groove (TG) by achieving a target of 25 TGs in 4 villages.

M&E was carried out by visiting 19 TGs of 2 villages resulting in M&E of 76% TGs and 50% villages and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation but raising of 9 to 10 TGs in a village is not desirable.

b. Suitability of Species planted

The species planted were suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival of plantations was Excellent (80%).

Plants were affected by frost.

The village wise survival %, average height and average girth, etc. were as given in Annexure-a.

C.2.3 Other Works

Physical achievement of other works by the DFO (T) Palwal under the NPV component was as given below:

C.2.3.1 Construction of building

In this model, 2 buildings (1 Forester Quarter and 1 Forest Guard Hut) were constructed at forest complex Palwal by the DFO (T) Palwal. M&E was carried out by visiting both the buildings resulting in M&E of 100% buildings and the results of M&E were as given below:

C.2.3.1.1 Forester Quarter

a. Location of Building

: :

This building was constructed at forest complex Palwal

b. Status of Building (completed or not)

Construction of this building has been completed.

e. Mensurement Book (MB)

MB was not maintained.

d. Completion Report (CR)

CR has been sent by RO to DFO.

e. Maintenance of Building

This building was being properly maintained.

f. Quality of Building

Quality of building was good.

g. Use of Building

This building was being used as Forester Quarter

C.2.3.1.1 Forest Guard Hut

a. Location of Building

This building was constructed at forest complex Palwai

b. Status of Building (completed or not)

Construction of this building has been completed.

c. Measurement Book (MB)

MB was not maintained.

d. Completion Report (CR)

CR has been sent by RO to DFO.

e. Maintenance of Building

This building was being properly maintained.

f. Quelity of Building -

Quality of building was good.

g. Use of Building

This building was being used as Forest Guard Hut.

C.3 Constraints faced by Implementing Authorities

As told, the constraints faced by the implementing authorities were as given below:

- a. Shortage of staff
- Delay in allotment of physical and financial targets,
- Non-availability of funds for the maintenance of TGs.

C.4 Suggestions of Implementing Authorities for Further Improvement

 Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.

- ii. Staff must be provided as per Cadre Allotment.
- iv. Funds must be provided for the maintenance of TGs during 3rd year of planting.

C.5 Suggestions of Evaluator

- The NAP project should be continued because it is helping in:
 - i. Enhancing the quality of degraded forests,
 - ii. Improving the tree cover in non-forest lands, and
 - v. Mitigating the changing climate.
- Physical and financial targets must be conveyed in time.
- Staff must be provided as per Cadre Allotnem.
- 9. Funds for the maintenance of TG must be provided for 3rd year.
- 10. Measurement Book should be properly maintained.

i -

Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60% - 69%, Average 50% -59%, Poor 50%]

Sr.	Name of			Target 1	Dalt	Unit Species	Remits of MAE						
No.	Şite	Implementin g Anthority	Range	Achiev ed		planted	Longitudes (Earf)	Latitudes (North)	Av. Sarviva I (%)	Av. Hetght (m)	Ay. Girth (cm)	Grading	Remarks
A	CA												
8	Tall Plants												
1	Nuh Hodal road km 20 L/side	DFO (T) Palwai	Hodal	0.25	<u>r</u> км	Neem, Arjun, Alstonia	77°12°47.8°	27 ⁰ 58'03.4"	86	2.8	20	Excellen t	_ · ·
B	NPV												
	Tall Plants	Tall Plants											
1	Sugar Mill Palwal	DFO (T) Palwal	Palwal	5.00	RKM	Arjun, Neom, Papri, Shisham, Alstonia	77 ⁶ 20'46.1'	2 8° 04'30.2"	66	1.7	NM	Good	Plants of small size were planted. Foor protection
b	Ridge plantation												
1	Deeghot Sec. 4&5 area	DFO (T) Palwsi	Hodai	40.00	RKM	Eucalyptu s, Kikar, Shisham, Jungle jalebi	77°22'31.6'	28°00'40.6''	90	4.0	18	Excellen t	-
C	Tree Groves												

3

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Sr.		Name of		Target	Vatt	Species		Results of M&E					
710.	Site	Explementin g Authority	Rango	eđ		pinnea	Longitudes (East)	Latitudes (North)	Av. Surviva I (%)	Av. Height (m)	Av. Girth (cm)	Grading	Remarks
t	Kalwaka PL	DFO (CFP) Faridabad	Faridabad	9	No.	Neem, Pipel, Papri, Gular, Siris	77"13'07.0'	28 ⁰ 14.9'	80	1.0	NM	Excellen t	Poer soil. Affected by frost
2	Chhaprola PL	DFO (CFP) Faridabad	Faridabad	10		•do-	77°14°26.2'	28°15'06.2''	80	1.0	NM		Poor soil. Affected by frost

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Nub Hodal road km 20 L/side

2 - DFO (T) Palwal - NPV - Tall Plants



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Sugar Mill Palwal



Chhaprola PL





Fonest Quard Hut at forest complex Palwal

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MONITORING & EVALUATION REPORT

Of

Works Carried Out During 2011-12

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REWARI DISTRICT OF HARYANA

UNDER

STATE CAMPA SCHEME

Submitted to: Conservator of Forest cum Nodel Officer (Forest conservation) State CAMPA, Haryana Department of Forest, Govt. of Haryana Van Bhawan, Sector-6 Panchkuta, Haryana



AFC INDIA LUMITED

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Monitoring & Evaluation Report

Of

Works Carried Out During 2011-12

In

Rewari District of Haryana

Under

State CAMPA Scheme

February 2014

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Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2^{nd} July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Rewari district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Rewari district during the year 2011-12 by the two implementing authorities, viz., DFO (I) Rewari and DFO (CFP) Rewari.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Rewari only. But the physical targets under the NPV component were achieved by both the implementing authorities, viz., DFO (T) Rewari and DFO (CFP) Rewari.

During the year 2011-12, a physical target of 79.58 RKM and 35.00 TGs was achieved against the fixed target of 92.27 RKM and 39 TGs resulting in 93.72% achievement of RKM and 89.74% achievement of TGs.

To assess the performance during February 2014, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

Observations

- a. In most of the sites, the area of plantations was <1ha and it is very difficult for a forest guard to protect and maintain such small plantations.</p>
- b. The works of both the components were of good quality.
- c. The average survival of plantations was 68.78%.
- d. Out of 41 sites of CA plantations, the survival % was Excellent (>79%) at 15 sites, Very Good (70-79%) at 14 sites, Good (60-69%) at 3 sites, average (50-59%) at 2 sites and poor (<50%) at 7 sites.</p>
- e. Out of 4 sites of NPV plantations visited, the survival % was Excellent (>79%) at 2 sites, Good (60-69%) at 1 site and poor (<50%) at 1 site.
- f. The main shortcomings in forest land plantations (CA) were:
 - Use of small sized plants instead of tall plants.
 - Under planting.
 - ili. Poor protection

Constraints faced by the implementing authorities

As told, the constraints faced by the implementing authorities were:

- Delay in allotment of physical and financial targets.
- Non-availability of funds for the maintenance of TGs.

Suggestions for further improvement

- The NAP project should be continued because it is helping in:
 - Enhancing the quality of degraded forests,
 - ti. Improving the tree cover in non-forest lands, and
 - iii. Mitigating the changing climate.
- Physical and financial targets must be conveyed in time.
- Under planting should be stopped.
- Tall plants of 2m in height should be planted in tall plants model.
- 5. Protection should be improved.

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- 6. Funds for the maintenance of TG must be provided for 3 years.
- Land bank should be identified and all plantations of <1 ha area should be done at this land bank.

Grading

(On a Scale of 1 to 10)

Quantitative Aspects	Physical	9

Qualitative Aspects	1.	Plantations	
		Quality	7
		Maintenance	6
		Sustainability	5

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(5 to <8)	(3 to <5)	(≪3)
	-	Very Good		

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Chapter A

GENERAL

- A.1 Name of District : Rewari
- A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoe CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- b. Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- Compensatory afforestation;
- Environmental services, which include:
 - i. Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - ii. Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - iii. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - iv. Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.

Research, training and capacity building.

A.5.3 Constitution

i. i The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

1.	Chief Minister, Haryana	Chairperson
2.	Minister of Forests, Haryana	Member
3.	Minister of Finance, Haryana	Member
4.	Chief Secretary, Haryana	Member
5.	Principal Secretary (Finance), Haryana	Member
6.	Principal Chief Conservator of Forests, Haryana	Member
7.	Chief Wildlife Warden, Haryana	Member
. 8.	Principal Secretary (Forests), Haryana	Member Secretary
A.5.3.	2 Steering Committee	
The S	teering Committee of Haryana consists of the following:	
1.	Chief Secretary, Haryana	Chairmerron
2.	Principal Secretary (Finance), Harvana	Member
3.	Principal Secretary (Forests), Harvana	Member
4,	Chief Wildlife Warden, Harvana	Mamber
5,	Conservator of Forests (FC) & Nodal Officer (FCA)	Member
6.	Representative of the Ministry of Environment and Foresta	Member
	Government of India	, menipa
7.	Two eminent NGOs nominated by the state Government	Members
8.	Principal Chief Conservator of Forests	Member Secretary
A.5.3.3	Executive Committee	•
The Ex	ecutive Committee of Haryana consists of the following:	
ι.	Principal Chief Conservator of Forests, Haryana	Chairperson
2.	Addl. Principal Chief Conservator of Forests (Forestry)	Member
3.	Chief Wildlife Warden, Haryana	Member
4.	Chief Conservator of Forests (Protection-I)	Member
5.	Chief Conservator of Forests (Protection-II)	Member
6.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
	Not below the rank of Addi, Secretary	Member
8.	Two eminent NGOs nominated by the state Government	Members
	for a period of 2 years at time who shall be eligible for re-no	mination
9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary

A.5.4 Meetings

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A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1^{st} meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{nd} June, 2010 at 3.30 PM under the Chalrpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2^{sd} meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1^{st} meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2rd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Rewari district of Haryana State was started in the year 2010 -1].

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Rewari district of Haryana State by the two implementing authorities, viz. DFO (T) Rewari and DFO (CFP) Rewari.

QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Rewari district of Heryana State by the two implementing authorities, viz. DFO (T) Rewari and DFO (CFP) Rewari.

B.1 Physical Targets

B.1.1 Plantation

	Ne	ane of		· P	hysical Targe	ta; ·	
Component	Sub-component	Model	Implementing Authority	Fixed	Achieved	Udia	
Compensator y Afforestation (CA)	•	Tall Plants	DFO (T) Rewari	92.27	74.58	RK M	
Net Present Value (NPV)	Afforestation and management of Government forest lands	Plantation of tall plants in linear forests		5.00	5.00	RҚ М	
	Afforestation in community and public lands	Plentation of Tree Grooves (TGs)	DFO (CFP) Rewari	39.00	35.00	Na.	
	Ţ	otal		97.27	79.58	RK M	
				39.00	35.00	No	

The physical achievement in Rewari district during the year 2011-12 under the State CAMPA scheme by the DFO (T) Rewari and DFO (CFP) Rewari is as given below:

Above table indicates that during the year 2011-12, a physical target of 79.58 RKM and 35.00 TGs was achieved against the fixed target of 92.27 RKM and 39 TGs resulting in 93.72% achievement of RKM and 89.74% achievement of TGs.

QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Rewari district of Haryana State by the two implementing authorities, viz. DFO (T) Rewari and DFO (CPP) Rewari.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Rewari only. But the physical targets under the NPV component were achieved by the two implementing authorities, viz., DFO (T) Rewari and DFO (CFP) Rewari.

During the year 2011-12, a physical target of 79.58 RKM and 35.00 TGs was achieved against the fixed target of 92.27 RKM and 39 TGs resulting in 93.72% achievement of RKM and 89.74% achievement of TGs.

To assess the performance during January 2014, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

C.1 Compensatory Afforestation

In this component, plantations were raised by the DFO (T) Rewari by achieving a target of 74.58 RKM under the Tall Plants model at 41 sites. All the 31 sites were visited during February 2014 and the results of M&E were as given below:

a. Suitability of Land afforested

Lands of <1 he in area were not suitable for raising, protection and maintenance of plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Pit planting technique. But this technique was not so effective due to soil compaction.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plentation was 68.61%.

Out of 41 sites of CA plantations, the survival % was Excellent (>79%) at 15 sites. Very Good (70-79%) at 14 sites, Good (60-69%) at 3 sites, average (50-59%) at 2 sites and poor (<\$0%) at 7 sites.

The main shortcomings were use of small sized plants in the name of tall plants, poor protection and under planting.

The tall plant means a plant of minimum 2 m in height at the time of planting. But at most of the visited sites, even after 2 years of planting, the plants are of less than 2 m in height. It clearly indicates that small sized plants were planted in the name of tall plants in the tall plants model, which is a serious foregularity.

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in Annexare-a.

C.2 Net Present Value

In this component, works were carried out in Rewari district during the year 2011-12 under the following 2 sub-components:

- i. Afforestation and management of Government forest lands
- ii. Afforestation in community and public lands

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out under the model Plantation of tall plants in linear forests. Plantations of this model were visited during February 2014 and the results of M&E were as given below:

C.2.1.1 Tall Plents

In this model, plantation works were carried out by the DFO (I) Rewari by achieving a target of 5 RKM at 1 site. M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E were as given below;

s. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survivel of plantation was 87%.

Detail of survival % and average height and girth of plantations was as given in Amexareb.

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out by the DFO (CFP) Rewari under the model Plantation of Tree Groove (TG). Plantations of this model were visited during February 2014 and the results of M&E were as given below:

C.2.2.1 Tree Groves (TGs)

In this model, plantations were raised by the DFO (CFP) Rewari by achieving a target of 35 TGs in 7 villages.

M&E was carried out by visiting TOs of 3 villages resulting in M&E of 40% villages and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation but raising of 4 to 8 TOs in 1 village is not desirable.

b. Suitability of Species planted

The species planted were suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. This technique is not so effective due to soil compaction. For early establishment of plantation, the Auger Hole planting technique should be used.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival of plantations was 65%.

Survival % was excellent (>79%) in 1 village, good (60-69%) in 1 village and average (50-59%) in 1 village.

The village wise survival %, average height and average girth, etc. were as given in Aunexare-b.

C.3 Constraints faced by Implementing Authorities

As told, the constraints faced by the implementing authorities are as given below:

Delay in allotment of physical and financial targets,

Non-availability of finds for the maintenance of TGs.

C.4 Suggestions of Implementing Authorities for Further Improvement

- i. Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- ii. Norms, especially for earth work, must be increased.
- Staff must be provided as per Cadre Allotment.
- Funds must be provided for the maintenance of TGs for 3 years.

C.5 Suggestions of Evaluator

- The NAP project should be continued because it is helping in:
 - Enhancing the quality of degraded forests,

- iv. Improving the tree cover in non-forest lands, and
- v. Mitigating the changing climate,
- 2. Physical and financial targets must be conveyed in time.
- 3. Under planting should be stopped.
- 4. Tall plants of 2m in height should be planted in tall plants model.
- Protection should be improved.
- 6. Funds for the maintenance of TG must be provided for 3 years.
- Land bank should be identified and all plantations of <I ha area should be done at this land bank.

Annexure-a Assessment of CA Plantations Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Oood 60%- 69%, Avarage 50%-59%, Poor<50%]

Na.	<u> </u>	cof Target Uait Species					Resolu of MAE							
	Site	Implementin g Anthority	Range	1 ACBUOYE d			Longituden (Enst)	Latitudes (North)	Av. Sarviva J	Av. Neight	Av. Girth	Grading	Remarks	
7-11		· _							(%)	(,	(сш)			
1811						_	_							
Note cisar	Tall plant means ly indicates that an	a plant of minimu all sized plants w	n 2 m in he are <u>planted</u> i	ight at the tù in the name q	ne of pla I sali pla	nting. But a hts in the tel	i man of the visite i plants model," w	ni sties, even after hich is a sierloug h	2 years of p regiliarity.	planting, I	he plant	s are of less (han 2 m in height.	
1	Rewari-Garti Bohri Rd, km 0- S L/Side	DFO (T) Rewari	Reward	0.14	RKM	Papri	76037.2'40.0"	25011.3'58.0"	90,	2.3	6	Excellent	-	
2	Rewarl-Carhi Bolni Rd, km 0- i L/Side	-do-	-do-	0.1	RKM	Pagori	76037'20.6**	28011'01.6**	92	2,4	3	Excellent	<u> </u>	
Э	Rowari-Garhi Bolni Rd. L/Side	-de-	-do-	0.1 4	RKM	Pagati	76037"26.0"	28010'49.3''	95	2.5	8	Exòelleat		
4	Rowari-Garhi Boloi Rd. Ion 0- 1 R/Side	-do-	-do-	0.14	RKM	Papri	76037'14.3"	28011'17,1"	95	2.5	8	Êxcellent		
5	Reveri-City By pass	-do-	-do-	0.144	RKM	Papri Neera Bakain	76036.8'55.0"	28010.7'59.0"	71	2.5	10	V. Good	-	
6	Rewari- Mahendergarh (-)	-do-	-do-	0.12	RKM	Papri	76 ⁰ 34'34.3"	28 ^d 12'16.5"	80	1.5	NM	Excellent		

7	Revect-NNL Rd. km 0-1 L/Side	-dic-	-dq-	0.112	RKM	Papri	76 ⁵ 36'2.2''	28 ⁴ 11'41.9"	3	1.2	NM	Foor	Poor protection
8	Rowari- Shanjhanpur Rd. km 0-5 L/Side	-do-	-do-	3.00	RKM	Papri	76035'40.5"	28010'36.3"	10	1.5	NM	Poor	Pour protection
9	Rowari-Soci-4 by pass Rd. R/side	-do-	-do-	0.08	RKM	Рарті	76037'49.3''	28010'59.2"	70	1.0	NM	V. Good	Poor protection
10	Rewari-Garbi Bolnf Rd.	'- d o-	-do-	0,224	RKM	Papri	76037' 11,0''	28010_5'45,0"	82	2.1	7	Excellent	-
11	Rewari-Jbajjar Rd. km 1-2 L/Side		-de-	0.052	RKM	Papri	76036'48.3"	28012'54.5"	88 .	2.6	7	Excellent	
12	Sector 4 by pass Rd,	-da-	-do-	0.12	RKM	Papri	76037'58.3"	28011115.6**	70	1.0	NM	V. Qood	Poor protection
L3	Rewari City	-40-	-do-	• 0.032	RKM	Papri Bar Pipal	76037*21.6**	28010'55.3"	100	3.0	10	Excellent	·
14	Rewarj-Patodi Rd. km 0-1 L/Side	-τιό-	-do-	0.452	RKM	Papri	76037'12.8"	28012'52.4"	72	1.0	NM	V. Good	Poor protection
15	Rewari-NNL .Rd. km 0-1 1/Side	-do-	-do-	0.128	RKM	Рарсі	76036'29.0''	28011.4*29.0**	٣		NM	Poor	Poor protection
L6	Rewari- Ramgarb Rd. Jan 0-1 R/Side	-40-	-46-	0,12	RKM	Papri	76038*48.5**	28012'40.9"	BC	12	NM	Excellent	-
						_			- [

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	I		1 · -		T	_			-					
	17	Dharuhera Nandrampar Baas Rd,	~do-	- d o-	0.076	RKM	Papri	76047*47.3**	28012'17,1"	70	2.0	NM	Y. Good	-
	15	Reward Sector 4	-30-	-do-	0.112	RKM	Рарті	76037'11.0"	28011*15*1	65	1.0	NM	Good	Poor protection
	19	Rowari City Nala	-do-	-do-	0.084	RKM	Papri	76037115.6"	28011'09.6"	89	دا	NM	Excellent	
	20	Nela Bank	-do-	-00-	0.136	RKM	Papri Aistonia	76036"56.6"	28011106.0**	70	2.0	5	V. Good	-
ø	21	Masert Section 4 & 5	-do-	-do-	21,6	RKM	Papri	76°25'24,5''	28°17'15.3"	G	0.5	NM	Average	
D	22	Rewarl- Shajampur Rd, km I-2 L/Side	-do-	-do	0.18	RKM	Papri	76036101.01	28011'00''	39	1.5	NM	Poor	Poor protection
	23 ,	Nala Bank (Rewari City)	-do-	-do	0.112	RKM	Papri	76035'06.8"	280 10'05.0"	87	1.4	NM	Excellent	
	24	Kund Mandola Rd.	-do-	-dc-	0,1	RKM	Papri	76 ⁶ 22'17,9''	28 ⁰ 13*19.3**	۲	2.0	5	Excellent	
	25	Khol Section 4 & 5	-40-	-do-	12.6	RKM	Papri	76 ⁴ 24'13_2''	28 [•] 11'44.8''	80	1.5	NM	Excellent	
3	26	Rewari City Sector 4	-do-	-00-	0.12	RKM	Papri	76038'08.2**	28011'3.98"	B	L.0	NM	Poor	Poor protection
-	27	Rewarf- Konsiwas Rd 1-2 L/Side	- d o-	-do-	0.112	RKM	Papri Bar Pinal	76037'51.8''	28011*28.1**	π	1.5	NM	V. Good	Poor protection
L				<u> </u>		. !					I	- 1		

28	Defil-Reward Railway line	-do-	-40-	0.632	RKM	Papri	76037*09.0**	28012.4142.01*	\bigcirc	D	NM	Poor	Poor protection
29	Rewari-NNL Rd. km 24-25	-de-	-do-	0.12	RKM	Papri	76*22`36.0''	28*09*1.4**	55	1.0	NM	Average	Prost affected
30	Rewari-Berli Rd. km 13-14 L/Sido	-do-	Nahar	0.08	RKM	Papri Nosm	76 ⁰ 30'5,3"	28 ⁹ 15"24.0"	77	2.0	5	V. Good	
31	Kosli-Tumna Rd. km D-I L & R/Side	-do-	-00-	0.112	RKM	Papri	76°28'37.2''	28 ⁹ 23'30.3"	60	2.0	4	Excellent	-
32	Jhal Juddi Rd km 0-1 L/Side	-do-	do	0.056	RKM	Fapri	76°26'113''	28 ⁰ 24'43.7"	75	נו	NM	V. Good	
33	RF Judoua Comp. No. 5	-do-	Bawai	16,356	RKM	Pipri –	76038153,1**	28000'45,4''	70	0.7	NM [.]	V. Good	Under planting
34	RF Jhabus Comp. No. 5	-do-	, -d o-	0.112	RKM	Papri	76038',59,3*'	28000'45.7"	70	0.8	NM	V. Good	Under planting
35	RP Jhabua Comp. No. 9	-de-	-do-	10.656	RKM	Paprt	76039'12.0''	28001'04.5''	69	0.8	NM	Good	Under planting
36	RP Jasbua Comp. No. 7	-do-	-đo-	5.70	RKM	Papri	76039"(5.7"	2000'57.9"	68	0.7	NM	Good	Under planning
37	Rewari-Bolai Ral	-40-	·do-	0.132	RKM	Pagarí	76041*27,6**	28006"t9.7"	70	1.0	NM	V. Good	Poor protection
38	Rewari-Bawai Rd.	-đọ-	-do-	0.232	RKM	Papri	76035'09.6''	28004'55.2''	\mathcal{O}^{\top}	1.5	NM	Poor	Under planting

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39	Pranpara Pawi Rd.	-do-	-do-	0.032	RKM	Papri	76038"30.6"*	28001'59.4"	90	1.5	NM	Excellent	-
4	Bawal-Prangrana Rd.	-do-	-do-	0.056	RKM	Papri	76034*46.3**	26003'18.2"	70	1.8	NM	V. Good	-
41	Bawal-Saban Rd.	-de-	-00-	0.076	RKM	Paper;	7603377.2"	28004*54_3**	-71	1.0	NM	V. Good	Poer protection
То	Total			74.584	RKM								·

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Annexure-b

Assessment of NPV Plantations

Orading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Poor<50%)

Sr. No.	Nume of		Target Limit Species			Reads of M&E							
	Site	Implementing Anthority	Range			panter	Longitudes (Bait)	Lanitudes (North)	Av, Survival	Av. Height	Av. Cåtb	Grading	Remarks
									(%)	(10)	(cm)		
A	Afforestation and management of Government forest lands												
8 .													
I	Kosil-Sabana Rd. km 0-5 L & R	DFO (T) Revarî	Nabar	5.0	RKM	Papri	76°29'43.8''	28°24*37.4*	87	2.5	6	Excellent	-
в	Afforestation in community and public lands												
8	Tree Groves												
1.	Bas Batodi pend	DFO (CFP) Rewari	Jatosang	9.E	No.	Misc. Species	76°27'48.4**	28°13'45_5''	50 .	دا	ŃM	Average	•
2.	Rationihai temple	-do-	-dc-	4.0	Na,	Misc. Species	75°35'23.7''	28 ⁴ 23'18.0"	65	1.2	NM	Good	
3.	Boris Kemelper Water Works	-do-	-do-	8.0	No.	Misc. Species	76°33'10.8''	28°15'29.7"	80	3.0	9	Excellent	-

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Khol Section 4 & 5



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Kund Mendole Rd.



Reward-Barli Rd. km 13-14 L/Side





Kosli-Tumna Rd. km 0-1 L & R/Side



Rewari-NNL Rd. km 0-1 L/Side



Reveri-Garhi Bolni Rd. km 0-5 L/Side

Nala Bank



Rewari-Garhi Bolni Rd. km 0-1 R/Sida



Reward City Nala

Rewari-Garhi Bolni Rd. km 0-1 L/Side

Monitoring & Evaluation Report of Works Carried Out During 2011-12 In Bhiwani Districts of Haryana Under State CAMPA Scheme

Submitted to

Nodal Officer, State CAMPA, Haryana and Conservator of Forests (Forest Conservation) O/o Principal Chief Conservator of Forests, Haryana C-18, Van Bhawan, Sector -6 Panchkuls, Haryana



Northern Regional Office: B1/9, Ilird floor, Community Centre Janakpuri, New Delhi-110058

Phone: 011-45791190-96, Fax: 91-45791189 Email: afcdelhi@afcindia.org;

Monitoring & Evaluation Report

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Of

Works Carried Out During 2011-12

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Bhiwani District of Haryana

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Under

State CAMPA Scheme

January 2014

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Executive Summary

Ministry of Environment and Forests (MoEF), Govi. of India had issued guidelines on 2^{nd} July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Bhiwani district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Bhiwani district during the year 2011-12 by the three implementing authorities, viz., DFO (I) Bhiwani, DFO (CFP) Bhiwani and DFO (WL) Hisar.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Bhiwani only. But the physical targets under the NPV component were achieved by all the three implementing authorities, viz., DFO (T) Bhiwani, DFO (CFP) Bhiwani and DFO (WL) Hisar

During the year 2011-12, a physical target of 30.30 RKM, 60.00 Ha, 80.00 TG and I building was achieved against the fixed target of 30.30 RKM, 60.00 Ha and 80.00 TG and I building resulting in 100% achievement.

To assess the performance during January & February 2014, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

Observations

- The works of both the components were of good quality.
- ii. The average survival of plantations was 70%.
- ill. The survival % was Excellent (>79%) at 8 siles, Very Good (70-79%) at 4 siles, Good (60-69%) at 2 sile, average (50-59%) at 2 siles and poor (<50%) at 2 siles.
- iv. The survival and growth of biadrainage plantations was excellent (>79%) at all the 8 sites visited.
- v. The main shortcomings in govi, forest land plantations were:
 - Use of small sized plants in the tall plants model.
 - Under planting.
 - Close spacing of plants on ridges.
 - Use of ridge planting technique in areas that are neither low lying nor waterlogged.
- vi. The main shortcoming in TG model of non-forest land plantations were:
 - Approved design of TG not followed.
 - Use of small sized plants instead of tall plants

Constraints faced by the implementing authorities

- Delay in allotinent of physical targets.
- ii. Law cost norms of plantation.
- iii. Non-availability of funds for the maintenance of TGs.

Suggestions for further improvement

- i. Scheme should be continued.
- 11. Physical and financial targets must be conveyed in time.
- iii. Under planting should be stopped.
- iv. Tall plants of 2m in height should be planted in tall plants model.
- Ridge planting technique should not be used in areas that are neither low lying nor waterlogged.
- vi. Close spacing of plants must be stopped.
- vii Protection should be improved.
- viii. Approved design of TG should be followed.
- ix. Funds for the maintenance of TG must be provided for 3 years.
- 2. For early reclamation of waterlogged areas, number of plants/ha should be increased from 200 to 300 plants/ha.
- xi. Farmers should be advised to clear fell the biodrainage plantations at the age of 4 years because after this age plantation causes adverse effect on the yield of agricultural crops. After clear felling, farmers should maintain the copplets by retaining one copplet on every slump.

Grading

(On a Scale of 1 to 10)

Quantitative Aspects	Physical	9
1		

Qualitative Aspects	1. Plantations	
	Quality	7
	Maintenance	6
	Sustainability	6
	2. Other Works	
	Quality	8
	Maintenance	
	Sustainability	8.

Overall Grading of the	Outstanding (7 to 10)	Very Good (5 to <8)	Good (3 to <5)	Poor (< <u>3)</u>
Project		Very Good	-	-
			•	

GENERAL

- A.1 Name of District : Bhiwami
- A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2^{ad} July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- a. Conservation, protection, regeneration and management of existing natural forests;
- Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- c. Compensatory afforestation;
- . d. Environmental services, which include:
 - i. Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - ii. Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - iii. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.
 - Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.
A.5.3.1 Governing Body

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The Governing Body of Haryana consists of the following:

t Chief Minister Harvana	Chairperson
	Member
2. Minister of Porcess, Harvana	Member
3. Minister of Finance, Haryana	Member
4. Chief Secretary, Haryana	Member
5. Principal Secretary (Finance), Haryana	Momber
Principal Chief Conservator of Forests, Haryana	Menuoer
7. Chief Wildlife Warden, Haryana	Member
8. Principal Secretary (Forests), Haryana	Member Secretary
A.5.3.2 Steering Committee	
The Steering Committee of Haryana consists of the following:	
1. Chief Scoretary, Haryana	Chairperson
2. Principal Secretary (Finance), Haryana	Member
3. Principal Secretary (Forests), Haryana	Member
4. Chief Wlidlife Warden, Haryana	Member
Conservator of Forests (FC) & Nodal Officer (FCA)	Member
Representative of the Ministry of Environment and Forest	s, Member
Government of India	• (, h
Two eminent NGOs nominated by the state Government	Members
Principal Chief Conservator of Forests	Member Secretary
A.5.3.3 Executive Committee	
The Executive Committee of Haryana consists of the following:	
 Principal Chief Conservator of Forests, Haryana 	Chairperson
2. Addl. Principal Chief Conservator of Forests (Forestry)	Member
3 Chief Wildlife Warden, Haryana	Member
4 Chief Conservator of Forests (Protection-I)	Member
5. Chief Conservator of Forests (Protection-II)	Member
6. Conservator of Forests (Planning)	Member
7. Representative of Finance Department	Member
Not below the rank of Addl. Secretary	Member
Two eminent NGOs nominated by the state Government.	Members
for a period of 2 years at time who shall be eligible for re	-nomination
Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary

A.5.4 Meetings

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

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A.5.4.2 Steering Committee

The 1th meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{nd} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2^{ad} meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1^{ad} meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The)st meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Bhiwani district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Bhiwani district of Haryana State by the three implementing authorities, viz. DFO (T) Bhiwani, DFO (CFP) Bhiwani and DFO (WL) Hisar.

QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Bhiwani district of Haryana State by the three implementing authorities, viz, DFO (T) Bhiwani, DFO (CFP) Bhiwani and DFO (WL) Hisar.

B.1 Physical Targets

The physical achievement in Bhiwani district during the year 2011-12 under the State CAMPA scheme by the DFO (T) Bhiwani and DFO (CFP) Bhiwani is as given below:

	Nam	Physical Targets				
Component	Sub-component	Model	Implementing Authority	Fixed	Achieved	Unit
Compensatory Afforcalation (CA)	1	Ridge Plantation	DFO (T) Bhiwani	15.30	15.30	RKM
Net Present Vplue (NPV)	Afforestation	Assisted Natural Regeneration		10.00	10.00	Ha
	management of Government forest lands	Plantation in linear ridges along roads and canals		s.00	5.00	RKM
1		Plantation of tall plants in linear forests		10.00	10.00	RKM
4	Afforestation in	Biodrainage	DFO (CPP)	50.00	50.00	He
	community and public lands	Plantation of Tree Grooves (TGs)	Bhiwani	125.00	80.00	No.
 -		 [otal	30.30	30.30	RKM	
				60.00	60.00	He
				80.00	80.00	No.

Above table indicates that during the year 2011-12, a physical target of 30.30 RKM, 60.00 Ha and 80.00 No TG was achieved against the fixed target of 30.30 RKM, 60.00 Ha and 80.00 No TG resulting in 100% achievement.

B.1.2 Other Works

The achievement of physical targets of other works by the DFO (WL) Hisar is as given below:

		Physical Targets				
Component	Sub- component	Model	(mplementing Authority	Fixed	Achieved	Ųnit
Net Prosent Valuo (NPV)	Conservation, protection and management of wildlife and its habitet	Construction of Guard Hut at Bhiwani	DFO (WL) Hisar]	I	No.

Above table indicates that during the year 2011-12, a physical target of 1 building was achieved against the fixed target of 1 building resulting in 100% achievement.

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QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report partains to the works carried out during the year 2011-12 in Bhiwani district of Haryana State by the three implementing authorities, viz. DFO (T) Bhiwani, DFO (CFP) Bhiwani and DFO (WL) Hisar.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Bhiwani only. But the physical targets under the NPV component were achieved by all the three implementing authorities, viz., DFO (T) Bhiwani, DFO (CFP) Bhiwani and DFO (WL) Hisar.

During the year 2011-12, a physical target of 30.30 RKM, 60.00 Ha, 60.00 TG and 1 building was achieved against the fixed target of 30.30 RKM, 60.00 Ha and 80.00 TG and 1 building resulting in 100% achievement.

To assess the performance during January & February 2014, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

C.1 Compensatory Afforestation

In this component, plantations were raised by the DFO (T) Bhiwani under the models Ridge Plantation at 2 sites. Both the sites were visited and evaluated and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Plenting Used and their Effectiveness

The technique of planting used was the Ridge planting technique.

There was no need to use ridge planting technique because the areas were neither low lying nor waterlogged.

Further, Plantations were raised at a spacing of $1 \text{ m } x \ 1 \text{ m on narrow ridges by planting Kikar, Beri and Lasura. But planting of these species at this spacing is technically wrong because the plants of these species have large crown and need more space for their growth and development.$

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 53%.

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in Annexure-0.

C_2 Net Present Value

In this component, works were carried out in Bhiwani district during the year 2011-12 under the following 3 sub-components:

- Afforestation and management of Government forest lands
- ii. Afforestation in community and public lands
- iii. Conservation, protection and management of wildlife and its habitat

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out under the following 3 models:

- Assisted Natural Regeneration
- Plantation in linear ridges along toads and canals
- iii. Plentation of tall plants in linear forests

Plantations of all the 3 models were visited and the results of M&E were as given below:

C.2.1.1 Assisted Natural Regeneration

In this model, plantation works were carried out by the DFO (T) Bhiwani by achieving a target of 10 ha at 1 site. M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E were as given below:

a. Suitability of Land efforcated

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantations was 40%.

Under planting was done.

Detail of site wise survival % and average height and girth of plantations was as given in Annexure-b.

C.2.1.2 Ridge

In this model, plantation works were carried out by the DFO (T) Bhiwani by achieving a target of 5 RKM at 1 site. M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Ridge planting technique. This is an effective technique for taising successful plantations in low lying/ waterlogged areas.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantations was 20%.

Detail of site wise survival % and average height and girth of plantations was as given in Annexure-b.

C.2.1.3 Tall Plants

In this model, plantation works were carried out by the DFO (T) Bhiwani by achieving a target of 10 ha at 2 sites. M&E was carried out by visiting 1 site resulting in M&E of 50% sites and the results of M&E were as given below:

a. Snitability of Land afforested

Land was suitable for raising plantation.

Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantations was 63%.

Small sized plants were planted instead of tall plants.

Detail of site wise survival % and average height and girth of plantations was as given in Annexure-b.

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out by the DFO (CFP) Bhiwani under the following 2 models:

Biodrainage for reclamation of waterlogged areas.

il. Plantation of Tree Groove (TG)

C.2.2.1 Blodrainage for reclamation of waterlogged areas

In this model, plantation works were carried out by the DFO (CFP) Bhiwani by achieving a target of 50 ha on farmers' waterlogged areas of 3 villages (Mundhal, Bhaini and Jhighar).

M&E was carried out by visiting farmers' waterlogged areas of Mundhal village resulting in M&E of 33% villages and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation.

Suitability of Species planted

The species planted was suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Ridge planting technique. This technique is very effective for waterlogged areas.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival of plantations was 86%.

Survival % and growth of plantations was excellent (>79%) at all the 8 sites visited.

For early reclamation of waterlogged areas, number of plants/ha should be increased from 200 to 300 plants/ha.

Farmers should be advised to clear fell the plantations at the age of 4 years because after this age plantation causes adverse effect on the yield of agricultural crops. After clear felling, farmers should maintain the coppices by retaining one coppice on every stump.

The area wise survival %, average height and average girth, etc. were as given in Annexureb.

C.2.2.2 Plantation of Tree Groove (TG)

In this model, plantation works were carried out by the DFO (CFP) Bhiwani by achieving a target of 80 TOs in 19 villages.

M&E was carried out by visiting 30 TGs of 5 villages resulting in M&E of 37% TGs and the results of M&E were as given below:

a. Sultability of Land afforested

Land was suitable for raising plantation.

b. Sultability of Species planted

The species planted were suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. This technique is not so effective due to soil compaction. For early establishment of plantation, the Auger Hole planting technique should be used.

d. Survival of Piants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival of plantations was 68%.

Plants were affected by frost and biotic pressure.

Approved design of TG was not followed.

Maintenance of TGs was not done due to non-availability of funds. It is suggested that funds must be provided for the maintenance of TGs for at least 3 years

The TO wise survival %, average height and average girth, etc. were as given in Annexare-

C.2.3 Conservation, protection and management of wildlife and its habitat

In this model, 1 building (Guard Hut) was constructed at Bhiwani by the DFO (WL) Hisar. M&E was carried out by visiting this building resulting in M&E of 100% buildings and the results of M&E were as given below:

a. Location of Building

This building was constructed in Mini Zoo Bhiwani.

Status of Building (completed or not)

Construction of this building was started during 2011-12 but completed during 2012-13.

c. Measurement Book (MB)

MB was maintained.

d. Completion Report (CR)

CR has been sent.

e. Maintenance of Building

This building was being properly maintained.

f. Quality of Building

Quality of building was good.

g. Use of Building

This building was being used as an office.

C.3 Constraints faced by Implementing Authorities

- Delay in allotment of physical targets.
- ii. Low cost norms of plantation
- iii. Non-availability of funds for the maintenance of TG.

C.4 Suggestions of Implementing Authorities for Further Improvement

- Physical and financial targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- ii. Norms, especially for earth work, must be increased.
- iii. Staff must be provided as per Cadre Allotment.
- Funds must be provided for the maintenance of TGs for 3 years.

C.5 Suggestions of Evaluator

Scheme should be continued.

- ii. Physical and financial targets must be conveyed in time.
- xii. Under planting should be stopped.
- xiii. Tall plants of 2m in height should be planted in tall plants model.
- xiv. Ridge planting technique should not be used in areas that are neither low lying nor waterlogged.
- xv. Close spacing of plants must be stopped.
- xvi. Protection should be improved.
- xvii. Approved design of TG should be followed.
- xviii. Funds for the maintenance of TG must be provided for 3 years.
- xix. For early reclamation of waterlogged areas, number of plants/ha should be increased from 200 to 300 plants/ha.
- xx. Farmers should be advised to clear fell the biodrainage plantations at the age of 4 years because after this age plantation causes adverse effect on the yield of agricultural crops. After clear felling, farmers should maintain the coppices by retaining one coppice on every stump.

Annexure-a Assessment of CA Plantations Assessment of CA Plantations

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		Grading (<u>en the basis o</u>	f survival %	<u>[Exceller</u>]	<u>nt >79%, Ver</u>	Results of M&E						
Sr.		Name of		Target Achieve	Unit	Species planted	├ ────				A <i>U</i>	Grading	Remarks
	Şitz	Emplementin g Authority	Range	Å	a		Loogitudes (East)	Latitodei (North)	Av. Sarviva I (%)	Height (xa)	Girth (cm)		
Ridg	Plantation		_								T 7		have were stat
	Tosham - Siwani Road Km 16-25	DFO (T) Bhiwani	Siwani	15.0	RKM	Kiker Beri	75*45`35.8*	28050'59.7'	55	1.0		Averago	suitable for ridge planting because it is neither low lying nor waterlogged area. Plants of tree species of large crown were planted at a specing of lm x lm on narrow ridges, which was technically wrong. Protection was no satisfactory.
	Hiser - Rajgarh Road Km 45 -50	-60-	-do-	0.3	-do-	Lasura Beri	75032'6.8'	28047*25.7	50	1.5	MM	Average	-do-
+-		Total		15.3	RKM	1	<u> </u>					<u> </u>	<u> </u>

NM = Not Measurable

• . •

Annexure-b Assessment of NPV Plantations

		Creating or	n uha bauis o	f an vival %	(Exceller	1 >79% VOLY	8000 /076 - 17 /c	,	<u> </u>	Results of	MAE		
5.1		Name of		Target	Unit	Species	T	T	AP.	Av.	Áv. [Grading	Recurks
Na.	Site	g Authority	Range	Achieve đ		planted	(Bant)	(North)	Surviva L	Reight (m)	Girth (cm)	_	•
									(*)				
	Afforestation #	ind managem	ent of Go	verpment	(orest)	ands					_		
<u> </u>	Andread Nature	Beeneration			_			-				Beer	
1	Ladawas Distributory.	DFO (J) Bhiwani	Loharu	10,0	ha.	Sirís	75°46`20.3' '	28°37'27.8' '	40			POOL	
	RD 85-95			<u> </u>					<u> </u>	<u> </u>			
Ъ.	Ridge						7007117 0	28955221 52	T 20	2.0	5	Poor	-
1	Hamal -	-do-	Bhiwani	5.0	RKM	Encetypen	10 13 17.2	10 JJ 2113			1		1
	Bhiwani Road	1		1	1	5			L .		1	.	
	Km 22-27			1	<u> </u>				<u> </u>				· · ·
È	Tall Plants							nela 6174 2'	- 20	2.5	T NM	Very good	Small sized plants
	Satnali -	-do-	Loharu	5.0	RKM	Papel	75'50'52.1	28 25 30.5	1	1			were planued
	Loharu Road		1	4	1					1	1		instead of tal
	Km 7-10				4	1		4	4				plants
		1											
B	Afforestation	in communit	y and put	lic lands									
a	Blodrainage					<u> </u>							
1	Mondhal Villa	iee					a duant of	1 20002124 3	1 87	4.5	12	Excellent	
h	Samunder S/o	DFO (CFP)	Bhiwani	i 2.065	5 ha	Clonal	76-10-27.2	29 02 34.3					
ן ו	Balbir,	Bhiwani			ļ	Encalyptu							
						1	76910744 1	2990229.3	85	3.0	15	Excellent	Fire damage
2	Chhatru S/o	-do-	-00-	0.91	5 ha	-00-	70 10 44.1	, va 190			1		
1	Manshi Rem	1		1									

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								20-02-25 4	90	5.5	22	Excellent	- 1
3	Daya Ram S/o	-do-	-do-	0.365	ba	-do-	76-10.0-17	, , ,	<i>"</i>]			1	
	Parsa						76910-38-11	29°02'46.3'	- 86 -	4.5	20	Excellent	
4	Jitender S/o	-do-	-do-	1.265	na I	-00-	10 10 101	, ,		•			
<u>ا</u>	Thandi Rem						76910/29.81	29°02'03.5'	90	5.0	26	Excellent	-
5	Sunder S/o	-do-	-do-	0.710		-00-		•					
	Gyani Rem				+		76910128.11	29°00'18.4'	90	8.0	25	Excellent	-
6	Dinesh S/o	-do-	-do-	Q,995		-00-		,		'	1	<u>ا</u>	
	Joginder			1.000			76 10'49.6'	29°02'31.9'	88	8.0	30	Excellent	•
7	Sandeep S/o	-do-	-do-	1.530	- 	-10-	,	· · · · · ·			1	l	
	Suraj Mal						76 10 42 1'	29"02"45.7"	80	7.0	25	Excellent	-
8	Sandeep \$/o	-do-	-do-	5,155	FUEL	-010-	10 10 144-	, , , , , , , , , , , , , , , , , , ,	1		I.	I	
	Satbir							<u> </u>		· -			
b	Tree Groves					hdien	75048137.4	28"38"55.9"	70	1.3	NM	Very	Frost damage.
ī	Bardu Dhirja	DFO (CFP)	Loharu	4	NO.	pulae.	175°48'33.3	*28 ⁰ 39'07.7				Good	Boundary treach
		Bhiwani				зросное	"	"	ļ		1_		damaged.
	·				-No		75"53"45.3"	28°24'30.3'	70	2.0	5	Very	Approved design of
2	Dhani	-do-	-10-	1 3	1		1	·]	Good	TG not followed
1	Samsarwas	•]	l		Į	1			1 .			Frost damage
	<u> </u>	<u> </u>	<u> </u>	┼			75°40'22.0'	28"35'28.1'	60	2.0] NM	Good	Heavy frost
3	Sirsi	-do-	-00-	1 1	1			,		I	<u> </u>		damage
		<u> </u>		<u> </u>	No		75 33 37.1	28 46 9.1	77	1.5	MM	Very	Approved design of
4	Dhani Bhakra	-do-	Siwani	1 1	1 10-				1	1		Good	TG not followed.
]	<u> </u>	┥┯	↓ -,	No.	-do-	75°32'58**	28 53 22.9	65	2.0	5	Good	Hcavy froa
-	Devsar	-do-	-00-	1 1	· [••••	1		,	6				damage

NM = Not Measureable



awas Distributory. RD 25-95

2 - DFO (CFP) Shiwani - NPV - Biodrait



Semender S/o Balbiz



Jitender S/o Thandi Ram



Dinesh S/o Joginder



Sandeep S/o Sund Mal



Dinni Samarwas Govi. School





Guard Hut

Monitoring & Evaluation Report of Works Carried Out During 2011-12 In Fatehabad Districts of Haryana Under State CAMPA Scheme

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Submitted to

Nodal Officer, State CAMPA, Haryana and Conservator of Forests (Forest Conservation) O/o Principal Chief Conservator of Forests, Haryana C-18, Van Bhawan, Sector -6 Penchkula, Haryana



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Monitoring & Evaluation Report

2

Of

Works Carried Out During 2011-12

In

Fatehabad District of Haryana

Under

State CAMPA Scheme

December 2013

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Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2^{ad} July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Falehabad district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Fatehabad district during the year 2011-12 by the two implementing authorities, viz., DFO (T) Fatehabad and DFO (CFP) Hisar.

State CAMPA scheme has two components, viz. Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Fatehabad only. But the physical targets under the NPV component were achieved by both the implementing authorities.

During the year 2011-12, a physical target of 56.38 RKM, 10 Ha and 17 No TO was achieved against the fixed target of 56.38 RKM, 10 Ha and 17 No TG resulting in 100% achievement.

To assess the performance during December 2013, 100% sites of works of CA component and \geq 20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

- The works of both the components were of good quality.
- II. The average survival of plantations was 76%.
- III. The survival % was Excellent (>79%) at 1 site, Very Good (70-79%) at 6 sites and Good (60-69%) at 1 sites.
- The main shortcoming was close spacing and wrong design of TOs.

The constraints faced by the implementing authorities were:

- Delay in allotment of physical targets.
- It Low cost norms of plantation
- III. Non-availability of funds for the maintenance of TGs.

Suggestions of the evaluator were:

- Scheme should be continued.
- 4 Physical targets must be conveyed in time.
- fii. Pit planting technique in compacted soils must be replaced with Auger Hole/Ridge planting technique.
- iv. Close spacing must be stopped.
- Funds for the maintenance of TG must be provided for 2 years.
- vi. Approved design of TGs must be followed.

Grading (On a Scale of 1 to 10)

Quantitative Aspects	Physical	9

Qualitative Aspects	 1.	Plantations	• •
		Quality	7
· ·		Maintenance .	6
-		Sustainability	5

: ·

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(5 to <8)	(3 to <5)	(≪3)
· · · · · · · · · · · · · · · · · · ·	•	Very Good		-

Chapter A

GENERAL

A.1 Name of District

: Fatehabad

A.2 Name of State

: Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

4.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- E. Conservation, protection, regeneration and management of existing natural forests:
- b. Conservation, protection and menagement of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- Compensatory afforestation;

d. Environmental services, which include:-

- Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
- Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
- iii. Non-material benefits obtained from ecosystems, spiritual, recreational, assthetic, inspirational, educational and symbolic; and
- Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.

Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

	1.	Chief Minister, Heryena	Chairperson
	2,	Minister of Forests, Haryana	Member
	3.	Minister of Finance, Haryana	Member
	4.	Chief Secretary, Haryana	Member
	5.	Principal Secretary (Finance), Haryana	Member
	6.	Principal Chief Conservator of Forests, Harvana	Member
	7.	Chief Wildlife Warden, Harvana	Member
	8.	Principal Secretary (Forests), Harvana	Member Secretary
4	(1)	Steering Committee	·
П	 ۹ کا	enting Committee of Homema consists of the following	
	. 50	Chief Commutee of The yang consists of the rontowing,	
•	1.	Chief Secretary, Haryana	Chairperson
	2.	Principal Secretary (Finance), Haryana	Member
	э.	Principal Secretary (Forests), Haryana	Member
	4.	Chief Wildlife Warden, Haryana	Member
	5.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member
	б.	Representative of the Ministry of Environment and Forests,	Member
		Government of India	
	7,	Two caninent NGOs nominated by the state Government,	Members
	8.	Principal Chief Conservator of Forests	Member Secretary
<u>.</u>	5.3.3	B Executive Committee	
ГЪ	e E	ecutive Committee of Haryana consists of the following:	
	1.	Principal Chlef Conservator of Forests, Haryana	Chairperson
	2.	Addl. Principal Chief Conservator of Forests (Forestry)	Member
	3.	Chief Wildlife Warden, Haryana	Member
	4,	Chief Conservator of Forests (Protection-I)	Member
	5,	Chief Conservator of Forests (Protection-II)	Member
	6.	Conservator of Forests (Planning)	Member
	7.	Representative of Finance Department	Member
		Not below the rank of Addl. Secretary	Member
	8.	Two entirent NGOs nominated by the state Government	Members
		for a period of 2 years at time who shall be eligible for re-n	omination
	9	Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary
۰.		commentation of a community of the state of	and the second s

A:5.4 Meetings

A.5.4.1 Governing Body

The 1^{st} meeting of the Governing Body is yet to be held.

A.S.4.2 Steering Committee

The 1st meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{sd} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2nd meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1st meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Fatehabad district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Fatehabad district of Haryana State by the two implementing authorities, viz. DFO (T) Fatehabad and DFO (CFP) Hisar.

QUANTITATIVE ANALYSIS

B.1 Physical Targets

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Fatehabad district during the year 2011-12 by the two Implementing authorities, viz., DFO (T) Fatehabad and DFO (CFP) Hisar.

The physical achievement in Fatehabad district during the year 2011-12 under the State CAMPA scheme by the DFO (T) Fatehabad and DFO (CFP) Hisar is as given below:

	N		Physical Targets			
Component	Sab- component	Model	Implementing Authority	Fixed	Achieved	Unit
Compensatory Afforcatetion (CA)	-	Ridge Plantation	DFO (T) Fatchabad	46.38	46.38	RKM
Net Present Value (NPV)	Afforestation . and	Assisted Natural Regeneration	j .	10.00	10.00	Ha
	forest lands	Plantation in linear ridges along roads and canals] - ₋	5.00	5.00	RKM
		Plantation of tall plants in linear forests		5.00	5.00	RKM
· · .	Afforestation in community and public lands	Plantation of Tree Grooves	DFO (CFP) Hisar	17.00	17.00	No
			56.38	56.38	ŘKM	
				10.00	10.00	He
		- 		17.00	17,00	No

Above table indicates that during the year 2011-12, a physical target of 56.38 RKM, 10 Ha and 17 No TG was achieved against the fixed target of 56.38 RKM, 10 Ha and 17 No TG resulting in 100% ashievement.

7

Chapter-C

QUALITATIVE ANALYSIS

C.1 Compensatory Afforestation

In this component, plantations were raised by the DFO (T) Fatehabad under the model Ridge plantation by achieving a physical target of 46.38 RKM at the following 4 sites:

Kamana Minor RD 20-27 L&R

2. Fatehabad Branch RD 255-263 L&R

. 3. Rattakhera Distributory RD 27-29 R/S

Ratia Branch RD 24-32 R/S

All the above 4 sites were visited during December 2013 and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation,

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Ridge planting technique. This technique was suitable for the area.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 75%.

The survival % was very good (70-79%) at all the 4 sites.

The main shortcoming was close spacing.

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in Annexure-a.

C.2 Net Present Value

In this component, works were carried out in Fatehabad district during the year 2011-12 under the following 2 sub-components:

Afforestation and management of Government forest lends

ii. • Afforestation in community and public lands

M&E of above works was done during December 2013 and the sub-component wise results of M&E were as given below:

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out under the following 2 models:

i. Assisted Natural Regeneration

ii. Plantation in linear ridges along roads and canals

iii. Plantation of tall plants in linear forests

C.2.1.1 Assisted Natural Regeneration

In this model, plantation works were carried out by the DFO (T) Fatehabad by achieving a target of 10 ha at 1 site (BMB canal RD 55-76.5 R/S). M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E were as given below:

s. Suitability of Land efforested.

Land was suitable for raising plantation.

b. Suitability of Species planted -

The species planted were suitable for the area.

Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Average survival of plantation was very good (72%).

Detail of site wise survival % and average height and girth of plantations was as given in *Annexure-b*.

C.2.1.2 Plantation in linear ridges along roads and canals

In this model, plantation works were carried out by the DFO (T) Fatehabad by achieving a target of 5 RKM at 1 site (Ghaggar Distributory RD 18-28 R/S). M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting (Ridge planting) was used as per the model.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ba to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was excellent (91%).

The survival %, average height, average girth and shortcomings, etc. were as given in Annexuze-b.

C.2.1.3 Plantation of tall plants in linear forests

In this model, plantation works were carried out by the DFO (T) Fatchabad by achieving a target of 5 RKM at 1 site (Chubarpur-Budanpur Road Km 0-4 L&R). M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E were as given below:

Suitability of Land afforested.

Land was suitable for taising plantation.

b. Suitability of Species planted -

The species planted were suitable for the area.

Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was good (65%).

The survival % and average height and girth of plantations were as given in Annexare-b.

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out under the model- Plantation of Tree Groove (TG)

In this model, plantation works were carried out by the DFO (CFP) Hisar by achieving a target of 17 TG at 7 sites. M&E was carried out by visiting 1 site (Mehuwala Gaushala) having 5 TGs resulting in M&E of 30% TGs and the results of M&E were as given balow:

Suitability of Land afforested.

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the areas/model.

Tochniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique is not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving sumber of plants.

Average survival was very good (77%).

Main shortcoming was that the approved design of TGs was not followed.

No maintenance of plants was carried out during the current year due to non-availability of funds.

The survival %, average height, average girth and shortcomings, etc. were as given in *dancence-b*.

C.3 Constraints faced by Implementing Authorities

Delay in allotiment of physical targets.

fi. • Low cost norms of plantation

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- iii. Non-availability of funds for the maintenance of TG.
- C.4 Suggestions of Implementing Authorities for Further Improvement
 - Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- ii. Norms, especially for earth work, must be increased.

iii. Staff must be provided as per Cadre Allotment.

- C.5 Suggestions of Evaluator
- L Scheme should be continued.
- if. Physical targets must be conveyed in time.
- ifi. Pit planting technique in compacted soils must be replaced with Auger Hole/Ridge planting technique.
- iv. Close spacing must be stopped.
- Funds for the maintenance of TO must be provided for 2 years.
- vi. Approved design of TG must be followed.

Annexure-a Assessment of CA Plantations Grading on the basis of survival % (Excellent > 79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Pour<50%)

Sr.	Name of			Target	Undit	Species	Results of M&B							
Νų.	Site	Implement- hig	Range		-		Longitudes (East)	Latitudea (North)	Av. Survival	Av. Height	Av. Girth	Grading	Remarks	
		Autority	.	•				· ·	(%)	(m) · .	(cm)		-	
Ridg	e Plantation		. '			•								
I.	Kamoa Minor RD 20-27 L&R	DFQ (T), Fatehabad	Fatchabad	4	RKM ⁻	Eucalyptus, Delc	75 ⁶ 37"21.6"	29 ⁴ 42'40.1"	7q	2.8	9	Very Good	Planting of Dek at a spacing of Im x Im is technically wrong	
		· : `											this species have large crown and need more space for their growth and	
	<u> </u>	:											development	
2 .	Fatchabad branch RD 255-263 L&R	DFO (T), Fatchabed	Fatehabad	27		Evcalyptus, Kikar, 'Ailandhus	75"20"43.8"	29'24' 12''	78		8	Very Good	Planting of Kilor and Atlanthus at a spacing of 1m x 1m is also technically wroag because the plants of these species have large grown and need more space for their growth and development	
3.	Rattakhera Distributory RD 27-29 R/S	DFO (T), Fatchahed	Fatchabarl		RKM	Eucalyptus	75°34 *5 3.8"	29 ⁹ 40*25 <i>.</i> 9** • .	77	3.0		Very Good	-	
4,	Ratia Branch RD 24-32 R/S	DFO (T), Fatehabed	Tobana	11.38	RKM	Eucalyptus	75 ⁶ 47'11.8''	29 41'37	75	5.0	10 1	Very Good	-	

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с.)

Annexure-b

Assessment of NPV Plantations Grading on the basis of survival % [Excellent > 79%, Very good 70% - 79%, Good 60%- 69%, Average 50%-59%, Four<50%]

Sr.	Name of			Target	Undt	Unit Species	Results of M&E							
	Site	Implementing Authority	Range			, premen	Loogitudes (Eert)	Latitudes (North)	Av. Sirvival	Av. Height	Av. Girth	Grading	. Remerks	
-	·							•	(%)	(m)	(cm)			
Plantation of tall plants in linear forests														
1.	Choharpur- Budanpur Road Km 0-4 L&R	DPO (T), Fetchabad	Tohana	5	RKM	Jamma, Arjun	75°48'41.4"	29 ⁴ 44'36.3"	65	3.0	10 [.]	Good	-	
Plantation in fincar ridges slong roads and canals														
2. •	Ghaggar Distributory RD 16-28 R/S	DFO (T), Fatehabed	Tohana	5	RKM	Eccalyptes	75°44'43.2''	29°45°13,2"	91.	4.5	18	Excellent		
Assisted Natural Regeneration														
3.	BMB canal RD 55-76.5 R/S	DFO (7), Fetebabad	Tohana	10	Ha	Arjun, Jamun, Shisham, Det	75°44*58''	29 ⁰ 43'54.2''	72	3.0	10	Very Good		
Tree Groves (TGs)														
4,	Mehuwala Gangbala	DFO (CFP), Hiser	Faishabad	5	No.	Bar, Pipel, Noem, Arjen, Jannan, etc.	75 * 18'24,2''	29 ⁸ 24'26.2''	77	3.0 		Very Good	Approved design of TGs is not followed.	

3 2



Chuharpur-Budanpur Road Km 0-4 L&R



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Mehuwala Ganshala; 5 TGs





Rattakhera Distributory RD 27-29 R/S



Kamana Minor RD 20-27 L&R
Monitoring & Evaluation Report of Works Carried Out During 2011-12 In Hissar Districts of Haryana Under State CAMPA Scheme

Submitted to

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Nodal Officer, State CAMPA, Haryana and Conservator of Forests (Forest Conservation) O/o Principal Chief Conservator of Forests, Haryana C-18, Van Bhawan, Sector -6 Panchkula, Haryana



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Monitoring & Evaluation Report

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Of

Works Carried Out During 2011-12

In

Hisar District of Haryana

Under

State CAMPA Scheme

October 2013

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Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had Issued guidelines on 2rd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Hisar district of Haryana was started in the year 2010-11. The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in this district.

During the year 2011-12, works under the State CAMPA Scheme in Hisar district were carried out by two implementing authorities, viz., DFO (T) Hisar and DFO (CFP) Hisar.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). No target was fixed/achieved under the CA component. Targets of NPV were achieved by both the implementing authorities.

During the year 2011-12, a physical target of 110 Ha and 250 RKM was achieved against the fixed target of 110 Ha and 250 RKM resulting in 100% physical achievement.

To assess the performance during October 2013, more than 20% sites of works of NPV component were visited and evaluated and the scheme was discussed with implementing authorities.

The works carried out are of good quality. But achievement of targets of strip forests in block forest (Bir Hisar) is totally wrong. Further, planting of 5000 plants per ha in Bir Hisar is beyond the carrying copacity of the area. At present the plantation of Bir Hisar looks good but in near future it will stagnate and the efforts made and expenditure incurred will go waste.

The constraints faced by the implementing authorities are (i) delay in allotment of physical targets, (ii) low cost norms of plantation and (iii) shortage of staff.

The suggestions given by the implementing authorities for further improvement are (i) physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Mansoon, (ii) norms, especially for earth work, must be increased, (iii) at least 2% contingency for unforeseen expenditure must be provided, (iv) staff must be provided as per Cadre Allotment and (v) Computer operators must be provided in every forest Range so that the computers may be used properly.

The suggestions of evaluator ore (i) Scheme should be continued, (ii) Physical targets must be conveyed in time, (iii) Pit planting technique in compacted soils must be replaced with Auger Hole/Ridge planting technique depending on the site conditions, (iv) Targets of strip forests must be achieved in strip forests and (v) Clase spacing in block forests must be stopped.

Grading

Quantitative Aspects	Phy	sical	9
Qualitative Aspects	1.	Plantations	
		Quality	7
		Mointenance	6
		Sustainability	6

(on Scale of 1 to 10)

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(5 to <8)	(3 to <5)	(<3)
	•	Very Good	· -	-

Chapter A

GENERAL

- A.1 Name of District : Hisar
- A.2 Name of State : Haryana
- A.3 Name of Scheme

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State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adboc CAMPA.

A.5 State CAMPA in Heryena

A.5.1 Establishment

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The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- b. Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- Compensatory afforestation;
- d. Environmental services, which include:-
 - Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - III. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - Iv. Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.
- e. Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

1.	Chief Minister, Haryana	Chairperson
2.	Minister of Forests, Haryana	Member
Э.	Minister of Finance, Haryana	Member
4.	Chief Secretary, Haryana	Member
5.	Principal Secretary (Finance), Haryana	Member
6.	Principal Chief Conservator of Forests, Haryana	Member

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7	Chief Mikilifa Warden, Harvana	Member
		Member Secretary
8.	Principal Secretary (Forests), Haryana	ineniner adarate. j
A.5.3.2	Steering Committee	
The Sto	ering Committee of Haryana consists of the following:	
1.	Chief Secretary, Haryana	Chairperson
2	Principal Secretary (Finance), Haryana	Member
3.	Principal Secretary (Forests), Haryana	Member
4.	Chief Wildlife Warden, Haryana	Member
5.	Conservator of Forests (FC) & Nodel Officer (FCA)	Member
6.	Representative of the Ministry of Environment and Forest	\$,
	Member	
	Government of India	
7.	Two eminent NGOs nominated by the state Government	Members
8.	Principal Chief Conservator of Forests	Member Secretary
A.5.3.	3 Executive Committee	
The E	ecutive Committee of Haryana consists of the following:	
1.	Principal Chief Conservator of Forests, Haryana	Chairperson
2.	Addl. Principal Chief Conservator of Forests (Forestry)	Member
3.	Chief Wildlife Warden, Haryana	Member
4.	Chief Conservator of Forests (Protection-I)	Member
5.	Chief Conservator of Forests (Protection-II)	Member
6.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
	Not below the rank of Addi. Secretary	Member
8.	Two eminent NGOs nominated by the state Government	Members
	for a period of 2 years at time who shall be eligible for re-	nomination
9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary

A.5.4 Meetings

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4,2 Steering Committee

The 1st meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{sd} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2nd meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urveshi Gulati IAS, Chief

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Secretary Haryana. In this meeting, the action taken report on 1st meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Hisar district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in Hisar district of Haryana State.

QUANTITATIVE ANALYSIS

B.1 Physical Targets

The physical achievement in Hiser district during the year 2011-12 under the State CAMPA scheme by the different implementing authorities of Haryana Forest department is as given below:

	Name of		Ph	ysical Targe	ts		
Component	Sub-component/ Model	Implementing Authority	Fixed	Achieved	Unit.		
Compensatory	1. Ridge Plantation	OFO (T), Hisar	0	0	RKM		
Afforestation	2. Plantation of tail plants	DFC (T), Hisar	0	0	RKM		
Net Present	1. Afforestation and	management of	Governme	nt forest lan	ds		
Value	i. Assisted Natural Regeneration	DFO (T), Hisar	10	10	Ha		
	ti. Plantation of tail plants in linear forests	DFO (T), Hisar	25	25	RKM		
	iji. Plantation in linear ridges along roads and canals	DFO (T), Hisar	225	225	RKM		
	2. Afforestation in co	Afforestation in community and public lands					
	i. Reclamation of farm land through plantation	DFO (CFP), Hisər	100	100	Hə		

Above table indicates that during the year 2011-12 the physical achievement was 100%.

QUALITATIVE ANALYSIS

C.1 Net Present Value

In this component, works were carried out in Hisar district during the year 2011-12 under the following 2 sub-components:

- i. Afforestation and management of Government forest lands
- 8. Afforestation in community and public lands

M&E of above works was done by the Agricultural Finance Corporation, New Delhi, during October 2013 and the sub-component wise results of M&E are as given below:

C.1.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out under the following 3 models:

- I. Assisted Natural Regeneration
- II. Plantation of tall plants in linear forests
- Bi. Plantation in linear ridges along roads and canals

Model wise results of M&E are as given below:

C.1.1.1 Assisted Natural Regeneration

In this model, plantation works were carried out by the DFO (T) Hisar by achieving a target of 10 Ha at 1 site (Bass Multipurpose Drain). M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E are as given below:

a. Suitability of Land afforested

Land is suitable for raising plantation.

b. Sultability of Species planted

The species planted is the Kikar. This species is suitable for the area.

Techniques of Planting Used and their Effectiveness

Technique of planting used is the Pit planting technique. But, this technique is not very effective due to compaction of soils. Therefore, this technique must be replaced with Auger Hole/Ridge planting technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas visited. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and average height and girth of plantations was arrived.

Detail of site wise survival % and average height and girth of plantations is as given in Annexure-o.

C.1.1.2 Plantation of tall plants in linear forests

In this model, plantation works were carried out by the DFO (T) Hisar by achieving a target of 25 RKM at 3 sites. M&E was carried out by visiting one site (Bir Hisar) resulting in M&E of 33% sites and the results of M&E are as given below:

a. Suitability of Land afforested

Bir Hisar is a block forest and the target fixed was for linear forests (railway lines, roads and canals), therefore, land of Bir Hisar is not a suitable site for this model.

Suitability of Species planted.

The species planted are bar, pipal and neem, etc. and these species are suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used is the Pit planting technique. Tree guards are used for the protection of plants but in spite of this the plants are badly browsed and have no future.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 hat to the extent of a minimum of 20% of the plantation areas visited.

Oetail of site wise survival % and average height and girth of plantations is as given in Annexure-0.

C.1.1.3 Plantation in linear ridges along roads and canals

In this model, plantation works were carried out by the DFO (T) Hisar by achieving a target of 225 RKM at 3 sites. M&E was carried out by visiting 1 site (Bir Hisar) resulting in M&E of 33% sites and the results of M&E are as given below:

Suitability of Land afforested

Bir Hisar is a block forest and the target fixed was for roads and canals, therefore, land of Bir Hisar is not a suitable site for this model.

b. Suitability of Species planted

The species planted is the Eucalyptus and this species is suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used is the Ridge planting technique, it is a very effective technique for raising successful plantation if at least 5 sq. in space is provided to the plants in a block forest.

But in Bir Hisar, the space provided is only 2 sq. m resulting in 5000 plants per ha. This very high density plantation is beyond the carrying capacity of the area. At present the plantation is young and looks good but in near future it will stagnate and the efforts made and expenditure incurred will go waste.

d. Survival of Plants

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Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 has to the extent of a minimum of 20% of the plantation areas visited.

Detail of site wise survival % and average height and girth of plantations is as given in Annexure-a.

C.1.2 Afforestation in community and public lands

In this sub-component, works were carried out by DFO (CFP) Hisar by achieving a target of 100 ha in wateriogged area of 2 villages under the model Reclamation of farm land through plantation, of which works of one village were evaluated resulting in evaluation of 50% villages and the results of evaluation are as given below:

a. Suitability of Land afforested

Farmers' waterlogged land is suitable for raising plantations under the model Reclamation of farm land through plantation.

Suitability of Species planted

The species planted is clonal Eucalyptus, which is very suitable for the waterlogged area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used is the Ridge planting technique. This technique is very effective for waterlogged areas.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in Anneswre-a.

C.3 Constraints faced by Implementing Authorities

- a. Delay in allotment of physical targets.
- b. Low cost norms of plantation
- c. Shortage of staff

C.4 Suggestions of Implementing Authorities for Further Improvement

- a. Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- b. Norms, especially for earth work, must be increased.
- c. At least 2% contingency for unforeseen expenditure must be provided.
- Staff must be provided as per Cadre Allotment.
- e. Computer operators must be provided in every Forest Range.

C.S Suggestions of Evaluator

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- Scheme should be continued.
- b. Physical targets must be conveyed in time so that earth work may be completed before the onset of Monsoon.
- Pit planting technique in compacted soils must be replaced with Auger Hole/Ridge planting technique.

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- d. Targets of strip forests must be achieved in strip forests
- Close spacing in block forests must be stopped.

Annexure-a

Assessment of NPV Plantations

Şr.	Name of			Tanget	Unit	Results of MAE							
No.	Site	Wing	Range	Model	Achieve d		Longlindes	Letitude;	Species	Av. Sarviv el (%)	Av. Height (th)	Ay. Cirfi (203)	Quality
1.	Basa Multipurpose Drain	DFO (T), Hisar	Hanşi	Aided Natural Regeneration	[0	Ha	75°54*23.2 **E	29°02'34"N	Kikar	60	3.0	17	Poor
2.	Bir Hisar	DFO (T), Hisar	Hisar	Plantation in linear ridges along roaris and canals	200	RK M	75 ⁰ 45'36.7 "E	29 ⁸ 1 ו'12.9″ N	Eucalypt us	83	3.3	12	Good
3.	Bir Hiser	DFO (T), Hisar	Hisar	Plantation of tall plants in linear forests	10	RK M	75 ⁸ 45'28"E	29 ⁰ 11*12"'N	Pipal. Ber	40	0.7	10	Poor
4.	Kumbha Fanners' Land	DFO (CFP), Hister	Hisar	Land reclamation by plantation on farmlands	12	На	76°4°48°E	29"07*42,2" N	Clonal Eucalypt us	93%	6.0	22	V. Good

Note-1: Bir Hisar- 200 RKM

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a. Target was for raising plantations along roads and canals but it has been done in block forest of Bir Hisar. Therefore, selection of site is totally wrong,

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b. Planting of about 5000 plants per ha is beyond the carrying capacity of the area. At present the plantation looks good but in near future it will stagnate and the efforts made and expenditure incurred will go waste.

Note-2: Bir Hisar- 10 RKM

- a. Target was for raising plantations in linear forests (railway lines, roads and canals) but II has been done in block forest of Bir Hisar. Therefore, selection of site is totally wrong.
- b. Plants are heavily browsed and have no future.

Annexure-c

Visual Journey

-



Bir Hisar-Ridge Plantation on Broad Ridges

.



Bir Hisar-Tall Plants in Tree Guards





Kumbha Farmer's Land

Monitoring & Evaluation Report of Works Carried Out During 2011-12 In Jind Districts of Haryana Under State CAMPA Scheme

Submitted to

-

Nodal Officer, State CAMPA, Haryana and Conservator of Forests (Forest Conservation) D/o Principal Chief Conservator of Forests, Haryana C-18, Van Bhewen, Sector -6 Penchkula, Haryana



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Monitoring & Evaluation Report

Works Carried Out During 2011-12

Under

State CAMPA Scheme

ln

Jind District of Haryana

October 2013

2 z Executive Summary 3 Grading 4 General Chapter – A 6 Quantitative Analysis Chapter – B 7-12 Chapter - C Qualitative Analysis a. Assessment of CA Plantations Annexure b. Assessment of NPV Plantations c. Photos

Contents

Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Jind district of Haryana was started in the year 2010-11. The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in this district.

During the year 2011-12, works under the State CAMPA Scheme in Jind district were carried out by two implementing authorities, viz., DFO (T) Jind and DFO (CFP) Bhiwani.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV), DFD (T) Jind has carried out the works in both the components, but DFO (CFP) Bhiwani has carried out the works in NPV component only.

During the year 2011-12, a physical target of 44.39 RKM, 40 Ha and 20 TG was achieved against the fixed target of 44.39 RKM, 40 Ha and 20 TG resulting in 100% physical achievement.

To assess the performance during October 2013, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the key observation was discussed with implementing authorities.

The works carried out are of good quality. But achievement of targets of strip forests in block forest (Bir Bara Ban Jind) is totally wrong. Further, planting of about 5000 plants per ha in Bir Bara Ban Jind is beyond the carrying capacity of the area. At present the plantation of Bir Bara Ban Jind looks good but in near future it will stagnate and the efforts made and expenditure incurred will go waste.

The constraints faced by the implementing authorities are (i) delay in allotment of physical targets, (ii) low cost norms of plantation, (iii) shortage of staff and (iv) non-availability of minimum 10 RKM forest areas for raising plantations under the CA component.

The suggestions given by the implementing authorities for further improvement are (i) physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon, (ii) norms, especially for earth work, must be increased, (iii) at least ... 2% contingency for unforeseen expenditure must be provided, (iv) staff must be provided as per Codre Allotment and (v) Computer operators must be provided in every Forest Range so that the computers may be used properly.

The suggestions of evaluator are (i) Scheme should be continued, (ii) Physical targets must be conveyed in time, (iii) Pit planting technique must be replaced with Auger Hale/Ridge planting technique for raising successful plantations in compacted solls, (iv) Targets of strip forests must be achieved in strip forests, (v) Close spacing in block forests must be stopped and (vi) Targets of the model "Lond reclamation by plantation¹ on farmiands" of NPV component must be increased as planty of farmers' waterlogged land is available for reclamation.

Grading

(on Scale of 1 to 10)

Quantitative Aspects	Phy.	sical Targets	. 9
Qualitative Aspects	1.	Plantations	
	.	Quality	. 8
	.	Maintenance	7
		Sustainability	6

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	[5 to <8) '	(3 to <5)	(<3)
	•	Very Good		-

Chapter A

GENERAL

A.1 Neme of District : Jind

A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Harvana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- b. Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;

c. Compensatory afforestation;

d. Environmental services, which include:-

- Provision of goods such as wood, non-timber forest products, fuel, fodder and, water, and provision of services such as grazing, tourism, wildlife protection and life support;
- Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and, water regimes;
- Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
- iv. Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and orimary production.

Research, training and capacity building.

A.S.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

Chief Minister, Haryana	Chairperson
Minister of Forests, Haryana	Member
Minister of Finance, Haryana	Member
Chief Secretary, Haryana	Member
Principal Secretary (Finance), Haryana	Member
Principal Chief Conservator of Forests, Haryana	Member
Chief Wildlife Warden, Haryana	Member .
Principal Secretary (Forests), Harvana	Member Secretary
	Chief Minister, Haryana Minister of Forests, Haryana Minister of Finance, Haryana Chief Secretary, Haryana Principal Secretary (Finance), Haryana Principal Chief Conservator of Forests, Haryana Chief Wildlife Warden, Haryana Principal Secretary (Forests), Haryana

A.5.3.2 Steering Committee

. The Steering Committee of Haryana consists of the following:

1.	Chief Secretary, Harvana	Chairperson
2.	Principal Secretary (Finance), Haryana	Member
7	Principal Secretary (Forests), Harvaria	Member
4	Chief Wildlife Warden, Harvana	Member
ч. 5	Concervator of Forests (FC) & Nodal Officer (FCA)	Member
э. 6.	Representative of the Ministry of Environment and Forest:	, Membe
	Government of India.	
7.	Two eminent NGOs nominated by the state Government	Members
8	Principal Chief Conservator of Forests	Member Secretary

A.5.3.3 Executive Committee

The Executive Committee of Haryana consists of the following:

Ŀ	Principal Chief Conservator of Forests, Harvane	Chairperson
2.	Addl. Principal Chief Conservator of Forests (Forestry)	Member
З.	Chief Wildlife Warden, Haryana	* Member
4.	Chief Conservator of Forests (Protection-I)	Member
5.	Chief Conservator of Forests (Protection-11)	Member
6.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
	Not below the rank of Addl. Secretary	Member
8.	Two eminent NGOs nominated by the state Government	Members
	for a period of 2 years at time who shall be eligible for re-	nomination
9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary

A.S.A Meetings

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1st meeting of the Steering Committee of the State CAMPA of Harvana was held on 2nd June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Harvana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2nd meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1^{21} meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2rd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Jind district of Harvana State was started in the year 2010-11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in Jind district of Haryana State.

Chapter-B

QUANTITATIVE ANALYSIS

B.1 Physical Targets

The physical achievement in Jind district during the year 2011-12 under the State CAMPA scheme by the different implanting authorities of Haryana Forest department is as given below:

	Name of		Physical Targets					
Companent	Sub-component/ Model	Implementing Authority	Fixed	Achieved	Unit '			
Compensatory Afforestation	1. Ridge plantation	DFO (T), Jlind	29.39	29.39	RKM			
Net Present	1. Afforestation and	management of (Governm <u>e</u>	nt forest lan	ds <u>·</u>			
Value	 Assisted natural regeneration in natural forests to improve density of forests 	DFO (T), Jind	. 10	10	Ha			
	ii. Plantation of tail plants in linear forests	DFO (T), Jind	5	5	RKM			
	iii. Plantation In Ilnear ridges along roads and canals	DFO (T), Jind	10	10	RKM			
ļ	2. Afforestation in co	mmunity and pu	blic lands		· · ·			
	i. Land reclamation by plantation on farmiands	DFO (CFP), Bhiwani	30	30	Ha			
	ij. Plantation of Tree Groove (TG)	DFO (CFP), Bhiwani	20	20	NO.			

Above table indicates that during the year 2011-12 the physical achievement was 100%.

Chopter-C

QUALITATIVE ANALYSIS

C.1 Compensatory Afforestation

In this component, plantations were raised by the DFO (T) Jind during the year 2011-12 by achieving a target of 29.39 RKM under the ridge plantation sub-component at 1 site. Monitoring and Evaluation (M&E) was carried out by the Agricultural Finance Corporation, New Delhi, during October 2013 by visiting this site resulting in M&E of 100% sites and the results of M&E are as given below:

B. Suitability of Land afforested

The physical target in RKM pertains to strip forests but in Jind district it is achieved in block forest (Bir Bara Ban Jind), which is wrong.

Suitability of Species planted

The main species planted is the Eucalyptus and this species is suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used is the Ridge planting technique. It is a very effective - technique for raising successful plantation if at least 6 sq. m space is provided to each plant in a block forest.

But In Bir Bara Ban Jind, the space provided is only 2 sq. m resulting in 5000 plants per ha. This very high density plantation is beyond the carrying capacity of the area. At present the plantation is young and looks good but in near future it will stagnate and the efforts made and expenditure incurred will go waste.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height was estimated and average height of plantations was arrived.

Oetail of site wise survival % and average height and girth of plantations is as given in Annexure-2.

C2 Net Present Value

in this component, works were carried out in Jind district during the year 2011-12 under the following 2 sub-components:

Afforestation and management of Government forest lands

Afforestation in community and public lands.

M&E of above works was done during October 2013 and the Sub-component wise results of M&E are as given below:

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out under the following 3 models:

- i. Aided Natural Regeneration
- ii. Plantation of tail plants in linear forests
- iii. Plantation in linear ridges along roads and canals

C.2.1.1 Alded Natural Regeneration

In this model, plantation works were carried out by the DFO (T) Jind by achieving a target of 10 Ha at one site. M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E are as given below:

a. Suitability of Land afforested

Land is suitable for raising plantation.

b. Suitability of Species planted

The main species planted are the Kikar, Arjun, Papri and Shisham. These species are suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used is the Pit planting technique. But, this technique is not very effective due to compaction of soils. Therefore, this technique must be replaced with Auger Hole planting technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 hato the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in *Annexure-b*.

C.2.1.2 Plantation of tall plants in linear forests

In this model, plantation works were carried out by the DFO (T) Jind by achieving a target of 5 RKM at one site. M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E are as given below:

a. Suitability of Land afforested

Land is suitable for raising plantation.

b. Suitability of Species planted

The main species planted are the Shisham and Bkain. These species are suitable for the area.

c. Techniques of Planting Used and their Effectiveness.

Technique of planting used is the Pit planting technique. But, this technique is not very effective due to compaction of soils. Therefore, this technique must be replaced with Auger Hole planting technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 has to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in Annoure-b.

C.2.1.3 Plantation in linear ridges along roads and canala

In this model, plantation works were carried out by the DFO (T) Jind by achieving a target of 10 RKM at 1 site. M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E are as given below:

a. Suitability of Land afforested

The physical target pertains to strip forests (roads and canals) but in lind district it is achieved in block forest (Bir Bara Ban Jind), which is deviation from the instruction.

b. Suitebility of Species planted

The main species planted are the Eucalyptus and Kikar and these species are suitable for the area.

c. Techniques of Planting Used and their Effectiveness.

The technique of planting used is the Ridge planting technique. It is a very effective technique for raising successful plantation if at least 6 sq. m space is provided to each plant in a block forest.

But In Bir Bara Ban Jind, the space provided is only 2 sq. m resulting in 5000 plants per ha. This very high density plantation is beyond the carrying capacity of the area. At present the plantation is young and looks good but in near future it will stagnate and the efforts made and expenditure incurred will go waste.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in Annexure-b.

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out under the following 2 models:

- i. Land reclamation by plantation on farmlands
- 11. Plantation of Tree Groove (TG)

C.2.2.1. Land redemation by plantation on farmlands

In this model, plantation was raised on the waterlogged areas of 23 farmers by DFO (CFP) Bhiwani by achieving a target of 30 ha. M&E was carried out by visiting the areas of 5 farmers resulting in M&E of 22% areas and the results of M&E are as given below:

Suitability of Land afforested:

Land is suitable for raising plantation.

b. Suitability of Species planted

The species planted is the clonal Eucalyptus. This species is suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used is the Ridge planting technique. This technique is very effective in raising successful plantation in waterlogged areas.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in Annexyre-b.

c.2.2.2 Plantation of Tree Groove (TG)

In this model, plantation works were carried out by the DFO (CFP) Bhiwani by achieving a target of 20 TG at 4 sites. M&E was carried out by visiting 1 sites resulting in M&E of 25%" sites and the results of M&E are as given below:

e. Suitability of Land afforested

Land is suitable for raising plantation.

b. Suitability of Species planted

The species planted are Bar, Pipal, Neem, Jamoa, Arjun, Gumbhar, Shisham, Pilkhan and Papri, atc. These species are suitable for the area.

C Techniques of Planting Used and their Effectiveness*

Technique of planting used is the Pit planting technique and the round trench.

d. Survival of Plants

Detail of site wise survival % and average height and girth of plantations is as given in Annewore-b.

C.3 Constraints faced by Implementing Authorities

Delay in allotment of physical targets.

- b. Low cost norms of plantation
- c. Shortage of staff
- d. Non-availability of minimum 10 RKM forest areas for raising plantations under the component- Companyatory Afforestation.

C.4 Suggestions of Implementing Authorities for Further Improvement

a. Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.

b. Norms, especially for earth work, must be increased.

c. At least 2% Contingency for unforeseen expenditure must be provided.

Staff must be provided as per Cadre Allotment.

Computer operators must be provided in every Forest Range so that the computer may be used properly.

- e. Targets of the model "Land reclamation by plantation on farmlands" should be increased as plenty of farmers' waterlogged land is available for reclamation.
- C.S Suggestions of Evaluator
- Scheme should be continued.
- b. Physical targets must be conveyed in time.
- Pit planting technique must be replaced with Auger Hole/ Ridge planting technique for raising good plantations in compacted soils.
- d. Targets of strip forests must be achieved in strip forests.
- Close spacing in block forests must be stopped.
- f. Physical and financial targets of the model "Land reclamation by plantation on farmlands" of NPV component must be increased as plenty of farmers' waterlogged land is available for reclamation.

Annexure-a

Assessment of CA Plantations

55.	Name of				Target Unit	Unit	Species	Results of M&E					
No.	Site	Wing	Range	Biock/ Seet	d d		prantap	Longitudes	Latitudes	Au. Sandval (%)	Av. Height ((m) _	Aw, Girth (sm)	Quality
Ridg	Ridge Plantation												
1	Bir Bara Ban - Jind, C-7, 9 & 1D	OFO (T) lind	Jind	Jind South/ Bir Bara Ban	29.39	RK M	Eucalypt US, Kikar	76⁰17′28.7 ″€	29 ⁰ 17'4D.7" N	70	4.0 <u>.</u>		Good

Note-1: Bir Bara Ban Jind- 29.39 RKM

- a. Target in RKM pertains to strip forests (railway lines, roads and canals) but it has been done in block forest of Bir Bara Ban Jind. Therefore, selection of site is totally wrong.
- b. Planting of 5000 plants per ha is beyond the carrying capacity of the area. At present the plantation looks good but in near future it will stagnate and the efforts made and expenditure incurred will go waste.

Annexure-b

Assessment of NPV Plantations

5.	r. Name of				Target	et Unit	Species	Results of M&E					
No.	Sibe	Wing/	Renge/	Block/ Best	Achieve d		planted	Longitudes	. fattinger	Av. Sarviva J (%)	.Av. Height (m)	Aar. Girth (cm.)	Qaalky
Aide	d Natural Regenera	tion	· · · ·			<u> </u>	•			· · ·			
1.	JP Railway line, Km 2-3 L&R	OFO (1) Jind	' Jind	Jind South/ Sindhvikhera	10	Ha	Kikar, Arjun, Papri, Shisham	76 °18 ′41.3″E	29 ⁰ 18'37.7" N	-76	2.5	12	Good
Plan	tation of tall plan	ts in linear fo	rests -		•							·	
2	JP Relivary Dire, Km 7-9 L&R	0FO (T) Jind	Jind	Jod South/ Sindhvikhera	5	RKM	Shisham, Bakain	76 ⁹ 21'45.3"F	29 ⁰ 18'18'N	48	2.C	10	Poor
Plant	ation in linear ridg	es along roads	and canals			• •							
3	Bir Bara Ban Jind, C-7, 9 & 10	050 (T) Jind	. Jind) Jind South/ Bir Bara Ban Jind	. 10	RKM	Eucalypt us, Xikar	76°17'27_9"E	29 ⁰ 17'44.7" N	75	3.0	10	Good ,
Land	reclamation by pla	intation on far	mlands										
4.	Kharainti Farmer's	i Land			:.				•	_			
	Sh.Gurmeet s/o Ved Pal	DFO (CFP), Bhiwani	Jind	· - · ·	0.53	. Ha	Clonal Eucalypt us	76°19'32.5°E	29 ⁹ 09'57"N	96	8.0	25	V. Good
· · -	Sh. Sudesh s/o Hawa Singh	DFO (CFP). Bhiwani	Jind		2.89	.Ha	Cional Eucalypt US	76 °19'3.5* E	29 °11′13″N	95	5		V. Good
	Sh. Sandesp s/o Baljeet	DFO (CFP), Bhiwani	Jind	-	1.00	Ha	Clonel Eucalypt us	76 °18'30 *E	29 ⁸ 9'9"N	93	5	11	V. Good
·	Sh. Jagat s/o Umaid .	DFO (CFP); Bhiwilni	Jind .		1.10	Ha	Cional Eucalypt us	76 ⁷ 19'16"E	29 ⁰ 11'08"N	95	5.0	12	V. Good
	Sh. Ramesh s/o Pirthi	DFO (CFP), Bhiwani	Jind	-	0.76	Ha	Cional Eucalypt - us	76 ⁴ 19 ⁻ 39"E	29 ⁰ 11'13"N	92	5.0	11	V. Good

 $^{\rm OO}$

Plantation of Tree Groove (TG)													
4.	igra PL	DEO (CEP),	Jind	-	2	No.	Bar,	76 ⁹ 15'S <i>S</i> *E	29 13 44.7	95	3	12	V. Good
		Bhiwani	· .	-			Pipal,		N				
	•						etc		-				-

Note-1: Bir Bara Ban Jind- 10 RKM

- a. Target pertains to strip forests (roads and canals) but it has been done in block forest of Bir Bara Ban Jind. Therefore, selection of site is totally wrang.
- b. Planting of 5000 plants per ha is beyond the carrying capacity of the area. At present the plantation looks good but in near future it will stagnate and the efforts made and expenditure incurred will go waste.







NPV -Bir Barn Bau Jlad



NPV: JP Railway line Km 2-3 L&R

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Tree Groove in Igra PL
Monitoring & Evaluation Report of Works Carried Out During 2011-12 In Sirsa Districts of Haryana Under State CAMPA Scheme

Submitted to

Nodal Officer, State CAMPA, Haryana and Conservator of Forests (Forest Conservation) O/o Principal Chief Conservator of Forests, Haryana C-18, Van Bhawan, Sector -6 Panchkula, Haryana

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Monitoring & Evaluation Report

Works Carried Out During 2011-12

Īn

Sirsa District of Haryana

Under

State CAMPA Scheme

Јапиагу 2014

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Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2^{of} July 2009 for establishing CAMPAs in the States/UTs and putting in place a funding mechanism for enhancing forest and tree cover and conservation and management of wildlife by utilizing funds received towards Compensatory Afforestation (CA), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Sirsa district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Sirsa district during the year 2011-12 by the three implementing authorities, viz., DFO (T) Sirsa, DFO (CFP) Hisar and DFO (WL) Hisar.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Sirsa only. But the physical targets under the NPV component were achieved by all the three implementing authorities, viz., DFO (T) Sirsa, DFO (CFP) Hisar and DFO (WL) Hisar.

During the year 2011-12, a physical target of 33.46 RKM, 90.00 Ha and 96.00 No TG was achieved against the fixed target of 32.71 RKM, 90.00 Ha and 96.00 No TG resulting in 100% achievement.

To assess the performance during January 2014, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

Observations

- i. The works of both the components were of good quality.
- The average survival of plantations was 79%.
- The survival % was Excellent (>79%) at 23 site, Very Good (70-79%) at 7 sites, Good (60-69%) at 7 site and average at 1 site.
- iv. The survival and growth of biodrainage plantations was excellent at all the 15 altes visited.
- v. The main shortcomings in forest land plantations were:
 - Close spacing
 - Under planting

Constraints faced by the implementing authorities

- Delay in allotment of physical targets.
- Low cost norms of plantation and Non-availability of funds for the maintenance of TGs.

Suggestions for further Improvement

- i. Scheme should be continued.
- Physical and financial targets must be conveyed in time.

Hi. Pit planting technique in compacted soils must be replaced with Auger Hole/Ridge planting technique.

iv. Close spacing for species having broad crown must be stopped.

v. Funds for the maintenance of TG must be provided for 3 years.

- v). For early reclamation of waterlogged areas, number of plants/ha should be increased from 200 to 300 plants/ha in biodrainage model.
- vii. Farmers should be advised to clear fell the biodrainage plantations at the age of 4 years because after this age plantation causes adverse effect on the yield of agricultural crops. After clear felling, farmers should maintain the coppices by retaining one coppice on every stump.

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Grading (On a Scale of 1 to 10)

Quantitative Aspects	Physical		•. • 9
•	-		· .

Qualitative Aspects	1.	Plantations	_		
		Quality	· . ·	8	I
		Maintenance		7	
		Sustainability		6	

Overall Grading of the Outstanding Very Good Good Poor

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Project	(8 to 10)	(5 to <8)	(3 to <5)	Poor (⊲)
	-	Very Goad	-	۰.

Chapter A

GENERAL

A.1 Name of District ; Sirsa

A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2^{ed} July 2009 for establishing CAMPAs 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 Affarestation (CA), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- Compensatory afforestation;

d. Environmental services, which include:-

- Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
- ii. Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
- iii. Non-material benefits obtained from consystems, spiritual, recreational, acethetic, inspirational, educational and symbolic; and
- iv. Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.

Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

T	де 📢	rovening body of maryana consists of the following:	
	1.	Chief Minister, Haryana	Chairperson
	2.	Minister of Forests, Haryana	Member
	. 3.	Minister of Finance, Haryana	Member
	∙ 4 .	Chief Secretary, Harvana	Member
	5.	Principal Secretary (Finance), Harvana	Member
	6.	Principal Chief Conservator of Forests, Harvana	Mamber
	'7.	Chief Wildlife Warden, Harvana	Mambas
	8.	Principal Secretary (Forests) Horsens	Memoer
	5 2	2 Stearfor Committee	Member Secretary
1	be S	teering Committee of Haryana consists of the following:	
	Ι.	Chief Secretary, Haryana	Chairmerson
	2.	Principal Secretary (Finance), Haryana	Member
	3.	Principal Secretary (Forests), Harvana	Monhor
	4.	Chief Wildlife Warden, Harvane	Manba
	5.	Conservator of Forests (FC) & Nodel Officer (FCA)	Mander
	б.	Returnsentative of the Ministry of Environment and Provents	Member
		Government of Indie	Member
•	7.	Two eminent NGOs appringted by the state Onemand	
	8.	Principal Chief Conservator of Formata	Memoers
			Member Secretary
	5.3.	Executive Committee	
0	њ Ел	ecutive Committee of Haryana consists of the following:	
	1.	Principal Chief Conservator of Forests, Haryana	Chairperson
	2.	Addl. Principal Chief Conservator of Forests (Forestry)	Member
	3.	Chief Wildlife Werden, Haryana	Member
	4.	Chief Conservator of Forests (Protection-D	Member
	5.	Chief Conservator of Forests (Protection-II)	Marshar
	6.	Conservator of Forests (Plenning)	. Bilansha
	7.	Representative of Finance Department	Methoer
		Not below the rank of Addi Secondary	Member
		The second second of the second	Member

- 8. Two eminent NGOs nominated by the state Government Members for a period of 2 years at time who shall be eligible for re-nomination 9. Conservator of Forests (FC) & Nodal Officer (FCA)
- Member Secretary

A.5.4 Meetings

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1^{st} meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{sd} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2nd meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1st meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011.

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Sirsa district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Sirsa district of Haryana State by the three implementing authorities, viz. DFO (T) Sirsa, DFO (CFP) Hisar and DFO (WL) Hisar.

QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Sirsa district of Haryana State by the three implementing authorities, viz. DFO (T) Sirsa, DFO (CFP) Hisar and DFO (WL) Hisar.

B.1 Physical Targets

The physical achievement in Sirsa district during the year 2011-12 under the State CAMPA scheme by the DFO (T) Sirse, DFO (CFP) Hisar and DFO (WL) Hisar is as given below:

	Nat		Physical Targets				
Component	Sub-component	Model	Implementing Authority	Fixed	Achieved	Unit	
Compensatory Afforestation (CA)	-	Ridge Plantation	DPO (T) Sirşa	22.71	. 22,00	RKM	
· · ·		Tall Planis	· · ·	0.00	1.48	RKM	
Not Present Value (NPV)	Afforestation and muscrement of	Assisted Natural Regeneration		10.00	10.00	Ha	
	Government forest lands	Plantation in linear ridges along roads and canals	· · ·	5.00	5.00	RKM	
	- -	Plantation of tall ² plants in linear forests	·	5.00.	5,00	ŘKM	
	Afforestation in	Biodrainage	DFO (CFP)	80.00	80.00	Ha	
	public lands	Plantation of Tree Grooves (TGs)	rinsar	35.00	35,00	No.	
	Conservation, protection and management of wildlife and its habitat	Plantation of TOs of fruit trees in Abubshahar Wild Life Sanchrary	DFO (WL) Hisar	61.00	61,00	No.	
	· To	Hal		32,71	33,46	<u>RKM</u>	
·				90.00	90.00	B	
				96.00	96.00	No	

Above table indicates that during the year 2011-12, a physical target of 33.46 RKM, 90.00 Ha and 96.00 No TG was achieved against the fixed target of 32.71 RKM, 90.00 Ha and 96.00 No TG resulting in 100% achievement.

QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Sirsa district of Haryana State by the three implementing authorities, viz., DFO (T) Sirsa, DFO (CFP) Hisar and DFO (WL) Hisar.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Sirsa only. But the physical targets under the NPV component were achieved by all the three implementing authorities, viz., DFO (T) Sirsa, DFO (CFP) Hisar and DFO (WL) Hisar.

During the year 2011-12, a physical target of 33.46 RKM, 90.00 Ha and 96.00 No TO was achieved against the fixed target of 32.71 RKM, 90.00 Ha and 96.00 No TO resulting in 100% achievement.

To assess the performance during January 2014, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

C.1 Compensatory Afforestation

In this component, plantations were raised by the DFO (T) Sirse under the following 2 models:

i. Ridge Plantation

ii. Tall Plants

C.1.1 Ridge Plantation

In this model, plantations were raised by the DFO (T) Sirsa at 3 sites. All the 3 sites were visited during January 2014 and the results of M&E were as given below:

a. Soitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

Techniques of Planting Used and their Effectiveness

The technique of planting used was the Ridge planting technique. This technique was suitable for the area.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

The survival % was very good (70-79%) at 2 site and good at 1 site.

The main shortcomings were:

i. Kikar and Ailanthus were planted on ridges at a close spacing of 2m x 1m, which is technically wrong.

Cleaning, pruning and spacing of Kikar plants have not done.

Detail of site wise survival %; average height, average girth and shortcomings, etc. were as given in Annexare-a.

C.1.2 Tall Plants

In this model, plantations were raised by the DFO (T) Sirsa at 8 sites. Seven sites were visited during January 2014 and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for taising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Pit planting technique. But this technique was not so affective due to soil compaction.

d. Survival of Planta

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 70%.

The survival % was excellent (>79%) at 2 sites, very good (70-79%) at 1 site and good (60-69%) at 4 sites.

The main shortcomings were:

- Planting of small sized plants in the name of tall plants. Tall plant means a plant of at least 2 m in height.
- A target of 1.46 RKM was achieved at 8 sites. It is not possible for a Forest Guard to maintain and protect such small sized new plantations.

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in Annexure-a.

C.2 Not Present Value

In this component, works were carried out in Sirsa district during the year 2011-12 under the following 3 sub-components:

Afforestation and management of Government forest lands:

ii. Afforestation in community and public lands

Conservation, protection and management of wildlife and its habitat

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out under the following 3 models:

i. Assisted Natural Regeneration

ì.

ii. Plantation in linear ridges along roads and canals

iii. Plantation of tall plants in linear forests

Out of above 3 models, the plantations of Assisted Natural Regeneration model were visited and the results of M&E were as given below:

C.2.1.1 Assisted Natural Regeneration

In this model, plantation works were carried out by the DFO (T) Sirsh by achieving a target of 10 ha at 2 sites. M&E was carried out by visiting both sites resulting in M&E of 100% sites and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Average survival of plantations was 63%.

The survival % was good (60-69%) at all the 2 sites.

Detail of site wise survival % and average height and girth of plantations was as given in *Annexure-b*.

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out by the DFO (CFP) Hisar under the following 2 model:

Biodrainage for reclamation of waterlogged areas.

ii. Plantation of Tree Groove (TO)

C.2.2.1 Biodramage for reclamation of waterlogged areas

In this model, plantation works were carried out by the DFO (CFP) Hisar by achieving a target of 80 ha on 68 farmers' waterlogged areas of 2 villages (Gudie Khere and Nirban).

M&E was carried out by visiting 15 farmers' waterlogged areas of Gudia Khera and Nirban villages resulting in M&E of 22% farmers' waterlogged areas and the results of M&E were as given below:

L Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted was suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Ridge planting technique. This technique is very effective for waterlogged areas.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival of plantations was 88%.

Survival % and growth of plantations was excellent (>79%) at all the 15 sites visited.

For early reclamation of waterlogged areas, number of plants/ha should be increased from 200 to 300 plants/ha.

Farmers should be advised to clear fell the plantations at the age of 4 years because after this age plantation causes adverse effect on the yield of agricultural crops. After clear felling, farmers should maintain the coppices by retaining one coppice on every stump.

The area wise survival %, average height and average girth, etc. were as given in Annexureb.

C.2.2.2 Plantation of Tree Groove (TG)

In this model, plantation works were carried out by the DFO (CFP) Hisar by achieving a target of 35 TGs in 11 villages.

M&E was carried out by visiting 8 TGs resulting in M&E of 23% TGs and the results of M&E were as given below:

Suitability of Land afforested .

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the areas/model,

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. This technique is not so affective due to soil compaction. For early establishment of plantation, the Auger Hole planting technique should be used.

d. Survival of Planta

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival of plantations was 81%.

Survival % was excellent (>79%) at 5 sites and very good (70-75%) at 3 sites.

'Plants were affected by frost/ drought/ soil salinity/ biotic pressure.

Maintenance of TGs was not done due to non-availability of funds. It is suggested that funds must be provided for the maintenance of TGs for at least 3 years

The TG wise survival %, average height and average girth, etc. were as given in Annexare-

C.2.3 Conservation, protection and management of wildlife and its hubitat

In this model, plantation works were carried out by the DFO (WL) Hisar by achieving a target of 61 TGs in 9 villages.

M&E was carried out by visiting 17 TGs of 3 villages resulting in M&E of 28% TGs and the results of M&E were as given below:

Sumblity of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the areas/model,

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. This technique is not so effective due to soll compaction. For early establishment of plantation, the Auger Hole planting technique should be used.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival of plantations was 67%.

Survival % was excellent (>79%) in 1 village, very good (60-69%) in another I village and average (50-59%) in third village.

Approved design of TGs was not followed,

Misc. species planted instead of fruit plants.

Maintenance of TGs was not done due to non-availability of funds. It is suggested that funds must be provided for the maintenance of TGs for at least 3 years

The TG wise servival %, average height and average girth, etc. were as given in Annexareb.

C.3 Constraints faced by Implementing Authorities

Delay in allotment of physical targets.

- ii. Low cost norms of plantation
- iii. Non-availability of funds for the maintenance of TG.
- C.4 Suggestions of Implementing Authorities for Further Improvement
- i. Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.

Norms, especially for earth work, must be increased.

iii. Staff must be provided as per Cadre Allotment.

C.5 Suggestions of Evaluator

i. Scheme should be continued.

ii. Physical targets must be conveyed in time.

lii. Pit planting technique in compacted soils must be replaced with Auger Hole/Ridge planting technique.

iv. Close spacing for species having broad crown must be stopped.

v. Funds for the maintenance of TG must be provided for 3 years.

vi. For early reclamation of waterlogged areas, number of plants/ha should be increased from 200 to 300 plants/ha.

vii. Farmers should be advised to clear fell the plantations carried out under biodrainage at the age of 4 years because after this age plantation causes adverse effect on the yield of agricultural crops. After clear felling, farmers should maintain the coppletes by retaining one copplete on every stamp.

Annexure-a Assessment of CA Plantations

Sr.		Name of		Target Unit Achieve	Species		•	1	Reputs of	M&E		1 · ·	
	Site	Implementin g Authority	Range	d			Langitades (Rayf)	Latitudes (North)	Av. Surviva 1 (%)	Av. Height (m)	Ar. Girth (cm)	Grading	Remarks
Ridg	e Plantation	1	· · · · ·	-	· .		1	·					1. · ·
1.	Sukhchuin Distributory RD 140-150 L&R	DFO (T) Sirsa	Sinsa	-8.0	RKM	Kikar Bucalyptu 9	75"06*41.7*	29 35 08.1	75	3.0	5	Very Good	Close spacing o Kikar
2	Sheranwali Distributory. RD 135-150 L&R and Sheranwali Parallel RD 35-53 L	DFO (T) Sirsa	Rania	8.0	RKM	Kikar Ailanthus	74°47'35_8*	29 ⁰ 24*22.0'	- -	- 3.0 -	8	Geod	Close spacing o Kilcar an Ailanthus
З.	Rori Branch RD 47-54 R/Side	DFO (T) Sinsa	Kalanwal i	6.0	RKM	Kikar Eucalyptu s	75°09°02.0°	29 ⁰⁴ 2'30.0'	70	2 .5	5	Very Good	Close spacing a Kikar. Under planting
		Total	·	22.0	RKM								
rall (Plants				•	· .	· · · ·	-	-				•
I	Chotala to Sangris road KM 4-5 L&R	DFO (T) Sirsa	Dahwali	0.12	RKM	Shisham replaced with Papri	74 ⁰ 28`44.0`	2947'34.3'	. 65	2,5	7	Good	Small sized plant planted instead of tall plants.

Grading on the basis of survival % [Excellent >79%; Vary good 70% -79%, Good 60%- 69%, Average 50%-59%, Poor<50%]

•		· :					17					-	
r.		Name of		Target	Dalt	Species		•	:	Remite of	MÆE		
	Site	Implementin g Authority	Range	d d	-		Longitudes (East)	Latitudes (North)	Ay. Serviva I (%)	Av. Height (pi)	Av. Girth (cm)	Greding .	Romarks
L	DHS road 312-313 L&R	DFO (T) Sirni	Dabwali	0.13	RKM	Shisham	74º43'41.6'	29"57"2.50"	62	2.0	5	Good	-do-
)	Siraa Jamal road KM 11-12 L	DFO (T) Sirsa	Sirsa	0.12	RKM	Neem	75°01'02.0'	29°16'34.4*	80	0.8	NM	Excellent	- dò-
I	Sirsa Barnala road KM 6-7 R	DFO (T) Sinsa	Sirsı.	0.05	RKM	Shisham	75°05'05.0'	29°34'56.9'	70	1.0	NM	Very Good	-do-
	DHS road KM. 249-250 L&R	DFO (T) Sirsa	Sirsı.	0.21	RKM	Neem	75°06'38.9'	29 ⁰ 31'37.8'	80	2.0	NM	Excellent	- do -
	SGC RD 44- 50 L&R	DFO (T) Sínsa	Ranis	0.25	RKM	Jamun Mulberry	-	-	-	-	•	-	-do-
	Jiwan Nagar- Dabwali road 41-42 L&R	DPO (T) Sirsa	Rania	0.08	RKM	Jamun Mulberry replaced with Neem	74 ⁰ 43"33.0"	29 ⁰ 39'36.2'	68	4.0	10 	Good	-do-
	Phaggu minor RD 15-25 R/Side	DFO (T) Sirsa	Kalanwal i	0.50	RKM	Neem Papri	75°11'58.5'	29"48"53.2"	60	2.0	NM	Good	-do-
tal				1.48	RKM								

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Annexare-b

Assessment of NPV Plantations

Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Poor<50%]

Sr.	n. Name of			Target Unit Speci	Species		·]	Results of	MAE		-	
140.	مالک	Implementia g Authority	Range	d		planted	Loogitades (Best)	Lailtudes (North)	Av. Surviva	Av. Height	Av, Girth	Grading	Remarks
				· .					(%)	(111)	(cm)		
A	Afforestation	and manager	ment of Go	vernment	forest	lands	<u> </u>	· .			-		
B	Assisted Natura	Regeneration		· .						-	• .		
.1	-Dabwali Rania road KM 17-19 L/Side	DFO (T) Sirsa	Dabwali	3.0 .	Ha	Shisham Jamnn Neem	74"44'11_1"	29⁶49'1.2' 1	60	D.E.	8	Good	-
2	Darówala- Keharwala- Manuwala road KM 0-9 L&R	DFO (T) Sirsa	Rania.	5.0	Ha	Shisham	74°42′13.8''	29°41'33,4''	65	3.0	3	Good	
B	Afforestation	in community	y and publi	ie lands						I			· ·
•	Biodreinege (200) piants = 1 ha)											
L -	Mahender Singh a'o Sh. Chei Ram, vill- Gudia Khera	DFO (CFP) Hisar	Som	120	No. of Plents	Clonal Eucalyphus	74"59"24.2"	29°23°23.3"	-	7.0	28	Excellent	No. of plants should be increased from 200 to 300 plants/ha for early reclamation of waterlogged areas.
2	Yed Ram s/o Sh.Nerak Ram, vID- Godia Khere	- do-	-de-	351	-90-	- do-	74 ⁰ 59'13.9''	29"23"23.6"	85	8.0	29	Excellent	· -de-
3	Bhoop Singh a'o Sh. Nanak Ram, vill-Gudia Khera	-do-	-de-	140	· -dc -	-do-	74°59'18.8''	29 ⁹ 23'2 3, 4''		8.0	27	Excellent.	-00-

• .

		• :				· · · -	19						
9r.]	Name of	•	Targel	Unit	Species				Results of	MAE	<u>.</u>	
No.	Site	Implementia 'g Anthority	Range	Achieve d		planted	Longitudes (East)	Latitudes (North)	Av. Sarviva I (%)	Av. Beight (m)	Ay. Girth (cm)	Grading	, Ramarka
4	Jai Fal s/o Sh. Maheader Singh, vill- Gutin Khera	-do-	- do-	. 63	-dc-	-do-	74°59'24.0''	29 ⁵ 23'24 <i>A</i> ''	\$2	7.0	26	Excellent	-40-
5	Chotto Ram a/o Sh.Kurda Ram, vill-Gufia Khora	~do-	-do-	75	-50-	-do-	74 59'04.3''	29°23'19.6''	· 81-	6.5 :	25	Excellent	
6	Gopi Ram s/o Sh. Nanak Ram, vill- Gudia Khara	-do-	-do-	97	-do-	-do-	74"59"21.9"	29"23"19.5"	87	.8.0	26	Excellent	-do-
7.	Krishan Kumar s/o Sh. Surja Ram, vill- Gudia Khera	-do-	-do-	75	-40-	-do-	74"5\$`51.9''	29 ⁶ 23"23.4"	85	8.0	25	Excellent	do-
8	Ram Sevroop s/o Sh. Jas Raj Kaswan, vill-' Nirwan	-do-	- do -	. 520	·-do-	-do-	75 ⁶ 02'40.0''	29 ⁶ 23'43.6''	90	7.0	. 30	Excellent	-do-
9	Ramjî Lal s/e Sh. Yad Ram, vill- Nirwan	-de- `	-do-	214	-dc-	-do-	75 02'18.9"	29 23 43.5"	85	7.0	30	Excellent	-do-
10	Rafbir s/o Sh. Dhan Raj, vill- Nirwen	-de- '	- do- :	682	-do-	-do-	75 ⁰ 02'57.6''	29 °23 '33.9"	94	10.0	40	Excellent	-de-
11	Manoj s/o Sh. Dharam Pal, vj]]- Nirwan	-de-	-do-	357	-do-	-do-	75°02'55.6''	29*23*23.9**	90	9.0	25	Excellent	-do- .:
12	Viped s/o Sb.Ram	-40-	-do-	127	-do-	-do-	75'02'45.8''	29 [°] 23'24.0''	9 2	9.0	25	Excellent	-do-

•

Sr.		Name of		Target	Unit	Species Resalts of M&E								
. NO.	Site	Implementin g Authority	Hunge -	d	•	pranted	Longitades (East)	Latitudes (North)	Av. Servive	Av, Height	Av. · Girth	Grading	Remarks	
•.	· .								(%)	(23)	(can)			
	Paratap, vill _: Nirwan			· ·										
13	Halbir s/o Sh. Jas Raj, vill- Nirwan	-do-	-do-	131	-40-	-do-	75°02*30.5″	29*23*43.6"	95 	0.01	30	Excellent	-30-	
14	Ram Singh a'o. Sh. Harlal, viil- Nirwan	-do-	-do-	80	-80-	-do-	75"02"18.4"	29 23 23 5	94	. T 0. 0	30	Excollent	-40-	
- 15 	Dharana Fal s/o Sh. Amar Singh, vill- Nirwan	-30-	· -do-	100	-de-	· -do-	75 ⁰ 02'45; 8 **	29"23'23.8"	96	10.0	30 ·	Excellent	-40-	
b .	Tree Groves		•											
L	Shamahan Ghat, vill-Gussiana	DFO (CFP) Histor	Sira	1	No.	Mise. species	7503128.017	29"15"14.4"	. 90	2.0	אא	Excellent	Plants are affected by frost/ drought/ soli salinity/ biotic pressure.	
· ·											•		No maintenance of TGs due to non- evailability of funds.	
2	Mandir, vill- Gussiana	-do-	- do -	. 1	No.	-40-	75°05'16.9‴	29°15'16.3"	90	2.0	ŃM	Excellent	-do-	
3	Geushala, vill- Mithi Surera	-do-	-96-	1	No.	-do	74°42'09.7"	29"24'38.6"	70	3.0	8	Very Good	-de-	
4	Johri, vill-	-đ ọ -	-do-	2	No.	-do-	74 42 14.5"	29°23'39.3''	80	1.5	NM	Excellent	-do-	
	Dini Shats						74*42'15.7"	29 23 39.4"	80	1.5	NM	Excellent	-do-	
6	Shamshan Ghat, vill- Tarkanwali	-do-	-040-	- t	No.	-de-	75 °0 9'24.6''	29 20 36.1	75	2.0	ЖМ .	Very Good	-40-	
.7	Pancharyat	-40-	-do-	2	Na.	-do-	75 09 30.5**	29°20'24.5"	85	L.O	NM	Excellent	-do-	

Sr.	-	Name of		Target	Voit	Species			1	Results of	M&B		
Liù.	Site	Implementia g Authority	Range	dd		, pantea	Longitudes (Eant)	Latitudes (North)	Av. Sarviva I (%)	Av. Height (m)	Av. Girth (cm)	Gradiag	Ramariu;
	Lend, vill- Turkurvali						75"04"19.8"	29"20"389"	75	1.3	NM	Very Good	-00-
С	Conservation,	protection a	nd manage	ment of w	ild]Efe a	nod its babi	tet						
Ħ	Tree Groves of P	rait Plants			•	•							
1	Ramgarh V. hospitel	DFO (WL) Hiser	Sira	. T	No.	Misc. species	74 45 47.0"	29"44"44.2"	70	2,5	6	Very Good	Mise, species planted instead of fruit plants.
	•		-			-							Approved design of TGn was not followed.
							-					•	No maintenance of TGs due to tim- availability of funds.
2	Munawali	-do-	-00-	6	No.	-de-	74"43"12.6"	29°44'50.6''	50	3.0	10	Excellent	do-
3	Godika	-40-	-do-	10	No.	ŝ	74"41 46.0"	29 43 33.2"	50	5.0	16	Average	-00-

. 21





1 - DFO (T) Sirsa - CA - Ridge 2 DFO (T) Sirsa - CA - Tall Plants

Jiwan Nagar-Dabwali road 41-42 L&R



Dabwali Rania road KM 17-19 L/Side



Chotala to Sangria road KM 4-5 L&R





4 - DFO (CPF) Elsar - NPV - Biodrainage

Bhoop Singh s/o Sh. Nanak Ram, vill-Cudia Khera Jel Pal s/o Sh. Mahander Singh, vill- Gudia Khara



Chottu Rats s/o Sh.Kurda Ram, vill- Gudia Khera Oopi Rats s/o Sh. Nanak Ram, vill- Gudia Khera.



Kristen Kumer s/o Sh. Surje Ram, vill- Gudia Khere. Ram Savroop s/o Sh. Jas Raj Kaswan, vill- Nirwan



Rajbir s/o Sh. Dhan Raj, vill-Nirwan



Manoj s/o Sh. Dirawa Pal, vili-Nirwan

C



/Inod a/o Sh.Ram Parmap, vili-Nirwan

Balbir a'o Sh. Jas Raj, vill- Nirwan



Ram Shigh s'o Sh. Harial, vill-Nirwan

Disease Pal s/o Sh. Amar Singh, vill- Norwan



Shamshan Ghat, vill- Gussiana Mendir, vill- Gussiana



Panchayat Land, vill- Tarkanwall



Shamshan Ghat, vill- Tarkatwali



Johri, vill- Mithi Surera

John, vill-Mithi Surera



Ramgath V. hospital



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MONITORING & EVALUATION REPORT

Of

Works Carried Out During 2011-12

In

JHAJJAR DISTRICT OF HARYANA

UNDER

STATE CAMPA SCHEME

Submitted to: Conservator of Forest cum Nodal Officer (Forest conservation) State CAMPA, Haryana Department of Forest, Govt. of Haryana Van Bhawan, Sector-6 Panchkula, Haryana



AFC INDIA LIMITED

NORTHERN REGIONAL OFFICE: B1/9, IIIRD FLOOR, COMMUNITY CENTRE JANAKPURI, NEW DELHI-110056 PHONE: 011-45791190-96, FAX: 91-45791189 EMAIL: AFCDELHIGAFCINDIA.ORG **Monitoring & Evaluation Report**

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Works Carried Out During 2011-12

In ·

Jhajjar District of Haryana

Under

State CAMPA Scheme

March 2014

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1

Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2^{ed} July 2009 for establishing CAMPAs in the States/LTs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Jhajjar district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Jhajjar district during the year 2011-12 by the two implementing authorities, viz., DFO (T) Jhajjar and DFO (CFP) Rewari.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Juajjar only. But the physical targets under the NPV component were achieved by both the implementing authorities.

During the year 2011-12, a physical target 70.93 RKM, 170 Ha and 15 TGs was achieved against the fixed target of 70.93 RKM, 170 Ha and 15 TGs resulting in >100% achievement.

To assess the performance during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

Observations

- The works of both the components were of good quality.
- The average survival of plantations was 83%.

:

- c. Out of 5 sites of CA plantations, the survival % was Excellent (>79%) at 1 site, Very Good (70-79%) at 3 sites and poor (<50%) at 1 site.</p>
- Out of 23 sites of NPV plantations visited, the survival % was Excellent (>79%) at 17 sites, Very Good (70-79%) at 5 sites and Good (60-69%) at 1 site

Constraints faced by the implementing authorities

As told, the constraints faced by the implementing authorities were:

- Delay in allotment of physical and financial targets,
- Non-availability of funds for the maintenance of TGs.
- Shortage of staff

Suggestions for further improvement

- 1. The NAP project should be continued because it is helping in enhancing the quality of degraded forests, improving the tree cover in non-forest lands and mitigating the changing climate.
- Physical and financial targets must be conveyed in time.
- Funds for the maintenance of Tree Groves (TGs) must be provided for 3 years.
Grading (On a Scale of 1 to 10)

Quantitative Aspects	Physical	9
	<u></u>	

Qualitative Aspects	1.	Plantations						
		Quality	8					
		Meintenance	7					
		Sustainability	7					

Overall Grading of the	Outstanding	Very Good	Gaod	Poor
Project	(8 to 10)	(5 to <8)	(3 to <5)	(<3)
	-	Very Good	-	-

Chapter A

GENERAL

- A.1 Name of District : Jhajjar
- A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoe CAMPA.

A.5 State CAMPA to Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- Compensatory afforestation;
- Environmental services, which include:-
 - Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of sarvices such as grazing, tourism, wildlife protection and life support;
 - ii. Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - iii. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - iv. Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.

Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

4

A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

	1.	Chief Minister, Haryana		Chairperson
	2.	Minister of Forests, Haryana		Member
	3.	Minister of Finance, Haryana		Member
	4,	Chief Secretary, Haryana		Member
	5.	Principal Secretary (Finance), Haryana		Member
	6.	Principal Chief Conservator of Forests, Haryana		Member
	7.	Chief Wildlife Warden, Haryana		Member
	8.	Principal Secretary (Forests), Harvana	Membe	Secretary
A.4	532	2 Steering Committee		
Th	e St	eering Committee of Haryana consists of the following:		
	1.	Chief Secretary, Haryana		Chaimerson
	2.	Principal Secretary (Finance), Haryana		Member
	3.	Principal Secretary (Forests), Haryana		Member
	4.	Chief Wildlife Warden, Haryana		Member
	5.	Conservator of Forests (PC) & Nodal Officer (FCA)		Member
	6.	Representative of the Ministry of Environment and Forests,		Member
		Government of India		
	7.	Two eminent NGOs nominated by the state Government		Members
	Ş .	Principal Chief Conservator of Forests	Membe	a Secretary
A.5	i.3.3	Executive Committee		
Th	: Ex	ecutive Committee of Haryana consists of the following:		
	۱.	Principal Chief Conservator of Forests, Haryana	•	Chairperson
	2.	Addl. Principal Chief Conservator of Forests (Forestry)		Member
	3.	Chief Wildlife Warden, Haryana		Member
	4.	Chief Conservator of Forests (Protection-I)		Member
	5.	Chief Conservator of Farests (Protection-II)		Member
	6.	Conservator of Forests (Planning)		Member
	7.	Representative of Finance Department		Member
		Not below the rank of Addi. Secretary		Member
	8.	Two eminent NGOs nominated by the state Government		Members
		for a period of 2 years at time who shall be eligible for re-no	minetic	n.
	9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Membe	r Secretary
		-		

A.5.4 Meetings

A.5.4.1 Governing Body

The l^{μ} meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1^{\circ} meeting of the Steering Committee of the State CAMPA of Haryana was held on 2nd June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2^{nd} meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urveshi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1^{nt} meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Jhajjar district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Jhajjar district of Haryana State by the two implementing authorities, viz. DFO (T) Jhajjar and DFO (CFP) Rewari.

QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Jhajjar district of Haryana State by the two implementing authorities, viz. DFO (T) Jhajjar and DFO (CFP) Rewari.

B.1 Physical Targets

B.1.1 Plantation

The physical achievement in Inajjar district during the year 2011-12 under the State CAMPA scheme by the DFO (T) Inajjar and DFO (CFP) Rewari is as given below:

	Na	we.af		Physical Targetz			
Component	Sub-component	Model	Implementing Authority	Fixed	Achieved	Unit	
Compensatory Afforestation (CA)	-	Ridge	Ъғо (Т) Љајјат	60.93	60.93	R К.M	
Net Present Value (NPV)	Afforestation and management of Government forest lands	Ridge plantation in linear forests		J O.D Ø	10.00	RKM	
	Afforestation in community and public lands	Plantation of Tree Grooves (TGs)	DFO (CFP) Rewari	15,00	15.00	No.	
		Biodrainage		170.00	170	Ня	
	Т	otal		70.93	70.93	RKM	
				170.00	1 70.00	На	
				15.00	15.00	No	

Above table indicates that during the year 2011-12, a physical target of 70.93 RKM, 170 Ha and 15 TGs was achieved against the fixed target of 70.93 RKM, 170 Ha and 15 TGs resulting in >100% achievement.

QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Jhajjar district of Haryana State by the two implementing authorities, viz. DFO (T) Jhajjar and DFO (CFP) Rewari.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Jhajjar only. But the physical targets under the NPV component were achieved by both the implementing authorities, viz., DFO (T) Jhajjar and DFO (CFP) Rewari.

During the year 2011-12, a physical target of 70.93 RKM, 170 Ha and 15 TGa was achieved against the fixed target of 70.93 RKM, 170 Ha and 15 TGs resulting in >100% achievement.

To assess the performance during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

C.1 Compensatory Afforestation

C.1.1 Ridge Madel

In this model, plantations were raised by the DFO (T) Jhajjar by achieving a target of 60.93 RKM at 5 sites. All the 5 sites were visited during March 2014 and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

Techniques of Planting Used and their Effectiveness

The technique of planting used was the Ridge planting technique. This technique is effective in taising successful plantations in low lying areas.

d. Survival of Plants

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Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 64%.

Out of 5 sites of CA plantations, the survival % was Excellent (>79%) at 1 site, Very Good (70-79%) at 3 sites and poor (<50%) at 1 site.

Detail of site wise survival %, average beight, average girth and shortcomings, etc. were as given in *Annexure-a*.

C.2 Net Present Value

In this component, works were carried out in Jhajjar district under the following 2 subcomponents:

- Afforestation and management of Government forest lands
- Afforestation in community and public lands

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out by DFO (T) Jhajjar under the model Ridge plantation in linear forests at 1 size.

Plantation of above site was visited during March 2014 and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Ridge planting technique. This technique is effective in raising successful plantations in low lying areas.

d. Survival of Plants

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Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was 85%.

Detail of survival % and average height and girth of plantations was as given in Annexareb.

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out by the DFO (CFP) Rewari under the following 2 models:

a. Plantation of Tree Groove (TG)

b. Biodrainage

C.2.2.1 Tree Groves

In this model, 15 TGs were raised in 2 villages.

M&E was carried out by visiting TGs of both villages resulting in M&E of 100% villages and the results of M&E were as given below;

Suitability of Land afforested

Land was suitable for raising plantation but raising of 6 to 9 TGs in 1 village is not desirable.

b. Suitability of Species planted

The species planted were suitable for the areas/model.

Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. This technique is not so effective due to soil compaction. For early establishment of plantation, the Auger Hole planting technique should be used.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival of plantations was 68%.

Survival % was very good (70-79%) in 1 village and good (60-69%) in another village

The village wise survival %, average bright and average girth, etc. were as given in Annexure-b.

C.2.2.2 Biodrainage

In this model, 170 ha land of 112 farmers of Dubaldhan village was afforested.

M&E was carried out by visiting plantations 20 farmers resulting in M&E of 12% farmers and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Ridge planting technique. This technique is effective in raising successful plantations in low lying areas.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival of plantations was 84%.

Survival % was excellent (>79%) of 16 plantations and very good (70-79%) of 4 plantations.

The farmer wise survival %, average height and average girth, etc. were as given in Annexure-b.

C.3 Constraints faced by Implementing Authorities

As told, the constraints faced by the implementing authorities are as given below:

- Delay in allotment of physical and financial targets,
- Non-availability of funds for the maintenance of TGs.
- c. Shortage of staff

1. i

C.4 Suggestions of Implementing Authorities for Further Improvement

 Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.

- iii. Staff must be provided as per Cadre Allotment.
- iv. Funds must be provided for the maintenance of TGs for 3 years.

C.5 Suggestions of Evaluator

٢_.

- 1. The NAP project should be continued because it is helping in:
 - i. Enhancing the quality of degraded forests,
 - ii. Improving the tree cover in non-forest lands, and
 - Mitigating the changing climate.
- 2. Physical and financial targets must be conveyed in time,
- 3. Funds for the maintenance of TO must be provided for 3 years.

Annexure-a Assessment of CA Plantations Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Poor<50%]

<u>ي</u> د.	Name of			Target	Unit	Species	otes Results of M&E						
	Site	Loplementing Authority	Range	ACCEVEN		JIMOUAL	Longinudes (Bant)	Latirades (North)	Av. Survival	Av. Height	Av, Girth	Grading	Remarka
						_			(%)	. (m)	(cm)		
Ridge	Plantation		_										
1.	OWS canal, RD 35-38 L&R	DFO (T) Jhajjar	Bahadurgarh	5.0 0	RКМ	Encolyptu	76°49'562''	28 [°] 41′55.7"		56.0	15	Poor	Damaged during road construction along GWS cenal
2.	DHS road, Km 38-45	-do-	. -do-	12.00	RKM	Eucalyptus	76°52'4.4''	28°43'03.0"	78	4.5	10	Very good	-
3	DHS road (HSIDC Land)	-do	-de	20.00	RKM	Encalyptus	76 ⁰ 52'3.4''	25 ⁰ 43 '5.8''	80	9.0	7	Excellent	-
4	Dabodha Minor	-do-	-do-	8.93	RKM	Eucalyptus	76 [*] 50*50.4**	25° 41'6.2"	70	5.0	10	Vary good	-
5	Matunhail PL	-do-	-do-	12.00	RKM	Bocalyptus	76 * 27*51.1**	28°3418.111	72	2.5	6	Vary good	-
		Total		60.93	RKM								

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Annexure-b

Assessment of NPV Plantations

Grading on the basis of anvival % [Excellent >79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Poor<50%]

5. S	Name of			Target Achieved	Unit	Species planted	Results of M&E						
	Site	Implementing Authority	Range				Longitudes (East)	Latitudes (North)	Av. Survival	Ay. Height	Av. Girth	Orading	Remarka
									(%)	(m)	(cm)		
A	Afforestation	and manager	ment of Gov	/ernment	forest	lends							
∎í	Ridge Plantatio	L.											
I	Barahi Kanonda Kulasi Road, Km 0-10L&R.	DFO (T) Jhajjar	Bahadungarh	10.00	RKM	Papri, Shisham, Neem, Bakain	76°54'6.2''	26°45°19.4**	85	2.0	ΝМ	Excellent	-
в	Afforestation	in communit	y and publi	c lands									
*	Tree Groves								•				•
1	Bilhia	DFO (CFF) Revari	Jbe∐ar	9.00	Na.	Misc. Species	76 ⁰ 31*25.3**	2 5°28 '14.0''	70	20	NIM	Very good	Need Protection
2	Dharoli	-do-	-do-	6.00	No.	-áo-	76 ⁰ 31°23.2"	28 ⁴ 25'39.2''	65	1.8	NM	Good	-do-
<u>ь</u>	Biodraioage												
	Village- Dubald			-							_		
I	Kala s'o Gajay Singh	DFO (CFF) Rewari	Jbajjar	4.00	Ha	Clonel Eucalyptus	76 °29'15.4''	28 [*] 40'24.7"	78	6.0	18	Yery good	•
2	Surinder s/o Jagay Rum	-d o -	-do-	2.00	Ha	-do-	76°29'33"	28 * 39*57.7**	85	6.0	1 8	Exection	-

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さんえ ひてつたいせい とうせんれん 行き込ん たいがく しょうせいしょう しょうていい

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-		
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	1.											_
Pawin Knmar	-40-	-do-	5.60	Ha	-do-	76 ⁰ 29'6.8''	28°39'57.1"	82	6.0	18	Excellent	·
Manjeet s/o Rohtas	-do-	-do-	3.60	На	-do- ·	76429154.2"	28940114.31	90	6.0	18	Excellent	-
Rambir s/o Jainarayan	-¢ə-	-do-	3.80	Ha	-do-	76°2'56.4''	28"39'43"	87	6.0	18	Excellent	•
Mangay Ram s/o Surdar Singh	-de-	-da-	4_50	HL	-åo-	76 ⁰ 28'48.2"	28 ⁴ 38'50.2''	76	6.0	18	Very good	-
Romas s/o Bhagwana	-do-	-do-	0.40	Ha	-do-	76°29'05.5''	28040'02.8'	<u></u>	5.0	15	Exection	
Purtap s/0 Kapoor Singh	-de-	-do-	2,40	Ha	-do-	76°31*11.1**	28°39'43.8''	90	5.5	t7	Excellent	- -
Parúcep s/o Rijakram	-do-	-00-	0.80	Ha	-do-	76°31°39.0"	28°39'49.4''	85	6.0	18	Excollent	
Papa No Baibir Singh	-do-	-do-	3.40	Ha	-do-	76°28'9,9''	28º40'8.1')	82	5.0	18	Excellent	
Parkash s/o Abbay Ram	-60-	-do-	0.40	На	-do-	76 °2 9°09.9°	28°39'44.7"	78	6.0	18	Very good	
Naveen s/o Ajmer	-do-	-dq-	040	Ħ∎	-do-	76°29'41.9''	28°40'42.1"	90	6.0	18	Excellent	-
Zaina s/o Sher Singh	-do-	-do-	0.80	Ha	-do-	76°31'48.0"	28039'51.4"	88	6.0	18	Excellent	- [
Rambir s/o Jagay Ram	-do-	-do-	0.20	Ha	-do-	76 ⁰ 29'38.7''	28 ⁰ 40'26.4''	83	6.0	15	Excallent	
Pewarn s/ Parichpal	-do-	-do-	0.80	Ha	-40-	76°29'30.4"	28°40'14.4''	90	5,5	16	Excellent	·
	Hariom s/o Pawan Knmar Manjeet s/o Rohtas Rambir s/o Jainarayan Mangay Ram s/o Surdar Singh Rohas s/o Bhagwana Partap s/o Kapoor Singh Partap s/o Kapoor Singh Partap s/o Rijakram Partap s/o Rafash s/o Rijakram Paro s/o Balbir Singh Parkash s/o Abbay Ram Naveen s/o Ajmer Zaina s/o Sher Singh Rambir s/o Jagay Ram	Hariom s/o Pawan Knmar-do-Manjeet s/o Rohtas-do-Rambir s/o Jainarayan-do-Mangay Ram s/o Sardar Singh-do-Romas s/o Bhagwana-do-Partap s/o Kapoor Singh-do-Partap s/o Kapoor Singh-do-Partap s/o Rijakram-do-Partap s/o Kapoor Singh-do-Partap s/o Kapoor Singh-do-Partap s/o Kapoor Singh-do-Partap s/o Kapoor Singh-do-Partap s/o Kapoor Singh-do-Partap s/o Kapoor Singh-do-Partap s/o Singh-do-Partap s/o Kapoor Singh-do-Partap s/o Singh-do-Partap s/o Partichpal-do-	Hariom s/o Pawan Kamar-dodo-Manjeet s/o Rohtas-dodo-Rambir s/o Jahasrayan-dodo-Mangay Ram s/o Surdar Singh-dodo-Rohtas s/o Bhagwana-dodo-Partap s/o Kapoor Singh-dodo-Partap s/o Kapoor Singh-dodo-Partap s/o Rijakram-dodo-Partap s/o Rama-dodo-Partap s/o Kapoor Singh-dodo-Partap s/o Rijakram-dodo-Partap s/o Rama-dodo-Partap s/o Rijakram-dodo-Partap s/o Rama-dodo-Partash s/o Abhay Ram-dodo-Rambir s/o Jagay Ram-dodo-Pawam s/ Participal-dodo-	Hariom s/o Pewin Knmar-dododo-5.60Manjeet s/o Rohtas-dododo-3.60Rambir s/o Jainsrayan-dododo-3.80Mangay Ram s/o Surdar Singh-dododo-4.50Rohtas s/o Bhagwana-dododo-0.40Partap s/o Kapoor Singh-dodo-0.40Partap s/o Kapoor Singh-dodo-0.80Partap s/o Kapoor Singh-dodo-0.80Partap s/o Kapoor Singh-dodo-3.40Partap s/o Kapoor Singh-dodo-0.80Partap s/o Kapoor Singh-dodo-0.80Partap s/o Singh-dodo-0.40Partap s/o Singh-dodo-0.40Partap s/o Singh-dodo-0.40Partap s/o Ajmer-dodo-0.40Naveen s/o Ajmer-dodo-0.20Pawam s/ Participal-dodo-0.80	Hariom s/o Pawan Kumar-dododo-5.60HaManjeet s/o Rohtas-dododo-3.60HaRambir s/o Jainsrayan-dododo-3.80HaMangay Ram s/o Surdar Singh-dododo-4.50HaRohtas s/o Bhagwana-dododo-0.40HaPartap s/o Kapoor Singh-dododo-0.40HaPartap s/o Kapoor Singh-dodo-0.6014aPartap s/o 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Monitoring & Evaluation Report of Works Carrled Out During 2011-12 In Sonipat /Karnal/Panipat Districts of Haryana Under State CAMPA Scheme

Submitted to

Nodal Officer, State CAMPA, Haryana and Conservator of Forests (Forest Conservation) O/o Principal Chief Conservator of Forests, Haryana C-18, Van Bhawan, Sector -6 Penchkula, Haryana



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KARNAL DISTRICT

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Monitoring & Evaluation Report

Of

Works Carried Out During 2011-12

In

Karnal District of Haryana

Under

State CAMPA Scheme

October 2013

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Executive Summary

Ministry of Environment and Forests (MaEF), Govt. of India had issued guidelines on Zrd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Karnal district of Haryana was started in the year 2010-11. The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in this district.

During the year 2011-12, works under the State CAMPA Scheme in Karnal district were carried out by two implementing authorities, viz., DFO (T) Karnal and DFO (CFP) Ponipat. The works carried out by the DFO (CFP) Panipat in Kornal district during the year 2011-12 are presently under the control of DFO (CFP) Kurukshetra.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). DFO (T) Kornal has carried out the works in both the components, but DFO (CFP) has carried out the works in NPV component only.

During the year 2011-12, a physical target of 61.07 RKM, 50 TG and 2 buildings was achieved against the fixed target of 61.04 RKM, 50 TG and 2 buildings resulting in 100% achievement.

To assess the performance during October 2013, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evoluated and the scheme was discussed with implementing authorities.

The works of both the components are of good quality.

The constraints faced by the implementing authorities are (i) delay in allotment of physical targets, (ii) low cost norms of plantation, (iii) shortage of staff and (iv) non-availability of minimum 10 RKM forest areas for raising plantations under the CA component.

The suggestions given by the implementing authorities for further improvement are (i) physical targets must be conveyed in April/ May so that earth work may be completed before the anset of Monsoon, (ii) norms, especially for earth work, must be increased, (iii) at least 2% contingency for unforeseen expenditure must be provided, (iv) staff must be provided as per Cadre Allotment and (v) Computer operators must be provided in every Forest Range so that the computers may be used properly.

The suggestions of evaluator are (i) Scheme should be continued, (ii) Physical targets must be conveyed in time, (iii) Pit planting technique in compacted soils must be replaced with Auger Hole/Ridge planting technique, (iv) Close spacing in block forests must be stopped and (v) TG of more than 3 at one site should be availed.

Grading

(on Scale of 1 to 10)

Quantitative Aspects	Phy	rsical	9
Qualitative Aspects	1.	Plantations	
		Quality	8
		Maintenance	6
		Sustainability	6
_	2.	Other Works	- .
		Quality	8
• .		Maintenance	7
		Sustainability	7

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(5 to <8)	(3 to <5)	(<3)
		Very Good	-	-

Chapter A

GENERAL

A.1 Name of District : Karnal

A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Pt-409/511 dated 18.1.2010.

A.5.2 Alms and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- c. Compensatory afforestation:
- d. Environmental services, which include:-

I. Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;

- Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
- III. Non-material benefits obtained from acosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and

Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.

e.

A.5.3 Constitution

The State CAMPA of Harvana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

1,	Chief Minister, Haryana	Chairperson
2.	Minister of Forests, Haryana	Member
З.	Minister of Finance, Haryana	Member
4.	Chief Secretary, Haryana	Member
5.	Principal Secretary (Finance), Haryana	Member
6.	Principal Chief Conservator of Forests, Haryana	Member
7.	Chief Wildlife Warden, Haryana	Member
8.	Principal Secretary (Forests), Haryana	Member Secretary

A.5.3.2 Steering Committee

The Steering Committee of Haryana consists of the following:

1,	Chief Secretary, Haryana	Chairperson
2.	Principal Secretary (Finance), Haryana	Member
З.	Principal Secretary (Forests), Haryana	Member
4,	Chief Wildlife Warden, Haryana	Member
5.	Conservator of Forests (FC) & Nodal Officer (FEA)	Member
6.	Representative of the Ministry of Environment and Forests.	

Member

Government of India

7.	Two eminent NGOs nominated by the state Government	Members
8.	Principal Chief Conservator of Forests	Member Secretary

A.S.3.3 Executive Committee

The Executive Committee of Haryana consists of the following:

L	Principal Chief Conservator of Forests, Haryana	Chairperson
2.	Addl. Principal Chief Conservator of Forests (Forestry)	Member
3.	Chief Wildlife Warden, Haryana	Member
4.	Chief Conservator of Forests (Protection-I)	Member
5.1	Chief Conservator of Forests (Protection-II)	Member
6.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
	Not below the rank of Addi, Secretary	Member

5

- 8. Two eminent NGOs nominated by the state Government Members for a period of 2 years at time who shall be eligible for re-nomination
- 9. Conservator of Forests (FC) & Nodal Officer (FCA) Member Secretary

A.S.A Meetings

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1st meeting of the Steering Committee of the State CAMPA of Karyana was held on 2st June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, 1AS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2^{nd} meeting of the Stearing Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1^{44} meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2^{sd} meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.S.5 Implementation

Implementation of State CAMPA scheme in Karnal district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report partains to the works done during the year 2011-12 in Karnal district of Haryana State.

QUANTITATIVE ANALYSIS

8.1 Physical Targets

Ľ

 The fixed and achieved physical targets in Karnal district during the year 2011-12 under the State CAMPA scheme by the different implementing authorities of Haryana Forest department is as given below:

	Name of		. Ph	rysical Target	S	
Component	Sub-component/ Model	Implementing Wing	Fixed	Achieved	Unit	
Compensatory Afforestation	1. Ridge Plantation	DFO (T), Karnāl	12.64	12.64	RKM	
	2. Plantation of Tall Plants	DFO (T), Karnal	8.43	8.43	RKM	
Net Present	1. Afforestation and	management of	Governme	nt forest lan	ds	
Value	L Plantation of tall plants in linear forests	DFO (T), Kamal	10	10	RKM	
	ii. Plantation In linear ridges along roads and canals	DFO (T), Karnal	30	30	RKM	
] .	2. Afforestation in co	mmunity and pu	iblic lands			
	i. Plantation of Tree Groove (TG)*	DFO (CFP), Panipat	50	50	No.	
	3. Construction of of	ffice and residen	tial buildin	gs		
. •	i. RO Residençe	DFO (T). Karnal	1	1	No.	
	1. RO Office	DFO (T), Kamal	1	1	No	

"Presently this work is under the control of DFO (CFP) Kurukshetra w.o.f. 1-4-2023.

Above table indicates that during the year 2011-12 the physical achievement was 100% in Karnal district under the State CAMPA scheme.

QUALITATIVE ANALYSIS

C.1 Compensatory Afforestation

in this component, plantations were raised by the DFO (T) Karnal under the following 2, sub-components:

Ridge plantation

IL Plantation of tall plants

C.1.1 Ridge Plantation

In this sub-component, plantation was raised at one site (RF Bassi Coup No.4-5).

Monitoring and Evaluation (M&E) was carried out by the Agricultural Finance Corporation, New Delhi, during October 2013 by visiting above site resulting in M&E of 100% sites and the results of M&E are as given below:

Suitability of Land afforested

Land is suitable for raising plantation. \cdot

Suitability of Species planted

The species planted is Eucalyptus, which is suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used is the Ridge planting technique.

Ridge planting technique is very effective in raising successful plantations. But this technique is not so effective at this site due to close spacing of plants. Due to close spacing, the plants have attained a good height but poor girth resulting in stagnation of plantation. Therefore, this close spacing in block forests must be stopped.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth of plantations was arrived.

Detail of site wise survival % and average height and girth of plantations is as given in Annexure-o.

C.1.2 Plantation of tall plants

In this sub-component, plantation was raised at the following 2 sites:

ii. Hathlana to Aungadh Road, KM 0-6 L&R

11. Aungadh Road to Manjura Road

Monitoring and Evaluation (M&E) was carried out by visiting all the above sites resulting in M&E of 100% sites and the results of M&E are as given below:

a. Suitability of Land efforested

Land is suitable for raising plantation.

b. Suitability of Species planted

The species planted are Shisham at Hathlana to Aungadh Road and Kigelia at Aungadh Road to Manjura Road. These species are sultable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used is the Pit planting technique.

Pit planting technique is not so effective due to compaction of soils. Therefore, this technique must be replaced with Auger-Hole planting technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survivel % and average height and girth of plantations is as given in . Annexure-o.

C.2 Net Present Value

In this component, works were carried out in Karnal district during the year 2011-12 under the following 3 sub-components:

- Afforestation and management of Government forest lands
- II. Afforestation in community and public lands
- iii. Construction of office and residential buildings

M&E of above works was done during October 2013 and the sub-component wise results of M&E are as given below:

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out under the following 2 models:

- Plantation of tall plants in linear forests
- II. Plantation in linear ridges along roads and canals

C.2.1.1 Plantation of tall plants in linear forests -

In this model, plantation works were carried out by the DFO (T) Karnal by achieving a target of 10 RKM at 3 sites. M&E was carried out by visiting one site resulting in M&E of 33% sites and the results of M&E are as given below:

a. Suitability of Land afforested

Land is suitable for raising plantation.

b. Suitability of Species planted

The species planted are Shisham, Toon and Kigelia. These species are suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used is the Pit planting technique. But, this technique is not very effective due to compaction of soils. Therefore, this technique must be replaced with Auger Hole planting technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in Annexure-b.

C.2.1.2 Plantation in linear ridges along roads and canals

In this model, plantation works were carried out by the DFO (T) Karnal by achieving a target of 30 RKM at 4 sites. M&E was carried out by visiting 2 sites resulting in M&E of 50% sites and the results of M&E are as given below:

Suitability of Land afforested.

Land is suitable for raising plantation.

b. Suitability of Species planted

The species planted are Allanthus, Eucalyptus and Shisham. These species are suitable for ` the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used is the Ridge planting technique. It is a very effective technique for raising successful plantation.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in Annexure-b.

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out under the model- Plantation of Tree Groove (TG)

In this model, plantation works were carried out by the DFO (CFP), Panipat by achieving a target of 50 TG at 8 sites. M&E was carried out by visiting 2 sites resulting in M&E of 25% sites and the results of M&E are as given below:

a. Suitability of Land afforested

Land is suitable for raising plantation but planting of 17 TG at one site is not desirable. The number of TG per site should not be more than 3, otherwise it simply become a block plantation.

Initially, 11 TG were planted at Kutel Panchayat Land and Shamshanghat but due to heavy blotic pressure these TG were failed and their site was changed to a Satsang Bhawan located in this village.

b. Suitability of Species planted

The species planted at Shekhpura PL are Bar, Pipal, Neem, Bakain, Jamoa, Jamun, Arjun, Bahera, Gumbhar, Shisham and Papri. In Satsang Bhawan of Kutel village, the main species planted is the Bakain. These species are suitable for the area.

C. Techniques of Planting Used and their Effectiveness.

Technique of planting used is the Pit planting technique. But, this technique is not very effective due to compaction of soils. Therefore, this technique must be replaced with Auger Hole planting technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in Annexure-b.

C.2.3 Construction of office and residential buildings

In this sub-component, following 2 buildings were constructed:

RO Residence

11. RO Office

C.Z.3.1 RO Residence

Results of M&E of this building are as given below:

Location of Building

This building is constructed in the Forest Complex, Karnal.

b. Status of Building (completed or not).

This building has been completed.

c. Maintenance of Building

This building is being properly maintained.

d. Quality of Building

Quality of building is good.

B. Present Use of Building

This building is being used as RO residence.

C.2.3.2 RO Office

Results of M&E of this building are as given below:

a. Location of Building

This building is also constructed in the Forest Complex, Karnal.

b. Status of Building (completed or not)

This building has been completed.

c. Maintenance of Building

This building is being property maintained.

d. Quality of Building

Quality of building is good.

e. Present Use of Building

This building is being used as RO office.

- C.3 Constraints faced by Implementing Authorities
- Belay in allotment of physical targets.
- b. Low cost norms of plantation
- c. Shortage of staff
- d. Non-availability of minimum 10 RKM forest areas for raising plantations under the component- Compensatory Afforestation as ordered by PCCF.
- C.4 Suggestions of Implementing Authorities for Further Improvement
- a. Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- Norms, especially for earth work, must be increased.
- c. At least 2% Contingency for unforeseen expenditure must be provided.
- Staff must be provided as per Cadre Allotment.
- Computer operators must be provided in every Forest Range so that the computer may be used properly.
- C.S Suggestions of Evaluator
- Scheme should be continued.
- b. Physical targets must be conveyed in time.
- Pit planting technique in compacted soils must be replaced with Auger Hole/Ridge planting technique.
- d. Close spacing in block forests must be stopped.
- e. TG of more than 3 at one site should be avoided.

Annexure-a

Assessment of CA Plantations

Sr.		Name o	1		Turget.	Unit	Species		- Re	wits of MR	ιE.		•
No.	Site .	Wing .	Range	Block/ Beat	Achieved			. Longitudes	Letitudes	Av. Surviva I (%)	Av. Height (m)	Av. Girth (cm)	Quality
Plant	tation of Tall Plants												
' 1.	Hathlana to' Aungadh Road Km 0-6 L&R	DFC (T), Karnal	Assandh	Nissing/ Nissing East	5.25	RKM	Shisham	76 ⁰ 49'45.6''E	29 ⁸ 40'49.2"N	70	2	8	500 0
Z.	-Aungadh Road to Manjura -Road	DFO (T), Karnal	Assandh	Nissing/ Nissing East	3.18 <u></u>	RKM	Kigelia	76 ⁰ 49'50.6E	29º4Q'21.3"N	80	× 2.5	. 10	Good _.
Ridge Plantation													
, ±.	RF Bassi Coup No.4-5	DFO (T), Xamai	Assandh	Assandh/ Bassi	12.64	RKM.	Eucalyptu S	76 ⁰ 39'8.12"E	29°14'0.49"N	90,7*	.5	6	Poor*

*Poor quality is due to close spacing of plants in a block forest of RF Bassi. This plantation is in a stagnate stage.

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Annexure-b

Assessment of NPV Plantations

f P	Name of		•		Terget	larges Unit Species				Results of MAR			
	Siller		Ranger	Block/ , Best	·		,	Longiandes .	Latitudes	Ar. Servinal (%)	Ат. Гайдэг (8)	Av. Girda (com)	Quality
Mask	uion of tail plants in lince	r farests		· · · · · · · · · · · · · · · · · · ·									
. I.	Bir Amin to Berthel Road, Km 0-4 L&R	DPO (T), Kamul	indut ,	Baihen/ · Aibin	. 56	RJICM	Shisham, , Toom, Kigelta	78 ⁴ 51'ንምድ 77 ⁹ 10-የሬተድ	29 ⁴ 52"57"N 29 ⁴ 51"50"N	76	29 	_ L6	Good
Plants	den in Koner ridges al on	rouds and casals			•				•		_		
7.	Hangé Branda, Kaadla Nol	DFO,(T), Kamal	Kamel	Monak/ Statish	14.7	RICH	Ailaathaa, Eacaiyptes	76'50'12.2"E	אי"7.91יוניפ2	2	ר ני	*30	Coed
3.	Ransi Breach, Kundhi Na-2	DFO ⁽ (T), Karad	Kanal	Minister Baileb	9.0	' RXM	Shiabarn, Bucalyptos	7 6'47'44.6 ''E	29 72 9734.L''N	50 : /	-3.5	فا	Good
Рна	the of Tree Groove (TG	I.			·				•				
•	Shelligun, 92.	DRQ (CSP), Pinipat/	Xonal	Kaajpere	17	Nio.	Ber, Pipel, Noom, Asson, Jaman, Arjun, Bahera, Papel Gambiata, Shisiana	77°02'40.2°15 77°02'34.9°15	29 ⁹ 38130,87N 29 ⁹ 381,47N	2	2.0		Poor
3	Selaring Blacomo (Kurini)	DIFO (CFF), Pasigat	Karsat	Xamal	11	No	Bakain	77°00'57"E	2 5°3 6°22.7"N	93	10	7	V. Good

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Annexure-c

Visual Journey



Ausgadh Road to Manjara Road



Hathiana to Anagadh Road Km 0-6 L&R



RF Basel Coup No.4-5

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Henel Branch, Knadla No.-1



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Hanal Branch, Kundla No.-2

PANIPAT DISTRICT

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Monitoring & Evaluation Report

· Of

Works Carried Out During 2011-12

In

Panipat District of Haryana

Under

State CAMPA Scheme

October 2013

Contents

Executive Summary							
Grading							
Chapter – A	General	4					
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Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. implementation of State CAMPA scheme in Panipot district of Haryana was storted in the year 2010-11. The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in this district.

During the year 2011-12, works under the State CAMPA Scheme in Panipat district were carried out by two implementing authorities, viz., DFO (1) Panipat and DFO (CFP) Panipat.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). DFO (T) Panipat has carried out the works in both the components, but DFO (CFP) Panipat has carried out the works in NPV component only.

During the year. 2011-12, a physical target of 132.50 RKM, 10 Ha, 50 TG and 1 building was achieved against the fixed target of 132.50 RKM, 10 Ha, 50 TG and 1 building resulting in 100% achievement.

To assess the performance during October 2013; 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the scheme was discussed with implementing authorities.

The works of both the components are of good quality.

The constraints faced by the implementing authorities are (i) delay in allotment of physical targets, (ii) law cost norms of plantation, (iii) shortage of staff and (iv) non-availability of minimum 10 RKM forest areas for raising plantations under the CA component.

The suggestions given by the implementing authorities for further improvement are (I) physical targets must be conveyed in April/ May so that earth work may be completed. before the onset of Monsoon, (ii) norms, especially for earth work, must be increased, (iii) at least 2% Contingency for unforeseen expenditure must be provided, (iv) staff must be provided as per Cadre Allotment and (v) Computer operators must be provided in every forest Ronge so that the computers may be used properly.

The suggestions of evaluator are (i) scheme should be continued, (ii) physical targets must be conveyed in time and (iii) Pit planting technique must be replaced with Auger Hole planting technique for raising successful plantations in compacted soils and (iv) TG of more than 3 at one site should be availed.

Grading (on Scale of 1 to 10)						
Quantitative Aspects	Phy	sical	-9 · ·			
Qualitative Aspects	1.	Plantations				
· · ·		Quality	7			
• .		Maintenance	6			
		Sustainability	· 6			
-	z .	Other Works	· .			
		Quality	9			
		Maintenance	8			
· .		Sustainability	8			

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(5 to <8)	(3 to <5)	(<3)
	-	Very Good	-	-

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Chapter A

GENERAL

- A.1 Name of District : Panipat
- A.Z Name of State : Haryana
- A.3 Name of Schema

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Haryana

A.S.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- a. Conservation, protection, regeneration and management of existing natural forests;
- Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- c. Compensatory afforestation;
- Environmental services, which include;-
 - Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - Non-material banefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and

Iv. Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.

Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

1.	Chief Minister, Haryana	Chairperson
2.	Minister of Forests, Haryana	Member
3.	Minister of Finance, Haryana	Member
4.	Chief Secretary, Haryana	Member
5.	Principal Secretary (Finance), Haryana	Member
6.	Principal Chief Conservator of Forests, Haryana	Member
7.	Chief Wildlife Warden, Haryana	Member
8,	Principal Secretary (Forests), Haryana	Member Secretary

A.5.3.2 Steering Committee

The Steering Committee of Haryana consists of the following:

1.	Chief Secretary, Haryana	Chairperson
2.	Principal Secretary (Finance), Haryana	Member
Э.	Principal Secretary (Forests), Haryana	Member
4.	Chief Wildlife Warden, Haryana	Member
5.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member
6.	Representative of the Ministry of Environment and Forest	5,
	Member ·	_
	Government of India	
7.	Two eminent NGOs nominated by the state Government	Members
8.	Principal Chief Conservator of Forests	Member Secretary
A.5.3.5	Executive Committee	
The Ex	ecutive Committee of Haryana consists of the following:	
1.	Principal Chief Conservator of Forests, Haryana	Chairperson
2,	Addl. Principal Chief Conservator of Forests (Forestry)	Member
З.,	Chief Wildlife Warden, Haryana	Member
4.	Chief Conservator of Forests (Protection-I)	Member
5.	Chief Conservator of Forests (Protection-II)	Member
6.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
	Not below the rank of Addi. Secretary	Member
8.	Two eminent NGOs nominated by the state Government	Members

Two eminent NGOs nominated by the state Government.

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for a period of 2 years at time who shall be eligible for re-nomination

9. Conservator of Forests (FC) & Nodal Officer (FCA) Member Secretary

A.S.4 Meetings

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1^{st} meeting of the Steering Committee of the State CAMPÁ of Haryana was held on 2^{nd} June, 2010 at 3.30 PM under the Chalrpersonship of Mrs. Urvashi Guiati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2nd meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1st meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2rd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5, Implementation

Implamentation of State CAMPA scheme in Panipat district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report partains to the works done during the year 2012-12 in Panipat district of Haryana State.

Chapter-B

QUANTITATIVE ANALYSIS

8.1 Physical Targets

The fixed and achieved physical targets in Panipat district during the year 2011-12 under the State CAMPA scheme by the different implementing authorities of Haryana Forest department is as given below:

	Name of	P	hysical Targe	ts -	
Component	Sub-component/ Model	implementing Wing	Fixed	Achieveil	'Unit
Compensatory Afforestation	1. Ridge Plantation	DFO (T), Panipat	107.50	107.50	RKIM
Net Present	1. Afforestation and	management of (Governme	nt forest lan	ds
value .	i. Plantation of tall plants in linear forests	DFO (T), Panipat	10	10	RKM
	ii. Plantation in linear ridges along roads and canals	DFO (T), Panipat	: 15	. 15	RKM
	2. Afforestation in co	mmunity and pub	lic lands		-
	i. Land reclamation by plantation on farmlands	DFO (CFP), Panipat	10	10	Ha
	ii. Plantation of Tree Groove (TG)	OFO (CFP), Panipat	50	50	No.
	3. Construction of re	sidential building	1		
	i. RO Residence	DFO (CFP), Panipat	· 1	1	No.

Above table indicates that during the year 2011-12 the physical achievement was 100% in Panipat district under the State CAMPA scheme.

QUALITATIVE ANALYSIS

C.1 Compensatory Afforestation

In this component, plantations were raised in Panipat district by the DFO (T) Panipat during the year 2011-12 by achieving a target of 107.50 RKM at 9 sites under the ridge plantation sub-component. Monitoring and Evaluation (M&E) was carried out by the Agricultural Finance Corporation, New Delhi, during October 2013 by visiting all the 9 sites resulting in M&E of 100% sites and the results of M&E are as given below:

Suitability of Land afforested

Land is suitable for raising plantation.

Suitability of Species planted

The species planted are Eucalyptus, Shisham, Bkain/Dek and Cassia galauca. These species are suitable for the area.

c. Techniques of Planting Used and their Effectiveness.

The technique of planting used is the Ridge planting technique. This technique is very effective in raising successful plantations.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height was estimated and average height of plantations was arrived.

Detail of site wise survival % and average height and girth of plantations is as given in *Annexure-o*,

C.2 Net Present Value

In this component, works were carried out in Panipat district during the year 2011-12 under the following 3 sub-components:

- Afforestation and management of Government forest lands.
- Afforestation in community and public lands
- ill. Construction of residential building

M&E of above works was done during October 2013 and the sub-component wise results of M&E are as given below:

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out under the following 2 models:

- Plantation of tall plants in linear forests
- 1. Plantation in linear ridges along roads and canals

C.2.1.1 Plantation of tall plants in linear forests

In this model, plantation works were carried out by the DFO (T) Panipat by achieving a target of 10 RKM at 1 site. M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E are as given below:

a. Suitability of Land afforested

Land is suitable for raising plantation.

5ultability of Species planted

The species planted are Shisham and Papri. These species are suitable for the area.

Techniques of Planting Used and their Effectiveness

Technique of planting used is the Pit planting technique. But, this technique is not very effective due to compaction of soils. Therefore, this technique must be replaced with Auger Hole planting technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in Annexure-b.

C.2.1.2 Plantation in linear ridges along roads and canals

In this model, plantation works were carried out by the DFO (T) Panipat by achieving a target of 15 RKM at 3 sites. M&E was carried out by visiting 1 site resulting in M&E of 33% sites and the results of M&E are as given below:

Suitability of Land afforested

Land is suitable for raising plantation.

b. Suitability of Species planted

The species planted is the Eucalyptus. This specie is suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used is the Ridge planting technique. It is a very effective ' technique for raising successful plantation.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in *Annexure-b*,

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out under the following 2 models:

i. Land reclamation by plantation on farmlands

ii. Plantation of Tree Groove (TG)

C.2.2.1. Land reclamation by plantation on farmlands

In this model, plantation was raised at 1 site by DFO (CFP) Panipat by achieving a target of 10 ha. M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E are as given below:

a. Suitability of Land afforested

Land is suitable for raising plantation.

b. Suitability of Species planted

The species planted is the clonal Eucalyptus. This species is suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used is the Ridge planting technique. This technique is very effective In raising successful plantation in waterlogged areas,

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in *Annexure-b*.

C.2.2.2 Plantation of Tree Groove (TG)

In this model, plantation works were carried out by the DFO (CFP), Panipat by achieving a target of 50 TG at 5 sites. M&E was carried out by visiting 2 sites resulting in M&E of 40% sites and the results of M&E are as given below:

Suitability of Land afforested

Land is suitable for raising plantation but planting of 10 TG at one site is not desirable. The number of TG per site should not be more than 3, otherwise it simply become a block plantation.

Suitability of Species planted

The species planted are Bar, Pipal, Neem, Bakain, Jamoa, Jamun, Arjun, Bahera, Gumbhar, Shisham and Papri. These species are suitable for the area.

c. Techniques of Planting Used and their Effectiveness.

Technique of planting used is the Pit planting technique. But, this technique is not very effective due to compaction of soils. Therefore, this technique must be replaced with Auger Hole planting technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in *Annexure-b.*

C.2.3 Construction of residential buildings

In this sub-component, 1 building for the residence of Range Officer was constructed. Results of M&E of this building are as given below:

Location of Building

This building is constructed in the Forest Complex, Panipat.

b. Status of Building (completed or not)

This building has been completed.

c. Completion Report sent or nat

Completion report is not sent.

d. Maintenance of Building

This building is being properly maintained.

Quality of Building

Quality of building is very good.

f. Present Use of Building

This building is being used by DFO (CFP) Panipat as his residence.

C.3 Constraints faced by Implementing Authorities

- Delay in allotment of physical targets.
- Low cost norms of plantation
- c. Shortage of staff
- d. Non-availability of minimum 10 RKM forest areas for raising plantations under the component- Compensatory Afforestation as ordered by PCCF.
- C.4 Suggestions of Implementing Authorities for Further Improvement
- a. Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- Norms, especially for earth work, must be increased.
- c. At least 2% contingency for unforeseen expenditure must be provided.
- Staff must be provided as per Cadre Allotment.
- e. Computer operators must be provided in every Forest Range so that the computer may be used properly.

C.5 Suggestions of Evaluator

- Scheme should be continued.
- Physical targets must be conveyed in time.
- Plt planting technique must be replaced with Auger Hole planting technique for raising successful plantations.
- Tree grooves of more than 3 at one site should be avoided.

Annexure-a

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Assessment of CA Plantations

Sr. No.		Name a	ſ		Turget	Chairt	Species			Ratu Da al 1	MAĘ		
	Site	Wing .	Range	Block Beat			planied	Longitades	LaBredes	Ar. Sentral (%)	Av. Height (m)	Ar. Cinta (cm)	Quality
Ridge	: Planta dara		•							·			<u> </u>
1.	Neckim Didmari Rosd, Km 0-4 L&R	DFO (T) Paulgar	Panipas	litrona/ Neoltan	. 10	RKM	Eccelyptes, C. gelace.	76 ⁴ 9131.01E	29°16'19.2"N	70	310	10	Dood .
1	Bohali Pf	DFO (1) Penipet	Panhat.	Panipet/ Bohell	1.8	REGM	Bacalypter	76"51"43"8	29*2111.7*24	75	3.0	12	Gast
3.	Assends Road, Km 3- 23 L&R	DPO (T) Paolpat	Puntpar .	Methoda/	- 2I -	RXM	Encilyptus	7 6'5 1'37'12	29 ⁹ 23'9.4"N	82	5.0	21L	V. Crood
4.	Sheen Minze, RID 0-qui)	DFO (1) Phalipat	Penipat	Matlanda/ Shere'	11	RIKIN	Висадуронн	76'4 \$ "14"'E	2 9*2 6'15"N	87	7.0	23	V. Geod
4	Panipat-Senoli Road, KM 13-18 Lake	DFO (T) Penipes	Saminatichy.	Bepoli/ Newsda	10	RRM	Batain .	77°96°01.8~2	29 ⁶ 23'0,7""N	54	۵٤ .	15	Y. Good
6.	Sembelikhe Dülkfindery, RD 0-14 LAHR	DFO (1) Pacipat	Sambalidha	Sambalka' Manam		RKM	Encelyptus, Skishem	76 °33'20 .5'TE	29 ⁷ 76'14,0"N	70	1.0	4	Good
π.	Santaŭda to Haŭroala Road, Km D- 10 Láin	DFD (T) Paulpai	Sensha@da.	Sambaikha/ Histowala	10	REM	Eccelyptes, Butain	37 0231.672	29 ⁶ 13'9.14 " N	F4	10	12	V. Oood
1	OT Road, Km 65-12 L&R	DFO (T) Panipar	Sembelides	Sembalkin West/ . Sembeliku	10	RKM	Bakein.	77"01"27.5"E	25"11"52"N	90	4.0	[6	V. Good
9.	SandanDiba Minne (Mahawati Beidge to Haldana Puoca Bridge)	DPO (7) Penipet	Sänshallitisa	Sembelikhe Weso/ Senebelikhe	75	BIDM	Boolypus	77 4 12*29,1***E	- 29 ⁴ 1111.6673N	72	4.0	18	Good

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Annexure-b

Assessment of NPV Plantations

Şr.		Name	<u>or </u>		Target	Unit	Species	en Remits of MAB					
Na.	5ite	Wing	Range'	Block/ 'Heat	d d		planted	Longitudes	Latitudes	Av. Surviv al (%)	Av. Hoight (m)	Ay. Girth (cm)	Quality
Manta	tion In Unter ridges also	g roads and casals							<u> </u>				
1.	Delhí Parálici, RD 74-81	DFO (T) Panipat	· Panipat	Panipal/ Bursham	7	RK. M	Eucalyp tus	7 6° 57'7.5″E	29º2['32" N	77	3.0	15	Good 🥇
Plan	tation of tall plant	s la linear fore			-								
٤	Samalkha to Naraina Dodpur Road, Kiri 0-6	DFO (1) Panipat	Sambalkh ■	Samalkha West/ Manana	01	RK M	Papri, Shisham Arjun	76*57'35.4* E	29°15.3 1.2 N*	70	2.5	10	Good
Land	reclamation by p	lantatico on fa	rmlands									[
3 .	Lohari Farmer Land (Sb. Shamsher 2/0 Balbir Singh)	DFO (CFP), Panipat	Panipat	Panipat/ Matlauda	10	Ha	Eucalyp tus	76°49'20_3* E	29 ° 21'26" N	92	5.0	26	V. Good
Plani	tation of Tree Gro	ove (TG)											
4.	Gawalıq Kabristan	DFO (CFP), Panipat	Panipat	Panipat/ Samalkha	10	No.	Bar, Pipal, etc	76 ⁰ 56'19.0" E	29 ⁰ 14*39.1 ייא	80	1.6	6	Good
5.	Divers Station Yard	DFO (CFF), Panipat	Panipat	Panipat/ Semalkha	2	א ס .	Bar, Pipal, etc	76 ⁰ 58'47 <i>.8"</i> E	29 ⁰ 19'13.4 ''N	100	20	15	V. Good

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Annexure-c





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SONIPAT DISTRICT

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Monitoring & Evaluation Report

Of

Works Carried Out During 2011-12

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Sonipat District of Haryana

Under

State CAMPA Scheme

October 2013

Executive Sumn	nery	2
Grading	- · · ·	3
Chapter – A	General	4
Chapter ~ B	Quantitative Analysis	7
Chapter C	Qualitative Analysis	8-13
Annexures	a. Assessment of CA Plantations	
,	b. Assessment of NPV Plantations	
	c. Photas	

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Executive Summary

Ministry of Environment and Farests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Sonipat district of Haryana was started in the year 2010-11. The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in this district.

During the year 2011-12, works under the State CAMPA Scheme in Sonipat district were carried out by two implementing authorities, viz., DFO (T) Sonipat and DFO (CFP) Panipat.

State CAMPA scheme has two components, vix., Compensatory Afforestation (CA) and Net Present Value (NPV). DFO (T) Sonipot has carried out the works in both the components, but DFO (CFP) Panipot has carried out the works in NPV component only.

During the year 2011-12, a physical target of 76.35 RKM, 100 Ha, 37 TG and 1 building was achieved against the fixed target of 76.35 RKM, 100 Ha, 37 TG and 1 building resulting in 100% achievement.

To assess the performance during October 2013, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the scheme was discussed with implementing outhorities.

The works of both the components are of good quality.

The constraints faced by the implementing authorities are (i) delay in allotment of physical targets, (ii) low cost norms of plantation, (iii) shortage of staff and (iv) non-availability of minimum 10 RKM forest areas for raising plantations under the CA component.

The suggestions given by the implementing outhorities for further improvement are (i) physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Mansqan, (ii) norms; especially for earth work, must be increased, (iii) at least 2% contributions for unforeseen expenditure must be provided, (iv) staff must be provided as per Cadre Allotment and (v) Computer operators must be provided in every Forest Range so that the computers may be used properly.

The suggestions of evaluator are (i) scheme should be continued, (ii) physical targets must be conveyed in time, (iii) Pit planting technique must be replaced with Auger Hole planting technique for raising successful plantations in compacted soils, (iv) Physical and financial targets of the model "Land reclamation by plantation on farmlands" of NPV component must be increased as plenty of formers' waterlogged land is available for reclamation and (v) The number of TG per site should not be more than 3, otherwise it simply become a black plantation.

Grading

(On Scale of 1 to 10)

Quantitative Aspects	Physical	9	

Qualitative Aspects	1.	Plantations	
		· Quality	8
• .		Maintenance .	7
		Sustainability	6

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(5 to <8)	(3 to <5)	(<3)
		Very Good	-	-

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GENERAL

A.1 · Name of District : Sonipat

A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010;

A.5.2 · Aims and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- b. Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;

Compensatory afforestation;

- d. Environmental services, which include:-
 - Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - III. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.
- Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

1.	Chlef Minister, Haryana	Chairperson
2,	Minister of Forests, Haryana	Member
э.	Minister of Finance, Haryana	Member
4.	Chief Secretary, Haryana	Member
5.	Principal Secretary (Finance), Haryana	Member
6.	Principal Chief Conservator of Forests, Haryana	Member

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7. Chief Wildlife Warden, Haryana	Member
8. Principal Secretary (Forests), Haryana	Member Secretary
A.5.3.2 Steering Committee	
The Steering Committee of Haryana consists of the following:	
1. Chief Secretary, Harvana	Chalrperson
2. Principal Secretary (Finance), Haryana	Member
 Principal Secretary (Forests), Haryana 	Member
4. Chief Wildlife Warden, Haryana	Member
5. Conservator of Forests (FC) & Nodal Officer (FCA)	Member
6. Representative of the Ministry of Environment and Forest	5,
Member	
Government of India	
7. Two eminent NGOs nominated by the state Government	Members
8. Principal Chief Conservator of Forests	Member Secretary
A.5.3.3 Executive Committee	
The Executive Committee of Haryana consists of the following:	
1. Principal Chief Conservator of Forests, Haryana	Chairperson
2. Addi. Principal Chief Conservator of Forests (Forestry)	Member
3. Chief Wildlife Warden, Haryana	Member
4. Chief Conservator of Forests (Protection-I)	Member
5. Chief Conservator of Forests (Protection-II)	Member
6. Conservator of Forests (Planning)	Member
7. Representative of Finance Department	Member
Not below the rank of Addi. Secretary	Member
8. Two eminent NGOs nominated by the state Government	Members
for a period of 2 years at time who shall be eligible for re-	nomination
9. Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary

A.5.4 Meetings

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1st meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{ed} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2nd meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief

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Secretary Haryana. In this meeting, the action taken report on 1st meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Sonipat district of Haryana State was started in the year 2010-11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in Sonipat district of Baryana State.

QUANTITATIVE ANALYSIS

B,1 Physical Targets

The fixed and achieved physical targets in Sonipat district during the year 2011-12 under the State CAMPA scheme by the different authorities of Harvana Forest department is as given below:

	Name of	Physical Targets									
. Component	Sub-component/ Model	Implementing Wing	Fixed	Fixed Achieved							
Compensatory Afforestation	1. Ridge Plantation	DFO (T), Sonipat	56.35	56.35	RKM						
Net Present	1. Afforestation and	sforestation and management of Government forest lands									
Value .	i. Plantation of tall plants in linear forests	DFO (T), Sonipat	10	10	RKM						
	ii. Plantation in linear ridges along roads and canals	DFO (T), Sonipat	. 10	10	RKM						
	2. Afforestation in co	mmunity and pul	blic lands								
	i. Land reclamation by plantation on farmlands	DFO (CFP), Panipat	100	100	Ha						
	ii. Plantation . of Tree Groove (TG)	DFO (CFP), Panipat	37	37	No.						
· ·	3- Construction of buildings										
	1. Forester quarter	DFO (T), Sonipat	; 1	1	No.						

Above table indicates that during the year 2011-12 the physical achievement was 100% in Sonipat district under the State CAMPA scheme.

QUALITATIVE ANALYSIS

C.1 Compensatory Afforestation

In this component, plantations were raised by the DFO (T) Sonipat during the year 2011-12 by achieving a target of 56.35 RKM at 6 sites under the ridge plantation sub-component. Monitoring and Evaluation (M&E) was carried out by the Agricultural Finance Corporation, New Delhi, during October 2013 by visiting all the 6 sites resulting in M&E of 100% sites and the results of M&E are as given below:

Suitability of Land afforested

Land is suitable for raising plantation.

b, Suitability of Species planted

The main species planted are Eucalyptus and Allanthus. These species are suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used is the ridge planting technique. This technique is very effective in raising successful plantations

d. Survival of Plants

Survival %was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height was estimated and average height of plantations was arrived.

Detail of site wise survival % and average height and girth of plantations is as given in Annexure-a.

C.2 Net Present Value

in this component, works were carried out in Sonipat district during the year 2011-12, under the following 2 sub-components:

- Afforestation and management of Government forest lands.
- Afforestation in community and public lands
- Construction of buildings

M&E of above works was done during October 2013 and the sub-component wise results of M&E are as given below:

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out under the following 2 models:

- i. Plantation of tall plants in linear forests
- Plantation in linear ridges along roads and canals

C.2.1.1 Plantation of tall plants in linear forests

In this model, plantation works were carried out by the OFO (T) Sonipat by achieving a target of 10 RKM at 2 sites. M&E was carried out by visiting one site resulting in M&E of 50% sites and the results of M&E are as given below:

Suitability of Land afforested

Land is suitable for raising plantation.

b. Suitability of Species planted

The main species planted is the Shisham. This species is suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used is the Pit planting technique. But, this technique is not very effective due to compaction of soils. Therefore, this technique must be replaced with Auger Hole planting technique.

d. Survival of Plants

Survival %was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in Annexure-b.

C.2.1.2 Plantation in linear ridges along roads and canals

in this model, plantation works ware carried out by the DFO (T) Sonipat by achieving a target of 10 RKM at 1 site. M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E are as given below:

Suitability of Land efforested

Larid is suitable for raising plantation.

Suitability of Species planted

The main species planted is the Eucalyptus and this species is suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used is the ridge planting technique. It is a very effective technique for raising successful plantation.

d. Survival of Plants

Survival %was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in *Annexure-b*,

C.Z.2 Afforestation in community and public lands

in this sub-component, works were carried out under the following 2 models:

- Land reclamation by plantation on farmlands.
- ii. Plantation of Tree Groove (TG)

C.2.2.1. Land reclamation by plantation on farmlands

In this model, plantation was raised at 11 sites by DFO (CFP) Panipat by achieving a target of 90 ha. M&E was carried out by visiting 2 sites resulting in M&E of 20% sites and the results of M&E are as given below:

a. Sultability of Land afforested

Land is suitable for raising plantation.

b. Suitability of Species planted

The species planted is the clonal Eucalyptus. This species is suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used is the Ridge planting technique. This technique is very effective In raising successful plantation in waterlogged areas.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 has to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average beight and girth of plantations is as given in Annexure-B.

C.2.2.2 Plantation of Tree Groove (TG)

In this model, plantation works were carried out by the DFO (CFP) Panipat by achieving a target of 37 TG at 3 sites, M&E was carried out by visiting 1 site resulting in M&E of 33% sites and the results of M&E are as given below:

Suitability of Land afforested

Land is suitable for raising plantation, but planting of 11 TG at one site is not desirable. The number of TG per site should not be more than 3, otherwise it simply become a block plantation.

b. Sultability of Species planted

The species planted are Bar, Pipal; Neem, Jamoa, Arjun, Gumbhar, Shisham, Pilkhan and Papri, These species are suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used is the Pit planting technique. But, this technique is not very effective due to compaction of soils. Therefore, this technique must be replaced with Auger Hole planting technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Detail of site wise survival % and average height and girth of plantations is as given in *Annexura-b*.

C.2.3 Construction of residential buildings

In this sub-component, 1 building for the residence of Forester was constructed. Results of M&E of this building are as given below:

a. Location of Building

This building is constructed in the Forest Complex, Sonipat.

Status of Building (completed or not)

This building has been completed.

c. Maintenance of Building

This building is being properly maintained.

d. Quality of Building

Quality of building is very good.

Present Use of Building.

This building is being used as DFO (T) office.

C.3 Constraints faced by implementing Authorities

- Delay in allotment of physical targets.
- Low cost norms of plantation
- c. Shortage of staff
- Non-availability of minimum 10 RKM forest areas for raising plantations under the component- Compensatory Afforestation.
- C.4 Suggestions of Implementing Authorities for Further Improvement
- a. Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- Norms, especially for earth work, must be increased.
- c. At least 2% Contingency for unforeseen expenditure must be provided.
- Staff must be provided as per Cadre Allotment.
- Computer operators must be provided in every Forest Range so that the computer may be used properly.
- e. Targets of the model "Land reclamation by plantation on farmlands" should be increased as plenty of farmers' waterlogged land is available for reclamation.

C.5 Suggestions of Evaluator

a. Scheme should be continued.

- b. Physical targets must be conveyed in April/ May sol that earth work may be completed before the onset of Monsoon.
- c. Pit planting technique must be replaced with Auger Hole planting technique for a raising successful plantations in compacted soils.
- d. Physical and financial targets of the model "Land reclamation by plantation on farmlands" of NPV component must be increased as plenty of farmers' waterlogged . land is available for reclamation.
- e. The number of TG per site should not be more than 3, otherwise it simply become a block plantation.

Annexure-a

Assessment of CA Plantations

Sr.		Name r	af 👘		Target	Unit	Species	Results of M&E					
Na.	Site	Wing	Renge	Block/ Best	Achieve d		planted	Longitudes	Letitudes	Av. Surviv el (%)	Av. Height (m)	Av. Girth (cm)	Quality
Ridge	Ridge Plantation												
1.	Jagsi -Gangana Road, Km 0-5	DFO (T) - Sonipat	Gobana	Bichpari/ Issepur Khari	8.	RKM	Eucalyot us, Allanthus	76 ⁰ 37'96″E	29 ⁰ 14'56*N	15%	15	θ.	Poor*
. 2.	Butana Distributary , RD 19-30	- DFO (T) Sonipat -	Gobanş	Bichpari/ Issapur Kheri -	12	RKM	Euc aly pt us	.75°37′32″E	29 ⁰ 14'0.08"N	83	3.5	.12	V. Good
.	Jattola Missor, RD 6-11	DFÖ (T) Sonipat	, R∎I ¢~~~~~	Kharkhoda/ Jharoni	10.35	RKM	Eucalypt Us	76 ⁹ 57*57*£	28 ⁴ 53'55"	n	3.0	12	Good
4.	Sisana Minor, RD 26-35	OFO (T) Sonipat	Rol	Kharkhoda/ Sisana	6	RKM	Eucalypt Us	76 [°] 51′56°E	28 ⁴ 56'07"N	78	3.8	12'	Good
5.	Sonipat-Gohana Road, Km 0-5	DFO (T) Sonipat	Sonipat	Sonipat/ Sonipat	4	RKM	Eucalypt us	76°56'04"E	29°01′11.1″N	10	2.5	ш	Good
5.	Ganaur Shahpur Road, Km 0-14	DFO (T) Sonipat	Sonipet	Dubeita/ Khugru	16	RKM	Allanthus	76°58*13**E	29 ⁰ 08'26"N	78	0.6	16	V. Good

*Damaged due to widening of road-FCA Case

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Annexure-b

Assessment of NPV Plantations

Sr. No.	Nince of				Tergel Unit	Species	Results of M&B						
	Sõis	Wag/	Range/	Bloeld Beat			putter	Longitudes .	Latitades	Av, Soertval (%)	Av. Hoigha (m)	Av. Gàrth (cm)	Quality
Pfantation in Heren ridges story roads and camb													
,	Genese Shebper Road, Kan 14-17 LAR	DPO (T) Sonipe	Stafipat	Dobetta/ Kbagna	IA .	RKLC	Becalyptas	76 53'48''E	29°10'50.2"N	80	3.0	15	V. Ģeod
Manta	tion of tall plants in these	r foresis						-	·				
2	Coince Salidon Read, Krn 5-7 L&R	DFO (T) Santper	Goluna.	BichperV Bichperi	· 6	REM	Allenthus, Poostypins	- 76 ⁴ 39'52"E	29°14.8"0N"	נד	23	20	V. Good
Landa	eclassica by physicalics	es farminuls											
З.	Anweil Permer Land	DFO (CFP), Pastpa:	Soniput	Gobara Gobara	ia	Ha	Eucalyptus	76 45144 72	29 ⁴ 0'32"N	86	3.0	12	V. Good
*	Lohari Tabba Paroasr Land	DFO (CFP), Panipat	Socipen.	Sonipair Scalper	22,	Ha	Pocalypter	76 7 32'32"E	29 7 0'32''N	90	5.0	18	V, Good
Planutien of Tree Greener (TG)													
ŝ.	June PL.	DPO (CPP). Pacipa	Socigni	Sonipet [/] Scoripet	11	No.	Baz, Pápal, etc	76 ⁵ 54'34''E	25 ⁴ 04-39.5"N	. 85	1.5	6	Good

Annexare-c Visual Journey

Gannaur Shahpur road Km 0 to 14 L&R CAMPA Year 2011-12 Sonipat Range Sonipat Division Target 16 RKM



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MONITORING & EVALUATION REPORT

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Of

Works Carried Out During 2011-12

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ROHTAK DISTRICT OF HARYANA

UNDER

STATE CAMPA SCHEME

Submitted to: Conservator of Forest cum Nodal Officer (Forest conservation) State CAMPA, Haryana Department of Forest, Govt. of Haryana Van Bhawan, Sector-6 Panchkula, Haryana



AFC INDIA LIMITED

NORTHERN REGIONAL OFFICE: B1/9, MRD FLOOR, COMMUNITY CENTRE JANAKPURI, NEW DELHI-110056 PHONE: 011-45791190-96, FAX: 91-45791169 EMAIL: AFCDELHIOAFCINDIA.ORG

Monitoring & Evaluation Report

Of

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Works Carried Out During 2011-12

In

Rohtak District of Haryana

Under

State CAMPA Scheme

March 2014

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Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010, implementation of State CAMPA scheme in Rohtak district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Rohtak district during the year 2011-12 by the two implementing authorities, viz., DFO (T) Rohtak and DFO (CFP) Panipat.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Rohtak only. But the physical targets under the NPV component were achieved by both the implementing authorities.

During the year 2011-12, a physical target of 34.62 RKM and 38 TGs was achieved against the fixed target of 34.62 RKM and 38 TGs resulting in 100% achievement.

To assess the performance during March 2014, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

Observations

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- The works of both the components were of good quality.
- b. Except 2 plantations damaged due to road widening, the average survival of other plantations was 73%.
- c. Out of 8 sites of CA plantations, the survival % was Excellent (>79%) at 3 sites, Very Good (70-79%) at 1 site, Good (60-69%) at 1 site and poor (<50%) at 3 sites.</p>
- d. Out of 5 sites of NPV plantations visited, the survival % was Excellent (>79%) at 3 sites, Good (60-69%) at 1 site and Average (50-59%) at 1 site.
- c. In most of the sites of CA plantations, the area of plantations was <1ha and it is very difficult for a forest guard to protect and maintain such small plantations.
- f. The main shortcomings in forest land plantations were:
 - Use of small sized plants instead of tall plants.
 - Under planting.
 - iii. Poor protection

Constraints faced by the implementing authorities

As told, the constraints faced by the implementing authorities were:

- Delay in allotment of physical and financial targets,
- Non-availability of funds for the maintenance of TGs.

Surgestions for further improvement

- The NAP project should be continued because it is helping in:
 - i. Enhancing the quality of degraded forests,
 - ii. Improving the tree cover in non-forest lends, and
 - iii. Mitigating the changing climate.
- 2. Physical and financial targets must be conveyed in time.
- Under planting should be stopped.
- 4. Tail plants of 2m in height should be planted in tall plants model.
- Protection should be improved.

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- 6. Barbed wire/ tree guards should be used for the protection of pl
- Funds for the maintenance of Tree Groves (TGs) must be provided for 3 years.
- Land bank should be identified and all plantations of <1 ha area should be done at this land bank.

Grading (On a Scale of 1 to 10)

	<u>\~</u>	<u></u>	
Quantitative Aspects		Physical	9

Qualitative Aspects	1.	Plantations	
		Quality	7
		Maintenance	6
		Sustainability	5

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(5 to <8)	(3 to <5)	(≪)
	•	Very Good	-	-

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GENERAL

- A.1 Name of District : Rohtak
- A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2^{nd} July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoe CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

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The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- b. Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- Compensatory afforestation;
- d. Environmental services, which include:-
 - Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, sir and water regimes;
 - 'jii, Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.
- e. Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

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The Governing Body of Haryana consists of the following:

1.	Chief Minister, Haryana	Chairperson
2.	Minister of Forests, Haryana	Member
3.	Minister of Finance, Haryana	Member
4.	Chief Secretary, Haryana	Member
5.	Principal Scoretary (Finance), Haryana	Member
6.	Principal Chief Conservator of Forests, Haryana	Member
7.	Chief Wildlife Warden, Haryana	Member
8.	Principal Secretary (Forests), Haryana	Member Secretary
A.5.3.	2 Steering Committee	-
The St	eering Committee of Haryana consists of the following:	
1.	Chief Secretary, Haryana	Chairperson
2.	Principal Secretary (Finance), Haryana	Member
З.	Principal Secretary (Forests), Haryana	Member
4,	Chief Wildlife Warden, Haryana	Member
5.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member
6.	Representative of the Ministry of Environment and Forests,	Member
	Government of India	
7.	Two eminent NGOs nominated by the state Government	Members
8.	Principal Chief Conservator of Forests	Member Secretary
A.5.3.2	3 Executive Committee	
The Er	ecutive Committee of Haryana consists of the following:	
1.	Principal Chief Conservator of Forests, Haryana	Chairperson
2.	AddI. Principal Chief Conservator of Forests (Forestry)	Member
3.	Chief Wildlife Warden, Haryana	Member
4,	Chief Conservator of Forests (Protection-I)	Member
5.	Chief Conservator of Forests (Protection-II)	Member
6.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
	Not below the rank of Addl. Secretary	Member
8.	Two eminent NGOs nominated by the state Government	Members
	for a period of 2 years at time who shall be eligible for re-no	mination
9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary
A.5.4	Meetings	

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1^{n} meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{nd} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2^{n} meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action teken report on 1^{n} meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12,2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Rohtak district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works carried out under the State CAMPA scheme during the year 2011-12 in Robtak district of Haryana State.

Model Micro-plan

Brief background of the programme for which micro-plan is prepared

A) General Information

A.1 Name of the Village 👘 🚦

- A.2 Name of the Panchayat :
- A. 3 Development Block
- A.4 Tehsil

A.5 Olstrict

A.5 Forest

a) Block	:
b) Range	:
c) Division	:

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Details of VIBage with Topography, Soil, Climate, vegetation along with Historical and ecological Background

B) Social Structure of the Village

B.1 Human Population

S.No.	Community	No. of households	Population		Π
			M	F	Total
				-	

B.2 Cattle Population

Village	Cow	Goat	Plg	Buffaloes	Total
Totel					

B.3 Education statuses of villagers

S.No.	Level	Male	Female	Total
1	Class V pass			
2	High School			
3	Intermediate and above			
4	filiterate			
	Total			

B.4. Economic Strata

B.4.1. Unemployed

5.No.	Age group	Nos
1	20-30	
2	30-45	
a)	45-60	
4	60-65	
	Total	

B.4.2. Source of income of the villagers

Primary Source

Secondary Source

B.4.3. Total employment

S.N.	Occupation	No. of	No. of Persons	No. of days
		households	Involved	employed/yr
1.	Farming			
2.	Livestock	-		
	a) Dairying			
	b) Goat/sheep			
	Repairing			
	c) Piggery/	· ·		
	d) Poultry			
	 e) Others, camel, 			•
	bullock for		1	
	drought &			
	transport			
3,	Artisans and self			
	employment:			
	a) Carpenter			
	b) Blacksmith		· ·	
	c) Mechanic		-	
	d) Barber			
	e) Washer man			
-	f) Others			
	(specify)			
4	Govt. service			
	 a) Forest Deptt. 			
	b) Education			
	c) Revenue			
	d) Others			
5.	Private service			
	a) Industrial			
	b) Shopkeeper			
	c) Daily labour	•		
	d) Others			
5 .	Transporter			
	Total			

B.S. Livestock

S.No.	Туре	Stall-feed	Open grazing	Total
1.	Buffaloes			
2.	Cows/bullocks			
3.	Sheep/goat			
4.	Others			
	Total		,	

8.6. Local migration in a year

No. of migrants	·	Duration in months/year
Male -	Femala	

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B.7. Civic facilities in the village

S.No	Type of facility	Location	Distance from village
1	Primary school		
2	High school		
3	Bank		
4	Past office		
5	Primary health centre		
6	Veterinary hospital		
7	Bus service		
8	Telephone		
9	Panchayat samiti	·	
10	Forest office		
11	NGÓ		•
12	Others _		

C. Land Details

C.1. Cultivable Land

S.No	Туре	irrigated Area (ha)	Unimigated Area (he)
1	Private cultivated		
2	Private uncultivated		

C.2. Land under other than cultivation

S.No	Түрв	Area (ba)
1 .	Forest land	
2	Permanent pasture	
3	Fallow	

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4	Cultivable wasteland		
5	Usar land		
6	Other type of land		
	Total	_	

C.3 Land holdings

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S.No.	Area (in ha.)	Households	Population
1	More than 4 ha.		
2	2-4ha.		
3	Less than Zha.		
4	Land less		
•	Total		

C.4. Land use pattern

a) Area under agricultural crops (ha.)

b) Area under horticulture (ha.)

c) Area under farm forestry (ha.)

d) Fallow

If fallow, then why?

Not suitable for crops

Non-availability of labour

Any other

C.S. Crop Production

Crop production (mean per ha.)

S.No.	Season	Wheat	Gram	Pulses
1	Rabi crop			
	Unimigated ·			
	Irrigated			
		Malze	Bajra	Jowar
2	Kharif crop			
	Unirrigated		i i	
	Irrigated			· .
Э.	Other crop			
	Total			

D. Fodder sources

S.No	Турея	 Quantity	Percentage
1	Forest Land		
	1) Grasses		
	2) Leaves		_ 1

2	Common land		_		
3	Agricultural Land		-		-
4	Purchased from market				_
	Others			_	

•

D.1. Average fodder requirement/household (kg)

D. 2. Fodder svailability (kg)

D.3. Deficit/Excess

E. Fuel wood sources

S.No.	Туреь	Quantity	Percentage
1	Forest land		
z	Common land		
3	Farm land		
4	Cow dung		
5	Bio-gas	· · ·	
6	Solar		
7	Kerosene		— -
8	Others (specify)		
	Total		

E. 2. Average fuel-wood requirement/household (kg)

E.3. Fuel-wood availability (kg)

E.4. Deficit/Excess

F. Forest land

S.No	Legal status	_		Area in ba.	
1	-				
2					
3			_		
Grand total					

F. Information related to plantation (if any)

F.1. Scheme of plantation

F.2. Implementing agancy

F.3. Species of seedlings planted & their survival status

5.No.	Туре	Year of plantation	No. of plantation	Present survival	Causes of mortality

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G. Details of water resources

G.Lirrigation water facilities

5.N.	Туре	Nos.	Longth (kin)	Private	Public
1	Canel				
2	Open wells				
3	Bore wells & pump				
4	Water hervesting structures				
5	Others				

G.2. Drinking water facilities

S.No	Туре	No's	Bulit by
1	Handpumps		
2 '	Openwells		-
3	Ponds, tanks		
4	Stream, spring		
5 ·	Supply water		

H. Gressroot level organization

5.No.	Туре	Name	Membership No's	Yest of establishment
1	Panchayat			
2	Youth groups			
3	Women groups	•		_
4	N.G.O			_
5	Gram vikas]		
	society/VFC	<u> </u>		
6	Others			

f. Financial institutions

1	Commercial Bank	
2	Co-operative bank	
3	Primary Agriculture Co-operative society	
4	Any others	

J. Natural resources available in and around the village

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Need assessment and availability of resource information

Forest Development

- 1. Needs of coppleing (ha.)
- 2. Needs tending of bamboo (ha.)
- 3. Regeneration (ba.)
- 4. Needs climber cutting/cleaning (ha.)
- Needs enrichment plantation (ba.) Young plantation= 1 to 5 yrs (ba.) Older plantation= >5 yrs (ba.)
- 6. Blank/scrub forest (ha.)
- Land for farm forestry (ha.) (in old abandoned cultivation)
- 8. Scope for Soll & Moisture Conservation
 - Check Dams
 - Guily Plugging
 - Contour Bunds
 - Contour Trenches
 - Any Other
- 9. Major source of fuel
- 10. Major source of fodder
- 11. Demand for fuel-wood plantation
- 12. Demand for fodder plantation
- 13. Demand for other plantation if any (specify)
- 14. Demand for bamboo plantation

Vilage Development

15. Infrastructural needs of the village

Action plan

A. Name of JFMC/VFPMC

B. Beat

C. Areas to be planted through different Afforestation Models:

Management Interventions	Area category	Area (ha)
ANR		
AR		
Pasture Development/Silvi-pasture		
Bamboo Plantation		
Plantation of Cane		
Mixed Plantation of trees having MFP & MV		
Regeneration of perennial heros and shrubs of MV		
Other activities		

[Separate sheet mentioning year wise details with budget should be enclosed at the end of Micro plan or below this).

D. Villagers Preference of species for Afforestation

D.1.Fuel-wood species

Species	Name of the species	Total no. of plants to be planted
Total		

D.2.Fodder species

Species	Name of the Species	Total no. of plants to be planted
Total		

D.3.NTFP species

Species	Name of the Species	Total no. of plants to be planted
		- · ·
Total		

D.4. Timber Species

Species	Name of the Species	Total no. of plants to be planted
Total		

Other if any:

E. Schedule of works

Work component	Work items	Period of work	Responsibility
· · · · ·			
— ———————————————————————————————————			

F. Plantation management (Indicate what strategies will be adopted)

- 1. Fire control: Developing Fire lines, community involvement etc.
- Grazing control: Developing norms, impose penalty etc.
- 3. Control of illicit felling: Developing norms, impose penalty etc.
- Control of encroachment: Removal of encroachment, Developing norms, impose penalty etc.
- 5. Water resource development: Convergence with Line Departments
- 6. Infrastructure development: Convergence with Line Departments
- Soil and moisture conservation plan: under the programme/Convergence with Line Departments
- G. New livelihood svenues for Social economic development of the villagers

G.1 Based on natural resource available in and around the village (with details i.e. source of material, backward & forward linkages with 8C ratio of each identified activity)

G.2 Based on others (with details i.e. source of material, backward & forward linkages with BC ratio of each identified activity)

H, Plantation Model wise details:

For example: Silvipastoral System

H.1 Species Composition

H.2 Spacing

H.3 Sowing

H.4 Pruning & Thinning

H.5 Lopping

H.5 Harvesting of Grass

I. Estimated Yield (According to the Plantation model opted)

- Grasses
- Leaf Fodder after 4th year
- Fuelwood (Thining, pruning & Singling operation)
- NTFPs
- Final Harvesting

J. Roles and responsibilities

- 1. Role of forest development
- 2. Regulation of fuelwood, fodder and other NTFP extraction
- 3. Benefit sharing
- 4. Marketing and value addition
- 5. Linkage of other departments and financial institutions
- 6. Monitoring and evaluation
- 7. Record keeping
- 8. Legal Framework
 - VFC formation
 - Rights & Responsibilities of VFC.
 - The agreement
 - Records

X. Infrastructural need emerged and its remedial measures through convergence

S.No.	Need/Issues	S	chemes/Line Separtment

L. Entry point activities to take up in the gree

S.No	Activity	Unit	Remarks

M. Responsibility Sharing (based on problems identified and measures suggested)

Task	To be done by VFPMC	To be done by Gram Penchayat
Account keeping		
Capacity building		
Repair/maintenance of structure		
Monitoring		

Any Other Remarks

L

information source	Information collected by

QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Rohtak district of Haryana State by the two implementing authorities, viz. DFO (T) Rohtak and DFO (CFP) Panipat.

B.I Physical Targets

B.1.1 Plantation

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The physical achievement in Rohtak district during the year 2011-12 under the State CAMPA scheme by the DFO (T) Rohtak and DFO (CFP) Panipat is as given below;

	Na	Physical Targets				
Composent	Sub-component	Model	Implementing Authority	Fixed	Achieved	Unii
Compensatory Afforestation (CA)	-	Ridge	DFO (T) Rohlak	2.00	2.00	RKM
		Tali Plants		12.62	12.62	RKM
Net Present Affor Value (NPV) - and mai of Gov	Afforestation and management of Government	Plantation of tall plants in linear forests		10.00	10.00	RKM
		Ridge plantation in linear forests		10.00	10.00	RKM
	Afforestation In community and public lands	Plantation of Tree Grooves (TGs)	DFO (CFF) Panipat	38 .D0	38.00	No.
	т	otal	·	34.62	34.62	RKM
				38.00	38,00	No

Above table indicates that during the year 2011-12, a physical target of 34.62 RKM and 38 No. was achieved against the fixed target of 34.62 RKM and 38 No. resulting in 100% achievement.

QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Rohtak district of Haryana State by the two implementing authorities, viz, DFO (T) Rohtak and DFO (CFP) Panipat.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Rohtak only. But the physical targets under the NPV component were achieved by both the implementing authorities, viz., DFO (T) Rohtak and DFO (CFP) Panipat.

During the year 2011-12, a physical target of 34.62 RKM and 38 No. was achieved against the fixed target of 34.62 RKM and 38 No. resulting in 100% achievement.

To assess the performance during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&B were as given below:

C.1 Compensatory Afforestation

C.1.1 Ridge Model

In this model, plantations were raised by the DFO (T) Rohtak by achieving a target of 2.00 RKM at 1 site. This site was visited during March 2014 and the results of M&E were as given below;

Suitability of Land afforested

Land was suitable for raising, protection and maintenance of plantation.

Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Ridge planting technique.

d. Survival of Plants

Plantation was damaged due to road widening and the survival of plantation was 0%.

C.1.2 Tail Plants Model

In this model, plantations were raised by the DFO (T) Rohtak by achieving a target of 12.62 RKM at 7 sites. All the 7 sites were visited during March 2014 and the results of M&E were as given below:

a. Suitability of Land afforested

Lands of 4 sites were not suitable for raising, protection and maintenance of plantation as the area of these sites were less than 1 ha,

b. Sultability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Pit planting technique. But this technique was not so effective due to soil compaction.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 60.71%.

Out of 7 sites of CA plantations, the survival % was Excellent (>79%) at 3 sites, Very Good (70-79%) at 1 site, Good (60-69%) at 1 site and poor (<50%) at 2 sites.

The main shortcomings were use of small sized plants in the name of tall plants and poor protection.

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in *Aunexare-a*.

C.2 Net Present Value

In this component, works were carried out in Rohtak district under the following 2 subcomponents:

- i. Afforestation and management of Government forest lands
- ii. Afforestation in community and public lands

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out by DFO (T) Rohtak under the following 2 models:

- i. Ridge plantation in linear forests
- ii. Tall plants plantation in linear forests

Plantations of above 2 models were visited during March 2014 and the results of M&E were as given below:

C.2.1.1 Ridge Plantation

In this model, plantations were raised by the DFO (T) Rohtak by achieving a target of 10 RKM at 1 Site. M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitabillty of Species planted

The species planted were suitable for the area. .

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Ridge planting technique. This technique is very effective in taising plantation in low lying areas.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was 87%.

Detail of survival % and average height and girth of plantations was as given in Annexure-b.

C.2.1.2 Tall Plants Plantation

In this model, plantations were raised by the DFO (T) Rohtak by achieving a target of 10 RKM at 2 sites. M&E was carried out by visiting 1 site resulting in M&E of 50% sites and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was 85%.

Detail of survival % and average height and girth of plantations was as given in Annexureb.

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out by the DFO (CFP) Panipat under the model Plantation of True Groove (TG) by achieving a target of 38 TGs in 6 villages.

M&E was carried out by visiting 14 TGs of 3 villages resulting in M&E of 50% villages and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for reising plantation.

b. Suitzbility of Species planted

The species planted were suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Fit planting technique. This technique is not so effective due to soil compaction. For early establishment of plantation, the Auger Hole planting technique should be used.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival of plantations was 70%.

Survival % was excellent (>79%) in I village, good (60-69%) in 1 village and average (50-59%) in1 village

The village wise survival %, average height and average girth, etc. were as given in Annexure-6.

C.3 Constraints faced by Implementing Authorities

As told, the constraints faced by the implementing authorities are as given below:

- Delay in allotment of physical and financial targets,
- Non-availability of funds for the maintenance of TGs.

C.4 Suggestions of Implementing Authorities for Further Improvement

- i. Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- ii. Norms, especially for earth work, must be increased.
- iii. Funds must be provided for the maintenance of TGs for 3 years.

C.5 Suggestions of Evaluator

- The NAP project should be continued because it is helping in:
 - Enhancing the quality of degraded forests,
 - ii. Improving the tree cover in non-forest lands, and
 - iii. Mitigating the changing elimate.
- Physical and financial targets must be conveyed in time.
- 3. Tall plants of 2m in height should be planted in tall plants model.
- Funds for the maintenance of TG must be provided for 3 years.
- 5. Land bank should be identified and all plantations of <1 ha area should be done at this land bank.

Annexure-a Assessment of CA Plantations Orading on the basis of survival % [Excellent >79%, Vory good 70% -79%, Good 60% - 69%, Average 50% -59%, Poor<50%]

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Sr. No.		Name of		Target	Unit	Species	Remits of M&E						
	. Site	lesplementin g Anthority	Range		r	plaated	Longitudes (Eesi)	Lathudes (North)	Av. Serviva I	Av. Height	Av. Girth (cm)	Grading	Ronarka
Ridg	e Plantation		·				I	<u> </u>				<u> </u>	L
L	NH-10 kg	DFO (T) Rohtak	Meham	2.00 ¢	RKM	Eucalyptu s	76 ⁰ 17 <u>22.7</u>	28°58'9.5"	9/	0	¢	Ø	Damaged duc to road widening
Tail	Plants				•		•	•				-	
1	Jassia Sanghi Khidwali rosd km 0-3 & 7.5	DFO (T) Rohtak	Rohtak	10.00	RKM	Shisham, Jamun, ' Ailanthus, Papri, Arjun	76 ⁰ 38'8.5''	29 ⁰ 00'52.6''	\$0	3.0	10	Excellen t	-
2	NH-71A Brzs stop of Brahmanwass km 13-14 L&R	DFO (T) Rohtak	Rohtak	0.09	RKM	Shisham, Arjan	76 ⁹ 38'3.1''	28°58'33.4''	75	1.7	NM	V. Good	Smail sized plants were planted
3	Mudak-Rurid- Assan dmin	DFO (T) Rohtak	Rohtak	0_31	RKM	Papri, Shisham, Neem	76944'28.6'	28 ⁶ 54'39.4	65	2.0	NM	Good	
4	NH-10 km 104-105	DFO (T) Rohtuk	Mebam	1.00 <	RKM	Shisham, Arjun, Papri	76 ⁰ 18'49''	28 ⁰ 57'33.3"	^`	0	Q	0	Damaged due to road widening

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5	Baniyani – Patwapur road km 5-9.6 L/side	DFO (T) Robtak	Meham	0.05	RKM	Jamun	76°29'36.6'	28 ⁰ 49'35.0''	90	1.0	NM	Excellen t	Small plants planted	sized wcrs
6	NH-71A km 6-7 R/side	DFO (T) Robiak	Rohtzk		RKM	Neem, Bahera, Papri	76 ⁶ 35'55.3'	28°55'31.1''	20	3.0	13	Poor		
7	NH-71 km 353 L/side	DFO (T) Rohtak	Meham	0.17	RKM	Bakain, Kachnar	76*33;27.9	28 ⁰ 55*33.4**	95	3.0	15	Exection t	-	-
	Total Ridge	& Tall Plants		14.62	RK M									

Annexure-b

Assessment of NPV Plantations

Grading on the basis of survival % [Excellent > 79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Poor<50%]

Sr. Name of Target Unit Species Results of M&E						- .							
140.	Site	Implementing Authority	Range	Acaseved			Longitud es (East)	Latitudes (North)	Av. Survival (%)	Ay. Height (m)	Av. Girth (cm)	Grading	Remarks
٨	Afforestation ga	d management o	of Governme	ot forest lan	nds			•	•	<u> </u>			
đ	Ridge Plantation	1											
I	Rohiak distributory	DFO (T) Rohtak	Rohtak	10.00	RKM	Encalyptus	76°37'16.0"	29 ⁴ 00'32,6''	87	6.0	16	Excellent	-
В.	Tall Plants Plant	ation		•							_		
1	Chamarian to Kupa road	DFQ (1) Rohtak	Rohtak	5.00	RKM	Arjun, Belgiri, Behom	76°28'15.9"	26°51*34.3'*	8 5	2.5	12	Excellent	-
B	Afferentation in o	community and	public lands	•			· .	•					
	Tree Groves					-							
1	Bhaini Maharajpur Water works	DPO (CFP) Panipet	Rohtak	2	No.	Papri, rjun, Shisham, Bar, Neem	76°15'12.3''	28"39"10.7"	50	0.5	NM	Average	Poor protection
2	Samman-Puthi Shemshan Ghar	DFO (CFP) Panipat	Rohtak.	7	No.	Arjun, Papel, Shishem, Pilkhan	76°16'51,9''	29°01~46.5''	65	2.0	NM	Good	
3	Sisser Shamshan Qhat	DFO (CFP) Panipat	Rohtak	.	No.	Papri, Neem, Shisharo, Arjun	76 ⁴ 14'44.0''	28°57741.5"	95	3.0	12	Excellent	-

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MONITORING & EVALUATION REPORT

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Of

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Works Carried Out During 2011-12

In

AMBALA DISTRICT OF HARYANA

UNDER

STATE CAMPA SCHEME

Submitted to: Conservator of Forest cum Nodal Officer (Perest conservation) State CAMPA, Haryana Department of Forest, Govt. of Haryana Van Bhawan, Sector-6 Panchkula, Haryana



AFC DIDIA LIMITED

EORTHERN REGIONAL OFFICE: B1/9, HED FLOOR, COMMUNITY CENTRE JARARPURI, REW DELHI-110056 PROME: 011-45791190-96, FAX: 91-45791189 EMAIL: AFCIRLHUPAFCINDIA.ORG

Monitoring & Evaluation Report

Of

Works Carried Out During 2011-12

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Ambala District of Haryana

Under

State CAMPA Scheme

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March 2014

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	c. Photos	17

Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010, Implementation of State CAMPA scheme in Ambaia district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Ambala district during the year 2011-12 by the two implementing authorities, viz., DFO (T) Ambala and DFO (CFP) Ambala.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Ambala only. But the physical targets under the NPV component were achieved by both the implementing authorities

During the year 2011-12, a physical target of 178.35 RKM, 203Ha and 70 TGs of plantation was achieved against the fixed target of 178.35 RKM, 203 Ha and 70 TGs resulting in >100% achievement.

To assess the performance during February 2014, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

Observations

- The works of both the components were of very good quality.
- b. The average survival of plantations was 85.88% (Annexure a &.b)
- c. The main shortcomings in forest land plantations were;
 - Use of small sized plants instead of tail plants.
 - H. Approved design of TGs was not followed

Constraints faced by the implementing authorities

As told, the constraints faced by the implementing authorities were:

- Delay in allotment of physical and financial targets,
- b. Non-availability of funds for the maintenance of TGs

Suggestions for further improvement -

- The NAP project should be continued because it is helping in:
 - Enhancing the quality of degraded forests,

- ii. Improving the tree cover in non-forest lands, and
- i. Mitigating the changing climate.
- 2. Physical and financial targets must be conveyed in time.
- 3. Tall plants of 2m in height should be planted in tall plants model.
- 4. Funds for the maintenance of TG must be provided for 3 years.
- 5. Staff should be provided as per cadre allotment.

Grading

(On a Scale of 1 to 10)

Quantitative Aspects	Physical	 	9

Qualitative Aspects	1.	Plantations	
		Quality	7
		Maintenance	6
		Sustainability	5

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(Sto_<8)	(3 to <5)	(≤)
	•	Very Good	-	•

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GENERAL

- A.1 Name of District : Ambala
- A.2 Name of State : Haryana
- A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MnEF), Govt. of India had issued guidelines on 2^{ad} July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.S.2 Aims and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- b. Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- Compensatory afforestation;
- Environmental services, which include:-
 - Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - iii. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primery production.

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e. Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

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The Governing Body of Haryana consists of the following:

1.	Chief Minister, Haryana	Chairperson
2.	Minister of Forests, Haryana	Member
3.	Minister of Finance, Haryana	Member
4.	Chief Secretary, Haryana	Member
5.	Principal Secretary (Finance), Haryana	Member
б.	Principal Chlef Conservator of Forests, Haryana	Member
7.	Chief Wildlife Warden, Haryana	Member
8.	Principal Secretary (Forests), Haryana	Member Secretary
		······································

A.5.3.2 Steering Committee

The Steering Committee of Haryana consists of the following:

1.	Chief Secretary, Haryana	Chairperson
2.	Principal Secretary (Finance), Haryana	Member
3.	Principal Secretary (Forests), Haryana	Member
4.	Chief Wildlife Warden, Haryana	Member
5.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member
á.	Representative of the Ministry of Environment and Forests,	Member
	Government of India	
7.	Two eminent NGOs nominated by the state Government	Members
8.	Principal Chief Conservator of Forests	Member Secretary

A.5.3.3 Executive Committee

The Executive Committee of Haryana consists of the following:

l,	Principal Chief Conservator of Forests, Haryana	Chairperson
2	Addl. Principal Chief Conservator of Forests (Forestry)	Member
Э.	Chief Wildlife Warden, Haryana	Member
4.	Chief Conservator of Forests (Protection-I)	Member
5.	Chief Conservator of Forests (Protection-II)	Member
6.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
	Not below the rank of Addl. Secretary	Member
8.	Two eminent NGOs nominated by the state Government	Members
	for a period of 2 years at time who shall be eligible for re-	nomination
9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary

A.5.4 Meetings

A.5.4.1 Governing Body

The 1st meeting of the Ooverning Body is yet to be held.

A.5.4.2 Steering Committee

The 1^{st} meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{st} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2nd meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1st meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Ambala district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Ambala district of Heryana State by the two implementing authorities, viz. DFO (T) Ambala and DFO (CFP) Ambala.

QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Ambala district of Haryana State by the two implementing authorities, viz. DFO (T) Ambala and DFO (CFP) Ambala.

B.1 Physical Targets

B.1.1 Plantation

The physical achievement in Ambala district during the year 2011-12 under the State CAMPA scheme by the DFO (T) Ambala and DFO (CFP) Ambala is as given below:

Name of				Physical Targets		
Сопрелен	Sub-component	Model	Implementing Autocrity	Fixed	Achieved	Մոյլ
Compensatory Afforestation (CA)		Ridge	DFO (T) Ambain	155.35	155.35	RKM
Net Present Value (NPV)	Afforestation and management of Government forest lands	Assisted Natural Regeneration		38.00	38.00	Ha
		Plentation of tail plants in linear forests		10.00	10.00	RKM
	-	Ridge plantation in linear forests		13.00	13.00	RKM
	Afforestation in community and public lands	Plantation of Tree Grooves (TGs)	DFO (CFP) Ambeig	78.00	70.00	Ňo.
		Biodminage		165.00	165.00	Ha
Total				178.35	178.35	RKM
				203.00	203.00	Ha
			-	70.00	70,00	No

Above table indicates that during the year 2011-12, a physical target of 178.35 RKM, 203Ha and 70 TGs was achieved against the fixed target of 178.35 RKM, 203 Ha and 70 TGs resulting in >100% achievement.

QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Ambala district of Haryana State by the two implementing authorities, viz, DFO (T) Ambala and DFO (CFP) Ambala.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Ambala only. But the physical targets under the NPV component were achieved by both the implementing authorities, viz., DFO (T) Ambala and DFO (CFP) Ambala.

During the year 2011-12, a physical target of 178.35 RKM, 203Ha and 70 TGs was achieved against the fixed target of 178.35 RKM, 203 Ha and 70 TGs resulting in >100% achievement.

To assess the performance during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

C.1 Compensatory Afforestation

C.1.1 Ridge Model

In this model, plantations were raised by the DFO (T) Ambala by achieving a target of 155.35 RKM at 6 sites. All the 6 sites were visited during March 2014 and the results of M&E were as given below:

a. Suitability of Land afformeted

Lands were suitable for raising plantations.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of plenting used was the Ridge planting technique. This is very effective technique for raising successful plantations in low lying areas.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 68.5%.
Out of 6 sites of Ridge model of CA component, the survival % was Very Good (70-79%) at 4 sites and Good (60-69%) at 2 sites;

Detail of site wise survival %, average beight, average girth and shortcomings, etc. were as given in Annexare-a.

C.2 Net Present Value

In this component, works were carried out in Ambala district under the following 2 subcomponents:

- i. Afforestation and management of Government forest lands
- II. Afforestation in community and public lands

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out by DFO (T) Ambala under the following 3 models:

ii. Assisted Natural Regeneration

iii. Ridge plantation in linear foresta

iv. Tall plants plantation in linear forests

Plantations of above 3 models were visited during March 2014 and the results of M&E were as given below:

C.2.1.1 Assisted Natural Regeneration

In this model, plantation works were carried out by the DFO (T) Ambala by achieving a target of 38.00 he at 8 sites. M&E was carried out by visiting 2 sites resulting in M&E of 25% sites and the results of M&E were as given below;

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Average survival of plentations was 77.5%.

The survival % was Excellent (>79%) at 1 site and very good (70-79%) at another site.

Detail of site wise survival % and average height and girth of plantations was as given in Annexare-b.

C.2.1.2 Ridge Plantation

In this model, plantations were raised by the DFO (T) Ambala by achieving a target of 13 RKM at 1 site. M&E was carried out by visiting 1 site resulting in M&E of 100% sites and the results of M&E were as given below:

Suitability of Land affortated ۰.

Land was suitable for raising plantation.

Suitability of Species planted Ь.

The species planted were suitable for the area.

Techniques of Planting Used and their Effectiveness c.

Technique of planting used was the Ridge planting technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was 71%.

Detail of survival % and average height and girth of plantations was as given in Annexare-

C.2.2 Afformation in community and public lands

In this sub-component, works were carried out by the DFO (CFP) Ambala under the

a. Tree Groves

Ь. Biodrainage

C.2.2.1 Tree Groves (TGs)

In this model, plantations were raised by the DFO (CFP) Ambala by achieving a target of 70 TGs at 18 sites. M&E was carried out by visiting 4 sites resulting in M&E of 22% sites and the results of M&E were as given below:

Suitability of Land afforested **±**.

Land was suitable for raising plantation.

Suitability of Species planted. Ъ,

The species planted were suitable for the area,

Techniques of Planting Used and their Effectiveness с.

Technique of planting used was the Pit planting technique.

Ł Survival of Plants

Survival % was estimated by counting the surviving plants.

Average survival of plantation was 85%.

Main shortcomings were:

Approved design of TGs was not followed. a.

6-9 TGs were taised at 1 site. b.

Detail of survival % and average height and girth of plantations was as given in Annexage-

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C.2.2.2 Biodrafuage

In this model, plantations were raised by the DFO (CFP) Ambala by achieving a target of 165.00 Ha in 11 villages. M&E was carried out by visiting 3 villages resulting in M&E of 27% villages and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

Suitability of Species planted.

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Ridge planting technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Average survival of plantation was 92.52%.

Survival % was Excellent (>79%) at all the sites.

Detail of survival % and average height and girth of plantations was as given in Annexare-

C.3 Constraints faced by Implementing Authorities

As told, the constraints faced by the implementing authorities are as given below:

- c. Delay in allotment of physical and financial targets,
- d. Non-availability of funds for the maintenance of TOs.

C.4 Suggestions of Implementing Authorities for Further Improvement

- i. Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- Norms, especially for earth work, must be increased.
- iii. Staff must be provided as per Cadre Allotment.
- iv. Funds must be provided for the maintenance of TGs in the 3rd year of planting.

C.5 Suggestions of Evaluator

- 6. The NAP project should be continued because it is helping in:
 - Enhancing the quality of degraded forests,
 - Improving the tree cover in non-forest lands, and
 - v. Mitigating the changing climate.
- Physical and financial targets must be conveyed in time.
- Tall plants of 2m in height should be planted in tall plants model.
- Funds for the maintenance of TG must be provided for 3 years.
- Staff should be provided as per cadre allotment.

Annexure-a Assessment of CA Plantations Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60% - 69%, Average 30%-59%, Poor<50%]

Sr. No		- Name of		. Name of		- Name of Ta		Target Achiev		Unit Species planted			Re	M to etta	&E		
	Site	Implementia g Authority	Range	ed		Longituder (East)	Latifudes (North)	Av. Secrytva 1 (%)	Av. Height (m)	Ay. Girth (cm)	Grading	Romania					
Ridg	e Plantation											·					
1.	Jagadhari- Ambala Road Km 44-46	DFO (T) Ambala	Ambala	8.00	RKM	Eucalyptus	75°53'4.9''	30 ⁰ 19'55.7"	71	4.0	15	V. Good	-				
2.	OT Road Km 208-212	-do-	-do-	20.00	RKM	Eccalyptus	76°45.7'37''	30°23.7'43.0''	70	3.5	12	V. Good	-				
3	Manakpor PF	-40	Naraingarb	20.00	RKM	Bucelyptus, Kikar	77°09'48''	30°28*08.0**	68	1.0	NM	Good	-				
4	Bari Rasaur PF	-do-	-do-	10.00	RKM	Eutalyptns	77°09'59.0"*	30°26'58,9''	72	3.0	10	V. Good					
5	Bari Russur Sec-S	-do-	-do-	27.35	RKM	Eucalyptus	77°†0'22.2''	30 ⁹ 26'46.3''	70	3.5	5	V. Good	-				
6	Rao Majra RF & PF	-do-	-do-	70,00	RKM	Eucalyptus, Kikar	77°09'32.3''	30 28 25,6".	0	3.0	5	Good	-				
		Tóta]		155.35	RKM	· · · ·						İ					

Town rents.

Annexure-b

Assessment of NPV Plantations

Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Poor<50%]

Sr.	Name of Site Implementin Ram		Target	Unit	Species			:	Replic of	MÆE			
14	Site	Implementin g Anthority	Range	d		pantor	Longhudes (East)	Latitudes (North)	Av. Surviya I (%)	Av. Height (m)	Av. Girth (cut)	Grading	Remarks
A	Afforestation	and manager	ment of Go	vernment	forest	landa	.	1	• • •		1		1
я	Assisted Natura	i Regeneration											
1	Ugala-Buhva Roed	DFO (J) Ambala	Saha	5.0	He	Shisham.	76 ⁴ 58'39.7''	30 ⁰ 11'04.0'*	80	2.6	10	Excellent	-
2	Shahbad- Sadhaura Road KM 42-50	-do-	-dc-	5.0	Ha	Holoptella, Shisham, Teak	77 ⁴ 01'56.2''	30 ⁹ 11'31.1"	75	1.7	NM	V. Good	-
<u></u> b.	Ridge Plantation	•				_					•	· -	· · ·
I	Bari Rasaar Sec-S	-40-	Naraingarh	13.0	RKM	Eucelyptus	77 ⁶ 10'22.1''	30 ⁹ 25*40.0**	71	3.0	6	V. Good	-
B	Afforestation	ia community	y and publi	c landa			• • • • • • • • • • • • • • • • • • • •	·	I,				i
9	Tree Groves												
1	Mohra	DFO (CFP) Ambala	Ambela	9.5	No.	Mise. Species	76*50*6.06**	30°15'24.0"	80	4.0	15	Excellent	Approved designed of TGs not followed
2	Laba	-do-	-do-	. 6.3	No.	-do-	77°05'48.5"	30°31'14,5''	85	2.3	10	Excellent	-do-
з.	KoluaBhura	-do-	-do-	1.0	No.	-de-	77 [°] 05°13.7°	30 32 01.3"	90	2.0	мм	Excellent	-

Sr. Name of Target Unit Species Remits of MAR. No. Active planted She Involementio Range d. Longitudes Latindes Av. Gradibe AY. Av. Remarks g Authority (Em) (North) Surviva Height Girth 1 (**m**) (cm) (%) -do-Harlyoli -do-4 -00-76°58'001'' 30⁹14'43.1" 1.0 No. 85 2.5 Excellent 10 Biodrainage b. Dhurali village Gurdhan Singh 1 -do--de-0.19 76 47 14.1" Ha Cional 30018'6.6" 96 8 Excellent 28 -Eucalyptus 2 Mebar Singh -do-76°47"12.8" -do-30*18'05.3** 1.25 Ha -do-7.5 95 25 Excellent -3 Surabjit Singh -do--de-2,10 76°44'08.6" Ha -do-30417.5'7.0' 8.5 90 30 Excellent Bara Ugara 1 Kaldeep Singh -do--do-1.72 Ha -do-76 47 37.4" 30°18'32.1** 92 **8.**D 26 Excellent _ 2 Janwant Singh -do--de-0.30 Ha -do-76°47'36.0" 30018'32.0" 95 8.2 29 Excellent -Bitu 1 -do--do-0.62 H -do-7646'05.5" 30918137.5** 7.9 94 28 Excellent _ Dalbir 4 -do--do-2.30 Ha do -7648'24.7" 30*16'27.3'* 7.5 26 Exenilent 92 -5 Mohan Singh -do--do-3.14 Ha -do-75°48'33.9" 30°18'27.9" 7.5 93 28 Excellent _ Krithan Singh 6 -do--do-0.50 Ha -do-76 48 27.1" 30 18'27.5" 92 7.8 27 Excellent _ 7 Maya Ram -do--do-3.50 76948113.3** Ha -do-30 18'46.9" 91 75 Excellent 26 -۵ Ashok -do--do-2.50 н -do-76048'43,8" 30018.878.9" 85 6.0 20 Excellent _ Gifteri village

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Şr.	Name of			Target Unit		lait Species	Remits of M&R							
No.	Site	implementin g Authority	Range	d		рыясеа	Longitudes (East)	Latitudes (North)	Av. Sarviva I (%)	Av. Height (m)	Av. Girtk (cm)	Grading	Remarks	
1	Sat Pal	-90-	-do-	7.70	Ha	-do-	76°59.6'02**	30°14.7'36''	94	75	26	Excellent	-	
2	Ranjit	-do-	-do-	1.40	Ha	-do-	76°59.6'02''	30°14.7"38"	95	7.3	24	Excellent	-	
3	Karam Singh	-do-	-do-	4.13	H۵	-do-	76°59.6'8.2**	30°14.5'0?"	93	7.0	23	Excellent	-	
4	Dhir Singh	-00-	-40-	1.50	Ha	-00-	76°59`42.8''	30 [*] 14`48.1`*	95	6.8	22	Excellent	-	
\$	Pawan Kumar	-do-	-do-	3.55	Ha	-40-	76°59'38.1"	30 ⁴ 14'37"	96	7.5	25	Excellent	-	
6	Kuldeep Singh	-do-	-do-	2.10	ffa	-do-	76 [*] 59'31.6''	30°14'44.I"	92	7.0	25	Excellent	-	
7	Satiah Kumur	-do-	-de-	1.20	Ha	-da-	76 ⁹ 59'14.9''	30 ⁹ 14'43.2''	91	6 .8	31	Excellent	-	
8	Baldey Singh	-do-	-40-	2.54	Ĥa	-de-	76°00'03''	30°14'59.4''	90	7.2	. 31	Excellent	-	
9	Manjit Singh	-do-	-do-	1.12	H	-фо-	76°59'50''	30°15'24.5"	92	6.0	25	Excellent	-	
τ0	Jagir Singb	-do-	-do-	1.20	Нь	-do-	76°39'49.3"	30°15°26.3	90	5.5	20	Excellent	•	
		Tob	a)	44.06	Ha	-do-		-		-				

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Jagadhari-Ambala Road Km 44-46



Bari Ressur PF

2 - DFO (T) Ambala - NPV - ANR



í e

Shahbad- Sadhaura Road KM 42-50



Mohra



Laha



Gurdhan Singh



Krishan Singh

Maya Ram



Pewan Kumar

Kuldeep Singh



Setish Kumar

Baldev Singh

MONITORING & EVALUATION REPORT

Of

Works Carried Out During 2011-12

In

KAITHAL DISTRICT OF HARYANA

UNDER

STATE CAMPA SCHEME

Submitted to: Conservator of Forest cum Nodal Officer (Forest conservation) State CAMPA, Haryana Department of Forest, Govt. of Haryana Van Bhawan, Sector-6 Panchkula, Haryana



AFC INDIA LIMITED NORTHERN REGIONAL OFFICE: B1/9, IIIRD FLOOR, COMMUNITY CENTRE JANAKPURI, NEW DELHI-110058 PHONE: 011-45791190-96, FAX: 91-45791189 EMAIL: AFCDELHI@AFCINDIA.ORG

Monitoring & Evaluation Report

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Of

Works Carried Out During 2011-12

In

Kaithal District of Haryana

Under

State CAMPA Scheme

March 2014

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Executive Summary

Ministry of Environment and Forests (MoEF). Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA,

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-F1-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Kalthal district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Kaithal district during the year 2011-12 by the three implementing authorities, viz., DFO (T) Kalthal, DFO (CFP) Ambala and DFO (WL) Panchkula.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Kaithal only. But the physical targets under the NPV component were achieved by all the three implementing authorities.

During the year 2011-12, physical target of 140.92 RKM, 73 Ha and 170 TGs was achieved against the fixed target of 141 RKM, 73 Ha and 170 TGs resulting in >100% achievement. Soil and Motsture Conservation works were also carried out in Saraswati forests in which two ponds were dug against target of two ponds.

To assess the performance during March/April 2014, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

Observations

- The works of both the components were of good quality.
- The average survival of plantations was about 60%.
- 3. Out of 6 sites of Ridge model of CA component, the survival % was Very Good (70-79%) at 1 site, Good (60-69%) at 3 sites, Average (50-60%) at 1 site and poor (<50%) at 1 site.
- Out of 2 sites of Ridge model of NVP component visited, the survival % was Excellent (>79%) at 1 site and poor (<50%) at 1 site.
- Out of 2 sites of ANR model of NVP component visited, the survival % was Good (60-69%) of both sites.
- The survival % was Good (60-69%) at 1 site visited of Tall plants model of NVP component.
- Out of 88 sites of TG model of NVP component visited, the survival % was Average (50-60%) at 69 sites and poor (<50%) at 19 sites.
- The 2 ponds dug up were of good quality.
- The main shortcomings observed in plantations were:
 - i. Use of small sized plants in tall plants model.
 - Absence of barbed wire fencing/ tree guards in tall plant model.

Constraints faced by the implementing authorities

As told, the constraints faced by the implementing authorities were;

- Delay in allotment of physical and financial targets,
- Non-availability of funds for the maintenance of TGs. These have been handed over to Panchayats resulting in no care later on.

Suggestions for further improvement

- 1. The State CAMPA scheme should be continued because it is helping in:
 - Enhancing the quality of degraded forests,
 - ii. Improving the tree cover in non-forest lands, and
 - iii. Mitigating the changing climate.
- Physical and financial targets must be conveyed in time.
- Tall plants of 2m in height should be planted in tall plants model.
- Barbed wire/ tree guards should be used for the protection of plantations.
- Approved design of TGs should be followed.
- 6. Funds for the maintenance of TGs must be provided.

Grading

(On a Scale of 1 to 10)

Quantitative Aspects	Physical		_	9	

Qualitative Aspects	1.	Plantations	
		Quality	6
		Maintenance	4
		Sustainability	4
	2	Other Works	_!
		Quality	8
		Maintenance	5
		Sustainability	6

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(5 to <8)	(3 to <\$)	(<3)
	•	Very Good	-	-

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GENERAL

- A.1 Name of District : Kaithal
- A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Foreats (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adboc CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Alms and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- Compensatory afforestation;
- d. Environmental services, which include:
 - i. Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, murism, wildlife protection and life support;
 - Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - iii. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - iv. Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.
- Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

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The Governing Body of Haryana consists of the following:

1.	Chief Minister, Haryana	Chairperson
2.	Minister of Forests, Haryana	Member
3.	Minister of Finance, Haryana	Member
4.	Chief Secretary, Haryana	Member
5.	Principal Secretary (Finance), Haryana	Member
6.	Principal Chief Conservator of Forests, Haryana	Member
7.	Chief Wildlife Warden, Haryana	Member
8.	Principal Secretary (Forests), Haryana	Member Secretary
A.5.3.3	Steering Committee	
The St	eering Committee of Harvana consists of the following:	
1.	Chief Secretary, Harvana	Chairmersan
2.	Principal Secretary (Finance), Harvana	Member
3.	Principal Scorctary (Forests), Harvana	Member
4.	Chief Wildlife Warden, Haryana	Member
5.	Conservator of Foresis (FC) & Nodal Officer (FCA)	Member
6.	Representative of the Ministry of Environment and Forests.	Member
	Government of India	
7.	Two eminent NGOs nominated by the state Government	Members
8.	Principal Chief Conservator of Forests	Member Secretary
A.5.3.	3 Executive Committee	
The E	accutive Committee of Haryana consists of the following:	
1.	Principal Chief Conservator of Forests, Haryana	Chairperson
2.	Addl. Principal Chief Conservator of Forests (Forestry)	Member
3.	Chief Wildlife Warden, Haryana	Member
4.	Chief Conservator of Forests (Protection-I)	Member
5.	Chief Conservator of Forests (Protection-II)	Member
6.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
	Not below the rank of Addl. Secretary	Member
8.	Two eminent NGOs nominated by the state Government	Members
	for a period of 2 years at time who shall be eligible for re-n	omination
9.	Conservator of Forests (FC) & Nodel Officer (FCA)	Member Secretary
	-	

A.5.4 Meetings

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1^{st} meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{st} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2⁻¹ meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1st meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The I^a meeting of the Executive Committee was held on 04.05,2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was hold on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Kaithal district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Kaithal district of Haryane State by the three implementing authorities, viz. DFO (T) Kaithal, DFO (CFP) Ambala and DFO (Wild Life) Panchkula.

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QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Kaithal district of Haryana State by the three implementing authorities, viz. DFO (T) Kaithal, DFO (CFP) Ambala and DFO (Wild Life) Panchkula.

B.1 Physical Targets

B.1.1 Plantation

The physical achievement of plantation in Kaithal district during the year 2011-12 under the State CAMPA scheme by the DFO (T) Kaithal, DFO (CFP) Ambala and DFO (WL) Panchkula is as given below:

	Name	of		F	hysical Terg	eta
Component	Sub-component	Model	Implementing Authority	Fixed	Achieved	Unit
Compensatory Afforestation (CA)	•	Ridge plantation	DFO (T) Kairbal	40.92	40.92	RKM
Net Present Value (NPV)	Afforestation and management of	Assisted Natural Regeneration		40.00	40.00	
	forest lands	Plantetion of tall plants in linear forests		10.00	10.00	RKM
		Ridge plantation		113.00	113.00	rkim
	Afforestation in community and mublic lends	Plantation of Tree Grooves	DPO (CPP) Ambala	90	90	No.
		(103)	DFO (T) Kaitbal	40	40	No.
	Soil & moisture conservation	Digging of ponds	DFO (WL) Panchicula	2	2	Na.
	Tot	al		163.9	163.9	RKM
				40.0	40.0	Ha
				130.0	130,0	No
<u> </u>				2.0	2.0	No.

Above table indicates that during the year 2011-12, a physical target of 163.9 RKM, 40 Ha, 130 TGs and 2 ponds was achieved against the fixed target of 164 RKM, 40 Ha, 130 TGs and 2 ponds resulting in 100% achievement.

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QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Kaithal district of Haryana State by the three implementing authorities, viz, DFO (T) Kaithal, DFO (CFP) Ambala and DFO (Wild Life) Panchkula.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Kaithal only. But the physical targets under the NPV component were achieved by all the three implementing authorities.

During the year 2011-12, physical target of 163.9 RKM, 40 Ha and 130 TGs was achieved against the fixed target of 164 RKM, 40 Ha and 130 TGs resulting in 100% achievement. Soil and Moisture Conservation works were also carried out in Saraswati forests which consisted of digging of 2 ponds.

To assess the performance during March/April 2014, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&B were as given below:

C.1 Compensatory Afforestation

C.1.1 Ridge Model

In this model, plantations were raised by the DFO (T) Kaithal by achieving a target of 40.92 RKM at 6 sites. All the 6 sites were visited during March/April 2014 and the results of M&E were as given below:

a. Sultability of Land afforested

Except Markanda distributory and Habri sub branch, all other 4 sites have old tree crop mainly of eucalyptus-resulting in order planning.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Ridge planting technique. This technique is very effective in raising successful plantation in waterlogged areas.

d. Sarvival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 59%.

Out of 6 sites of Ridge model of CA component, the survival % was Very Good (70-79%) at 1 site, Good (60-69%) at 3 sites, Average (50-60%) at 1 site and poor (<50%) at 1 site.

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in Annexure-a.

C.2 Net Present Value

In this component, works were carried out in Kaithal district under the following 3 subcomponents:

- 2

- i. Afforestation and management of Government forest lands.
 - ii. Afforestation in community and public lands
 - iii. Soil and Moisture Conservation Works

C.2.1 Afforestation and management of Government forest lands

1 **1** -

In this sub-component, works were carried out by DFO (T) Kaithal under the following 3 models:

- i. Assisted Natural Regeneration
- Ridge plantation in linear forests
- iii. Tall plants plantation in linear forests.

Plantations of above 3 models were visited during March/April 2014 and the results of M&E were as given below:

C.2.1.1 Assisted Natural Regeneration

In this model, plantation works were carried out by the DFO (1) Kaithal by achieving a target of 40 ha at 8 sites. M&E was carried out by visiting 2 sites resulting in M&E of 25% sites and the results of M&E were as given below;

a. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils and under planting.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Average survival of plantations was 63%. The survival % was Good (>60%) at both sites.

Detail of site wise survival % and average height and girth of plantations was as given in Annexure-b.

C.2.1.2 Ridge Plantation

In this model, plantations were raised by the DFO (T) Kalthal by achieving a target of 113 RKM at 8 sites. M&E was carried out by visiting 2 sites resulting in M&E of 25% sites and the results of M&E are as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation,

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Ridge planting technique. But at one site (Panipat Kaithal Road K.M. 170-177, L&R), the plants were planted in pits on old failed ridges.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected,

Survival of plantation was Excellent on 1 site and Poor at other site.

Detail of survival % and average height and girth of plantations was as given in Annexureb.

C.2.1.3 Tall Plants Plantation

In this model, plantations were raised by the DFO (T) Kaithal by achieving a target of 10 RKM at 2 sites. M&E was carried out by visiting 1 site resulting in M&E of 50% sites and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of solls and without fencing.

d. Survival of Plants

69

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was 61%. Detail of survival % and average height and girth of plantations was as given in *Annexure-b*.

C.2.2 Afforestation in community and public lends

In this sub-component, works were carried out by DFO (CFP) Ambala and DFO (T) Kaithal under the model-Tree Groves

C.2.2.1 Tree Groves (TGs)

In this model, DFO (CFP) Ambala has planted 90 TOs in 6 villages and DFO Kaithal has planted 40 TGs in 4 villages. Out of these, 88 TGs planted in 3 villages were visited and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. This technique is not so effective due to soil compaction. For early establishment of plantation, the Auger Hole planting technique should be used.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

94

Average survival of plants was 47%.

Main shortcoming was that approved design of TGs was not followed in few areas by DFO (T) Kaithal.

The village wise survival %, average height and average girth, etc. were as given in Annexare-b.

C.2.3 Soil and Moisture Conservation Works

Two ponds (each of 60m length, 55m width and 2m depth) were dug up in Saraswati WLS. Both ponds were visited and the results of M&E were as given below:

a. Location

- 1. Thehmazibulla forest: 76° 24° 01.5" E longitude and 29-59'-03.7" N latitude
- The Papsar forast: 76-24*-41" E longitude and 29-58*25.3" N latitude

b. Quality

Quality of work was good.

c. Measurement Book (MB)

MB was maintained for labour component only.

d. Completion Report (CR)

CR has been sent by IWL Saraswati to DFO (WL) Panchkula Vide special dated 05.02.2012 for both the pends.

C.5 Suggestions of Evaluator

The State CAMPA scheme should be continued because it is helping in:

- Enhancing the quality of degraded forests,
- b. Improving the tree cover in non-forest lands, and
- Mitigating the changing climate.
- d. Physical and financial targets must be conveyed in time.
- Tail plants of 2m in height should be planted in tail plants model.
- Barbed wire/ tree guards should be used for the protection of plantations.
- g. Approved design of TGs should be followed.
- Funds for the maintenance of TGs must be provided.

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Annexure-a Assessment of CA Plantations

Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Poor<50%]

Şr.		Name of ~		Target Unit Species Results of M&E									
No.	Site	Implementing Authority	Range	- Achevea		pienceo	Longluides (East)	Latitudes (North)	Av, Survival	Av. Height	Av. Ginb	Grading	Remarks
									(%)	(22)	(다마)		
Ridg	e Plantation	I					•	•	-				
L	Markanda distributory R.D.140-155 R.SIDE	D.F.O. (T) Kaithal	Sanaswati	8.00	RKM	Eucelyptus	76°19'01.4'' 76°19'43.3''	30 [°] 02'18.9'' 30 [°] 02'28.9''	40	4.0	10	Poor	Only 25% plants are > 7m in height. Av. Height of 1200 plants replaced during 2013-14 is of 0.5 m.
2	RF Rewar Rott 47- 48,49,74,76-80	D.F.O. (T) Kaitbal	Saraswati	3.D0	RKM	Eucalyptos Frans Kikar Mesquito	76°24*16.1*	29"59"55.9"	60	0.6	N.M.	Good	Planted on both sides of temporary water channel. No future except in few wet patches. Under-planting.
3	RF KAKEOR Roct 40,42,43	D.F.O. (T) Kaithal	Sereswed	4.00	RKM	Eusalyptus Frans Toot, Shisham	76 [*] 26*01,2**	29 ⁴ 58'25.I''	52	0.6	N.M.	Average	-do-
4	RF Thehnewal Rect 31- 32.53.54.75.76	D.F.O. (T) Kaithal	Saraswati	11.00	RKM	Eucalyptus.	76 °23′23.9 ′′	29"59"29.9"	71	7.0	30	V. Good	Under-planting
5	Old para RD Prempura lo Bhuna	D.F.O. (T) Kalithal	Serasward	4.92	RKM	Eucalyptus Frans Shisham Arjan	76"23"13.1"	29 ⁰ 57'19.4''	62	2.5	8	Good	Under-planting
6	Habri Sub Branch RD 60- 87 L&R	D.F.O. (T) Kalibal	Pundri	10.00	RKM	Eucatyptus Arjun Dalk Papri Amla, etc.	76°41'37.8'' 76 ° 37'46 <i>.</i> 6''	29 [°] 44'11.9'' 29 [°] 41'52.2''	66	3.0	12	Good	Gap planting

Annexure-b

Let $\hat{c} \in \hat{c} \in \hat{O}$ by the set $\hat{c} \in \hat{c} \in \hat{C}$, $\hat{c} \in \hat{C}$, \hat

Assessment of NPV Plantations

Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Poor<50%]

		Name of		Tarect	Unit	Speciet	r <u> </u>			Results of	M&E		
51. No.	Site	Implementing Authority	Range	Achieved		planted	Longitudes (Eest)	Latitudes (North)	Av. Survival (%)	Av. Height (m)	Av. Gàrth (cnt)	Grading	Remarks
A	Afforestation	nd manageh	nent of Go	vernment	forent	lends	•						
	Ridge Plantation												
1	Saraswati Kundel (Pada)	D.F.O. (T) Kahhal	Seraswati	69.00	RKM	Encelyptus	76 14 8.3 76 12 25.8"	29°53'33.2" 29°53'10.9"	80	5.0	10	Excellent	•
2	Panipat Kalibai rd. K.M. 170- 177 L&R	D.F.O. (T) Kaitbal	Pundni	2.00	RKM	Kamer Potremjiva papri Amia Sadabhar	76"23'32.0"	29"33"54.2"	30	1.5	N.M .	Poor	Pit planting on old ridges. Under-planting.
h	Tall Plents Plant	tation.											
	Karnai kaithai rd. K.M. 42-44 L&R	D.F.O. (T) Kaithal	Pundrt	4.00	RKM	Kazalla Jamova Kach Pipal Pilkhan Neem Sbisham	7 6°4 0°54.5''	29 ⁹ 45'05.4*'	61	2.4	7	Good	Pit planting along road side. Under-plantlog
. e.	Aided Natural R	egeneration											
1	RF Relation	D.F.O. (T) Kaithal	Kaithal	10 .00.	На	Shiaham	76 ⁹ 20'30''	29*44*14.9**	65	2.0	7	Good	Salt-affected area. Growth and success is likely to be affected in fature.
2	Karnal kaithal rd. k.ro. 49-56 LikiR	D.P.O. (T) Kaithal	Pondri	10.00	He	Kazelia Shishem Kadam Naem Pilkhen	76-34-40.8 76-38-13.5	29°46'16.7" 29°46'12.1"	60	2.3	B	Good	Under-planting,

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こうかく えきひょう しんざか 生産 わかり ション・チャート しゅうゆく

8	Tree Groves												
1	RF Thehmajibuila R,No. 17,18,37,42,43	D.F.O. (T) Kaitbal	Saraswiti	31	No.	Jamun Lasuda Pilkhan Gullar Bar Pipal	76°24'30.8''	29*58*42.8**	50	2.0	N.M.	Average	Some T.Gs are in linear strip others are in proper design. Growth is good near water bodies
2	Diwal Panchayat Land	D.F.O. (CFP) Ambale	Kaitha]	3 8	No.	Ncom, Pipal, Guinochar Shistiam Amataa etc.	76"18"52.7"	29745*34.2**	50	2.0	N.M.	Ампада	T.Gs are in proper design. Desiocation of plants has started in sult- affected area.
3	Gulana Panchayat Land	D.P.O. (CPP) Ambala	Kaithal	19	No.	Neem, Pipal, Guimohar Shisham Amains etc.	76 15 25.1"	29"46"17,4"	40	2.5	B	Poor	Salt-affected area

Monitoring & Evaluation Report of Works Carried Out During 2011-12 In Kurukshetra Districts of Haryana Under State CAMPA Scheme

Submitted to

Nodal Officer, State CAMPA, Haryana and Conservator of Forests (Forest Conservation) O/o Principal Chief Conservator of Forests, Haryana C-18, Van Bhawan, Sector -6 Panchkula, Haryana



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Monitoring & Evaluation Report

Of

Works Carried Out During 2011-12

In

Kurukshetra District of Haryana

Ünder

State CAMPA Scheme

December 2013

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Executive Summary

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2rd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Kurukshetra district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Kurukshetra district by the two implementing authorities, viz. DFO (T) Kurukshetra and DFO (CFP) Kurukshetra.

State CAMPA scheme has two components, viz., CA and NPV. DFO (T) Kurukshetra has carried out the works in both the components, but DFO (CFP) Kurukshetra has carried out the works in NPV component only.

During the year 2011-12, a physical target of 78.87 RKM, 40 Ha and 20 No TG was achieved against the fixed target of 78.87 RKM, 40 Ha and 20 No TG resulting in 100% achievement.

To assess the performance during December 2013, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

- a. The works of both the components were of good quality.
- The average survival of plantations was 75%.
- c. The survival % was Excellent (>79%) at 3 sites, Very Good (70-79%) at 5 sites and Good (6-69%) at 2 sites.
- The main shortcoming was close spacing and under planting.

The constraints faced by the implementing authorities were:

- Delay in allotment of physical targets.
- if Low cost norms of plantation
- ill. Non-availability of funds for the maintenance of TG.

Suggestions of the evaluator were:

- Scheme should be continued.
- Physical targets must be conveyed in time.
- Pit planting technique in compacted soils must be replaced with Auger Hole/Ridge planting technique,
- d. Close spacing in block forests must be stopped.
- Under planting must be stopped.
- f. Funds for the maintenance of TG must be provided for 2 years.

Grading

(on Scale of 1 to 10)

Quantitative Aspects Physical 9	
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Qualitative Aspects	1.	Plantations		
		Quality	7	
		Maintenance	6	
		Sustainability	5	

Overall Grading of the	Outstanding	Very Good	Good	Poer
Project	(8 to 10)	(5 to <8)	(3 to <5)	(<3)
		Very Good	-	-

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Chapter A

GENERAL

- A.1 Name of District : Kurukshetra
- A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- c. Companisatory afforestation;
- Environmental services, which include:-
 - Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - ii. Regulating services such as climate regulation, discase control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - iii. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - Supporting such other services necessary for the production of ecosystem services, blodiversity, nutrient cycling and primary production.

Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Haryana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

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The Governing Body of Haryana consists of the following:

1,	Chief Minister, Haryana	Chairperson
2.	Minister of Forests, Haryana	Member
3.	Minister of Finance, Haryana	Member
4.	Chief Secretary, Haryana	Member
5.	Principal Secretary (Finance), Haryana	Member
б.	Principal Chief Conservator of Forests, Harvana	Member
7.	Chief Wildlife Warden, Harvana	Member
8.	Principal Secretary (Forests), Harvana	Member Societari
A.5.3.	2 Steering Committee	Monner geneimly
The \$	teering Committee of Harvana consists of the following:	
1.	Chief Secretary, Harvana	C
2.	Principal Secretary (Finance) Harvana	Charperson
3.	Principal Secretary (Forests), Harvana	Member
4.	Chief Wildlife Warden, Harvana	Member
5.	Conservator of Forests (FC) & Nodel Officer (FCA)	Mamber
б.	Representative of the Ministry of Environment and Foreste	Monuer
	Government of India	MEINDER
7.	Two eminent NGOs nominated by the state Government	Members
8.	Principal Chief Conservator of Forests	Member Secretary
A.5.3,3	Brecutive Committee	•
The Ex	ecutive Committee of Harvana consists of the following:	
1.	Principal Chief Conservator of Forests, Harvana	Chairmerson
2.	Addl. Principal Chief Conservator of Forests (Forestry)	Member
3.	Chief Wildlife Warden, Harvana	Mambar
4.	Chief Conservator of Forests (Protection-D	Manicer
5.	Chief Conservator of Forests (Protection-II)	Member
6.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Denartment	Member
	Not below the rank of Addl. Secretary	Member
8.	Two eminent NGOs nominated by the state Government	Menhor
	for a period of 2 years at time who shall be eligible for re-no	minetion
9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary
		,

A.5.4 Meetings

A.S.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held,
A.5.4.2 Steering Committee

The 1^{**} meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{nd} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2nd meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1st meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2st meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09,2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Kurukshetra district of Haryana State was started in the year 2010 - II.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Kurukshetra district of Haryana State by the two implementing authorities, viz. DFO (T) Kurukshetra and DFO (CFP) Kurukshetra.

QUANTITATIVE ANALYSIS

8.1 Physical Targets

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The achievement of physical targets in Kurukshetra district during the year 2011-12 under the State CAMPA scheme by the two implementing authorities, viz., DFO (T) Kurukshetra and DFO (CFP) Kurukshetra is as given below:

	N	PI	Physical Targets				
Component	Sub- component	Model	Implementing Authority	Fixed	Achieved	Unit	
Compensatory Affectstation (CA)	-	Ridge Plantation	DFO (T) Kurukshetra	55.8 7	55.87	RKM	
Not Present Value (NPV)	Afforestation and	Assisted Natural Regeneration		40.00	40.00	Ha	
	of Government forest lands	Plantation in linear ridges along roads and canals		13.00	- 13.00	RKM	
		Plantation of tail plants in linear forests		10.00	10.00	RKM	
-	Afforestation in community and public lands	Plantation of Tree Grooves	DFO (CFP) Kurukshetra	20.00	29,00	No	
		Total		78.87	78.87	RKM	
				40.00	40.00	Ha	
				20.00	20.00	No	

Above table indicates that during the year 2011-12, a physical target of 78,87 RKM, 40 Ha and 20 No TG was achieved against the fixed target of 78.87 RKM, 40 Ha and 20 No TG resulting in 100% achievement.

QUALITATIVE ANALYSIS

C.1 Compensatory Afforestation.

In this component, plantations were raised by the DFO (T) Kurukshetra under the model Ridge plantation by achieving a physical target of 55.87 RKM at the following 3 sites:

- RF Balahi
- RF Barason, Rect. No. 34, 35, 36, 37
- Sconsar tower rect. No. 102 & 108

All the above 3 sites were visited during December 2013 and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Ridge planting technique. This technique was suitable for the area.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 76%.

The survival % was excellent (>79%) at I site and very good (70-79%) at the remaining 2 sites.

The main shortcoming was close spacing and under planting.

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in Annexure-a.

C.2 Net Present Value

In this component, works were carried out in Kurukshetra district during the year 2011-12 under the following 2 sub-components:

- Afforestation and management of Government forest lands.
- Afforestation in community and public lands

M&E of above works was done during December 2013 and the sub-component wise results of M&E were as given below:

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out under the following 2 models:

- i. Assisted Natural Regeneration
- ii. Plantation in linear ridges along roads and canals

iii. Plantation of tall plants in linear forests

C.2.1.1 Assisted Natural Regeneration

In this model, plantation works were carried out by the DFO (T) Kumkshetra by achieving a target of 40 ha at 7 sites. M&E was carried out by visiting 2 sites resulting in M&E of 30% sites and the results of M&E are as given below:

Suitability of Land afforested.

Land was suitable for raising plantation.

Suitability of Species planted

The species planted were suitable for the area.

Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Average survival of plantation was 71%.

The survival % was very good (70-79%) at 1 site (Thenesar - Jhansa Road, Km 4-12 L&R) and good (60-69%) at the second site (Saraswati canal RD 50-60 L&R).

Cleaning and thinning of natural Shisham plants should be done at the second site.

Detail of site wise survival % and average height and girth of plantations was as given in *Annexure-b*.

C.2.1.2 Plantation in linear ridges along roads and canals

in this model, plantation works were carried out by the DFO (T) Kurukshetra by achieving a target of 13 RKM at 1 site (RF Seonsar rect. No. 125). M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E were as given below:

Suitability of Land afforested.

Land was not suitable, because the land treated was a compact forest instead of road/canal.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting (Ridge planting) was used as per the model.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was 65%.

The main shortcoming was close spacing and under planting.

The survival %, average height, average girth and shortcomings, etc. ware as given in Annexare-b.

C.2.1.3 Plantation of full plants in linear forests

In this model, plantation works were carried out by the DFO (T) Kurukshetra by achieving a target of 10 RKM at 2 sites. M&E was carried out by visiting one site (Thanesar - Dhand Road, Km 4-6 L&R) resulting in M&E of 50% sites and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique is not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was 70%,

The survival % and average height and girth of plantations were as given in Annexure-b.

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out under the model- Plantation of Tree Groove (TG)

In this model, plantation works were carried out by the DFO (CFP) Kurukshetra by achieving a target of 20 TO at 7 sites. M&E was carried out by visiting 3 sites resulting in M&E of 40% sites and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation.

Suitability of Species planted

The species planted were suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique is not very effective due to compaction of soils.

In this model, 19 tall plants per TG were to be planted. A boundary trench around each TG was to be dug and sowing of seed of Kikar on the dug up soil of boundary trench was to be done. But lostcad of these operations, block plantations were raised.

No maintenance of plants was carried out during the current year due to non-availability of funds.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival was 80%,

The survival % was excellent (>79%) at 2 sites (Mathana Govt. Primary School and IGN College Ladwa) and very good (70-79%) at the (Mathana Grain Market) site.

Growth (height and girth) of plants was very good at 1 site (IGN College Ladwa) but poor at the other 2 sites.

Detail of site wise survival % and average height and girth of plantations is as given in *Annexure-b*.

C.3 Constraints faced by Implementing Authorities

- Delay in allotment of physical targets.
- b. Low cost norms of plantation
- Non-availability of funds for the maintenance of TG.
- C.4 Suggestions of Implementing Authorities for Further Improvement
- a. Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- Norms, especially for earth work, must be increased.
- c. Staff must be provided as per Cadre Allotment.

C.5 Suggestions of Evaluator

- a. Scheme should be continued.
- Physical targets must be conveyed in time.
- c. Pit planting technique in compacted soils must be replaced with Auger Hole/Ridge planting technique.
- Close spacing in block forests must be stopped.
- e. Under planting must be stopped.
- Funds for the maintenance of TG must be provided for 2 years.

Annexure-a

Assessment of CA Plantations

Grading on the basis of survival % [Excellent >79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Poer<50%]

Sr.		Nauto	t o l		Target	Usk	Species			•	Renta er	MAE		
	Site	Wing	Range	Biock/ Beat	ACAMINE			Longitades (East)	Latiliades (North)	Av. Survhal (%)	Av. Height (m)	Av. Ginth (cm)	Gradiag	Bénaria —
1	RF Balahi	DFO(T), Kurukabetr 4	Thagesar	Jyotisar/ Jyotisar	25.87	RKM	Eucalyptu 9	76045'45.7' '	29059'18. 6''	80	3.0	1]	Eacollent	Close spacing
2.	RF Baruson, Rect. No. 34, 35, 36, 37	DFO(T), Kuruksheir B	Prihwa	Seonsar/ Barason	20.00	RKM	Encalyptu s	76 031'51.9'	29059*05**	70	3.0	B	Very Good.	Under planting and close spacing
3.	RF Sconser tower rect. No. 102 & 108	DPO(T), Kuruksheir a	Pehwa	Seonsar/ Seonsar	10.00	RKM	Eucalyptu 3	76028'50.9' '	29058150. 6''	79	33	10	Very Good.	Close specing

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Annexure-b

Assessment of NPV Plantations

Matter	: st 	<u> </u>		Target Achievest	Undi	Spacies			8	dis of Male	E		_
Site	Wing	Range	Block/ Beni			Largitades	La dita des	AK. Surviyal (%)	Av. Sicipin (m)	Av. Girth (cm)	Quality	Rettaria	
ted Natural Regener	ration –			<u> </u>		•			<u> </u>				
Thanczar - Jhansa Road, Km 4-12 L&R	DFO (T), Kurukabetra	Thanesar	lyodistr/ Dinraia	10	Ha	Shishem, Dek	76°49'08.0' 'E	30 ⁰ *00*24.4* *N	75	2.5	8	Vecy Good	<u> </u> -
Sameswati camal RD 50-60 L&R	DFO (T), Kurakahetra	Pelnva	Pehwa/ Guntha Ja	3	Ha	Shiabam, Arjun, Chukrani a	76°30'04.3' 'Е	29 ⁹ 56721,1'' N	68 V	2.5	10	Good	Needs cleaning and thinning o nancal Shisham
Tantation			·I				I						pients
RF Sconsar rect. No. 125 (instead of 106, 122 & 23)	DFO (F), Karukshetra	Pehwa	Ramgar b/ Seomar tower	13	RK M	Bucelypt as	76 °28 '44.3' 'E	29 ⁴ 58'13.6'' N	65 V	25	10	Good,	Under planting and close
Leaty						_				!			
Thanesar - Dhand : Read, Km 4-6 L&R	DPO (T), Knrukshetra	Thinesar	Jyotisar/ Pindarsi	4	RK M	Shisham, Dok, Arjun, Taula	7 6⁸46'7,4'' E	29 ⁰ 56'43.6'' N	"∕	3.0	10	Very Good	
	Name Site Site Ited Natural Regener Thenesar - Juansa Road, Km 4-12 L&R Samswati canal RD 50-60 L&R Straswati canal RD 50-60 L&R RF Sconsar rect. No. 125 (Instead of 106, 122 & 23) Itants Thanesar - Dhand Road, Km 4-6 L&R	Name of Size Wing Ied Natural Regenerations Thenesar - Jointsia Road, Km 4-12 L&R DFO (1), Kurukabetra Strasswati canal RD 50-60 L&R DFO (1), Kurukabetra Road, Km 4-12 L&R DFO (1), Kurukabetra Strasswati canal RD 50-60 L&R DFO (1), Kurukabetra Road, Km 4-5 of 106, 122 & 23) DFO (1), Kurukabetra Thanesar - Dhund Road, Km 4-6 L&R DFO (1), Kurukabetra	Name of Size Wag Range Ied Naturel Regeneration Thenesar - Jamasa Road, Km 4-12 DFO (T), Kurakabetra Thenesar Sareswati canal RD 50-60 L&R DFO (T), Kurakabetra Pelywa Banayos DFO (T), Kurakabetra Pelywa RD 50-60 L&R DFO (T), Kurakabetra Pelywa Reserve DFO (T), Kurakabetra Pelywa Reserve DFO (T), Kurakabetra Pelywa Reserve DFO (T), Kurakabetra Pelywa	Name of Size Wing Range: Block/ Bent 1ed Natural Regenerations Ited Natural Regenerations DFO (T), Road, Km 4-12 Thanesar Jyotisar/ Dimrain Struswati canal L&R DFO (T), RD 50-60 L&R DFO (T), Kurukabetra Pehwa Pehwa/ Gumtha Ja Flantation DFO (T), RD 50-60 L&R DFO (T), Kurukabetra Pehwa Ranger b/ Seoman Ja R Sconsar rect. No. 125 (instead of 106, 122 & 23) DFO (T), Kurukabetra Pehwa Ranger b/ Seoman Jower Thanesar - Dhand Road, Km 4-6 DFO (T), Kurukabetra Thanesar Jyotisar/ Pindarsi	Name of Target Size Wing Range Block/ Beni Method Natural Regeneration Ide Natural Regeneration Themesar - Joansa Road, Km 4-12 DFO (T), Kurukabetra Thanesar Jyotisar/ Dimrain 10 Straswati canal RD 50-60 L&R DFO (T), Kurukabetra Pehwa Pehwa/ Guntha Ja 5 Reset DFO (T), RD 50-60 L&R DFO (T), Kurukabetra Pehwa 13 Reset DFO (T), Kurukabetra Pehwa Is guntha Reset DFO (T), No. 125 (instead of 106, 122 & 23) DFO (T), Kurukabetra Pehwa Rangar b/ Seonsar tower 13 Thanesar - Dhand Road, Km 4-6 DFO (T), Kurukabetra Thenesar Pindarsi Jyotism/ 4 4	Name af Target Unit Size Wag Range Block/ Beni Unit Ied Natural Regeneration Thenesar - Jonnsa Road, Km 4-12 L&R DFO (1), Kurukabetra Thenesar Jyotisar/ Dinzala 10 Ha Straswati canal RD 50-60 L&R DFO (1), Kurukabetra Thenesar Pebwa/ Guntha 3 Ha R Straswati canal RD 50-60 L&R DFO (1), Kurukabetra Pebwa/ Guntha 3 Ha R Straswati canal R DFO (1), Kurukabetra Pebwa/ Suntha 3 Ha R Straswati canal R DFO (1), Kurukabetra Pehwa Rangar b/ Seonsar tower 13 RK M No. 125 (Instead of 106, 122 & 23) DFO (1), Knrukabetra Thanesar Jyotisar/ Pindarsi 4 RK M	Name ofTorretTargetUsitSpaceSizWingRangeBlock/Block/IteltSpaceItel Naturel RegenerationThenesar - Joansa Road, Km 4-12DFO (T), KurnkabetraThanesarJyotisar/ Dinrain10HaShishem, DekStraswati CallCanal KurnkabetraDFO (T), KurnkabetraPehwa/ Clumba3HaShisham, Arjun, Chukrasi BStraswati RD 50-60 L&RDFO (T), KurnkabetraPehwa/ Clumba3HaShisham, Arjun, Chukrasi BRSconsar rect. No. 125 (instead of 106, 122 & 23)DFO (T), KurukshetraPehwaRanger b/ Sconsar tower13RK MBucalypt usThanesar - Dhand Read, Km 4-6DFO (T), KurukshetraThanesar PindarsiJyotisar/ 4RK MShisham, Arjun, Chukrasi B	Notice ofTurget ActionedHatSpace plantedSizeWingEaugeBlock/ BeniBlock/ BeniItal:Space plantedIted Natural RegenerationsThanesar - Joansa Road, Km 4-12DFO (T), KurukabetraTheresarJyotistar/ Dhuraig10HaShisham, Plante, Plante,76°49'08.0'' 'EStraswati Care RD 50-60 L&RDFO (T), KurukabetraPehwal10HaShisham, Arjun, Chukrasi B76°30'04.3' 'EPlantationDFO (T), KurukabetraPehwal Paine, Ia3HaShisham, Arjun, Chukrasi B76°30'04.3' 'EPlantationDFO (T), KurukabetraPehwal Paine, Ia3HaShisham, Arjun, Chukrasi B76°23'44.3' 'EPlantationDFO (T), KurukabetraPehwal No. 125 (Instead DFO (T), KurukabetraRanger Ia13RK MBucalypt us76°23'44.3' 'ENo. 125 (Instead DFO (T), KoulashetraDFO (T), KurukabetraPehwal M13RK MBucalypt us76°23'44.3' 'EThanesar - Diand Read, Km 4-6DPO (T), KurukabetraThanesar PindarsiA MRK MShisham, Dok, Arjun, E	Name atTargetTargetWaitSpaceSizeWingHangeBlock/ BestBlock/ BestHatSpaceIncurveIdel Naturel RegenerationsThaneszer - Jhansa Road, Km 4-12DFO (T), KurakabetraThaneszerFyotisar/ Diuraia10 DiuraiaHa Shisham, DaixShisham, Pé*00'24.4' 'E76*49'08.0' 30*00'24.4' 'N30*00'24.4' 'NSaraswati LözCarall DFO (T), KurakabetraPehwa/ Cumba Ja10 Pehwa/ Cumba JaHa Shisham, Ariya, Shisham, Chukrasi B76*30'04.3' 29*56'21.1'' N30*00'24.4' 'NFinanciosRestDFO (T), KurukshetraPehwa Dei13 Seonsar towerRK MBucelypt B76*28'44.3' N29*58'13.6'' NFinanciosRF Sconsar rect. No. 125 (frestead of 106, 122 & 23)DFO (T), KurukshetraPehwa MRanger B' Seonsar tower13 MRK M Bucelypt B29*58'13.6'' NThanesar - Dinand Road, Km 4-5DFO (T), KurukshetraThanesar Pindarai4 M MRK M MShisham, B76*46'7.4'' N29*56'43.6'' N	Name of SizeWagEasge EasgeBlock BestTurget AshovedUnit AshovedSpace AshovedLaginoloLatitudeaAv. Av. (%)SizeWagEasge EastBlock BestBestIImaginoloLatitudeaAv. (%)Ited Naturel RegenerationThanesar - Jhansa Road, Km 4-12DFO (T), KurukabetraThanesar PointeinJyotisar/ Gunnin10Ha Shisham, Dek76°49'08.0' (%)30°10'24.4' N75' Seconsar N30°10'24.4' N75' Seconsar Chukrasi a30°10'24.4' N75' Seconsar N29°56'21.1'' Seconsar To N68 Seconsar To Seconsar tower13RK MBacabyrit N76°28'44.3' N29°56'21.1'' Seconsar N68 Seconsar To 	Name af Target Assidered Usic Planted Space Planted Enset Instant Usic Planted Space Planted Instants Instants Instants Instants Instant Instant <thinstant< th=""> <thinstant< th=""> Instant</thinstant<></thinstant<>	Name of Target Address Target Make of Decision Target Address Target Decision Target Decision Target Decis	Number of Larger Target Allowed Target Allowed Use: Space Space Description Use: Space Description Use: Space Description Use: Space Description Constrained allowed allow

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5.	Mathana Primery Sch	Govt. col.	DFO (CFP), Kuralishetra	Kurukabet ra	-	4	No.	Pipel, Arjun, Shistann, Jannun, etc	76°57′13" E	29 ° 53 '54.3'' N	80	1.5	NM *	Excellent	Poor growth and poor protection	
6.	Mathana Market	Grain	DFO (CFP), Karakshetra	Kumkabet ra	-	3	No.	-Do-	76*57*13.4* B	29 ⁰ 59'1.6" N	≈√	20	NM	Very Good	Pour growth and poor protection.	~
7.	IGN C Ladwn	>oliege	DFO (CFP), Kurukshetra	Kumakshet ra	-	2	No.	-Do-	77°03'4.6'' B	30 ⁰ 00'43,3'' N	90	2.5	LO	Excellent	Needs cut back of weeds	-

"NM= Not Measureable

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Annexare-c



Thanesar - Jhansa Road, Km 4-12 L&R



Mathana Grain Market



Saraswati canal RD 50-60 L&R



RF Barason, Rect. No. 34, 35, 36, 37

RF Sconsar tower rect. No. 102 & 108

Monitoring & Evaluation Report of Works Carried Out During 2011-12 In Panchkula Districts of Haryana Under State CAMPA Scheme

Submitted to

Nodal Officer, State CAMPA, Haryana and Conservator of Forests (Forest Conservation) O/o Principal Chief Conservator of Forests, Haryana C-16, Van Bhawan, Sector -6

Panchkula, Haryana



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Phone: 011-45791190-96, Fax: 91-45791189 Email: afcdelhi@afcindia.org;

Monitoring & Evaluation Report

Of

Works Carried Out During 2011-12

In

Panchkula District of Haryana

Under

State CAMPA Scheme

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November 2013

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1

Executive Summary

Ministry of Environment and Forests (MoEF). Govi. of India had issued guidelines on Z^{ad} . July 2009 for establishing CAMPAs in the States/UTs and putting in place a funding mechanism for enhancing forest and tree cover and conservation and management of wildlife by utilizing funds received towards Compensatory Afforestation (CA), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-F1-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Panchhula district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in Panchkula district by the three implementing authorities, viz., DFO (T) Morni-Pinjore, DFO (CFP) Ambala and DFO (WL) Panchkula.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). DFO (T) Morni-Pinjore has carried out the works in both the components, but DFO (CFP) Ambala and DFO (WL) Panchkula have carried out the works in NPV component only.

During the year 2011-12, the achievement of physical targets of plantations was 101 RKM. 40 Ha and 52 No TGs against the allotted targets of 101 RKM, 40 Ha and 52 No TGs resulting in 100% achievement. In addition to these, other works (Conservation, protection and management of wildlife and its habitat; Protection of forests including maintenance of fire lines; and construction of buildings) were also carried out.

To assess the performance during November 2013, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

1. Planiations

- a. The plantations of both the components were of good quality.
- b. The average survival of 13 plantations visited was 74%.
- c. The survival % was Excellent (>79%) at 3 sites, Very Good (70-79%) at 9 sites and Average (50-59%) at 1 site.
- d. The main shortcomings were:
 - [Close spacing
 - it. Under planting
 - Iff. Browsing
 - iv. Wrong design of TGs

Other Works

a.

The other works of NPV component were also of good quality

b. The main shortcomings were:

Absence/wrong design of spill ways in water ponds constructed under the sub-component "Conservation, protection and management of wildlife and its habitat".

- Aliotment of physical targets without mentioning any unit/number/quantity of crate wire structures under the subcomponent "Conservation, protection and management of wildlife and its habitat".
- iii. Target of crate wire structures was not achieved.
- iv. Allotment of physical targets without mentioning any unit/number/quantity under the sub-component "Protection of forests including maintenance of fire lines"
- v. No maintenance of fire lines as the entire amount was utilized on Protection Watchers under the sub-component "Protection of forests including maintenance of fire lines"

The constraints faced by the implementing authorities were:

Delay in allotment of physical targets.

- b. Low cost norms of planuation
- c. Shortage of staff

ìŁ

3:

d. Non-availability of 2 years old plants for planting.

The suggestions of evaluator for further improvement were:

a. Scheme should be continued.

b. Physical and financial targets must be conveyed in time.

c. Units of physical targets allotted must be mentioned.

- d. Pit planting technique must be replaced with Auger Hole/Ridge/Trench-cumpit planting technique depending on the site condition.
- Close spacing and under planting must be stopped.
- Approved design of TGs must be followed.

g. Protection of plantations should be improved

h. Tail plants of less than 2 m in height should not be planted.

Proper spill way must be provided in water ponds.

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Grading (on Scale of 1 to 10)

Quantitative Aspecia	Physical	9

1.	Plantations	
	Quality	1
. 	Maintenance	6
	Sustainability	6
2	. Other Works	
	Quality	7
ŀ	Maintenauce	6
	Sustainability	5
	J.	I. Plantations Quality Maintenance Sustainability 2. Other Works Quality Maintenance Sustainability

Overall Grading of the	Outstanding	Very Good (S to ≤8)	Good (3 to <5)	Poor (<3)
Project		Very Good	-	

Chapter A

GENERAL

: Haryana

; Panchkula

A.2 Name of State

A.1

.

A.3 Name of Scheme

Name of District

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), GovL of India had issued guidelines on 2nd July 2009 for establishing CAMPAs in the States/UTs and putting in place a funding mechanism for enhancing forest and tree cover and conservation and management of wildlife by utilizing funds received towards Compensatory Afforestation (CA), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5. State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Pt-409/511 dated 18.1.2010.

A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- a. Conservation, protection, regeneration and management of existing natural forests;
- Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- c. Companisatory afforestation;
- d. Environmental services, which include:-
 - Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - iii. Non-material benefits obtained from ecosystems, spiritual, recreational, sesthetic, inspirational, educational and symbolic; and
 - Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.
 - Rescarch, training and capacity building.

A.5.3 Constitution

The State CAMPA of Harvana consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

The Governing Body of Haryana consists of the following:

1 Chief Minister, Harvana	Champerson
1. Chief Williams, and a	Member
2. Minister of Polesia, they man	Member
3. Minister of Finance, Haryana	Member
Chief Secretary, Haryana	in the second se
5. Principal Secretary (Finance), Haryana	Memoer
6 Principal Chief Concervator of Forests, Haryana	Member
7 Chief Wildlife Warden, Haryana	Member
8. Principal Secretary (Forests), Haryana	Member Secretary
5.3.2 Steering Committee	
he Steering Committee of Haryana consists of the following:	
1. Chief Secretary, Haryana	Chairperson
2. Principal Secretary (Finance), Haryana	Member
3 Principal Secretary (Forests), Haryana	Member
4 Chief Wildlife Warden, Haryana	Member
5 Conservator of Forests (FC) & Nodel Officer (FCA)	Member
6. Representative of the Ministry of Environment and Forest	is, Member
Oovernment of India	
7 Two eminent NGOs nominated by the state Government	Members
e Bringing Chief Conservator of Porests	Member Secretary

8. Principal Chief Conservator of Porests

A.5.3.3 Executive Committee

The Executive Committee of Haryana consists of the following:

I	Principal Chief Conservator of Forests, Harysma	Chairperson
,	Addi Principal Chief Conservator of Forests (Forestry)	Member
	Chief Wildlife Warden, Haryana	Member
4.	Chief Conservator of Forests (Protection-I)	Member
5.	Chief Conservator of Forests (Protection-II)	Member
6.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
D	Not below the rank of Addl. Secretary Two eminent NGOs nominated by the state Government	Members
э.	for a period of 2 years at time who shall be eligible for re-	nomination
9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary

- Meetings 5.4

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1st meeting of the Stearing Committee of the State CAMPA of Haryana was held on 2^{sd} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Gulati, IAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2nd meeting of the Steering Committee of the State CAMPA of Haryena was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1st meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1st meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09,2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Panchkula district of Haryana State was started in the year 2010 -11.

A.5.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in Panchkula district by the three implementing authorities, viz., DFO (T) Morni-Pinjone, DFO (CFP) Ambale and DFO (WL) Panchkula.

Chapter-B

QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in Panchkula district by the three implementing authorities, viz., DFO (T) Morni-Pinjore, DFO (CFP) Ambala and DFO (WL) Panchkula.

B.1 Physical Targets

B.1.1 Plantations

The achievement of physical targets of plantations in Panchkula district during the year 2011-12 under the State CAMPA scheme by the two implementing anthorities, viz., DFO (T) Momi-Pinjore and DFO (CFP) Ambala is as given below:

	· Na	Physical Targets				
Component	Sub- component	Model	Implementing Authority	Fixed	Achieved	Unit
Compensatory Afforestation	-Nil-	Ridge Plantation	DFO (T) Morni-	46.8	46.8	RKM
(CA)	1	Tall Plants	Pinjore	31.2	. 31.2	RKM
Net Present Value (NPV)	Afforestation	Aided Natural Regeneration		• 40	40	Ha
	managament of Government forest lands	Plantation in linear ridges along roads and canals		13	13	RKM
		Plantation of tall plants in linear forests		10	10	RKM
	Afforestation in community and public lands	Tree Groves (TGs)	DFO (CFP) Amhala	52	52	No.
· · ·	 \$1	ub-Total	· ·	101	101	RKM
ļ '.				40	.40) Ha
		•		52	2 32	No

B

Above table indicates that during the year 2011-12, the achievement of physical targets of plantation was 101 RKM, 40 Ha and 52 No TGs against the allotted targets of 101 RKM, 40 Ha and 52 No TGs resulting in 100% achievement.

B.1.2 Other Works

The achievement of physical targets of other works by the 3 implementing authorities, viz., DFO (T) Morni-Pinjore, DFO (CFP) Ambala and DFO (WL) Panchkula is as given below:

	Nam	Physical Tergeta					
Component	Sub- component	Model	Implementing Authority	Fixed	Achieved	Unit	
Net Present Value (NPV)	Conservation, protection and management	Digging of Water Ponds at Surajpur	DFO (WL) Panchicula	2	2	No.	
	of wildlife and its habitat	*Construction of Stone Masonry Dama at Surajpor		2	-	No.	
· · ·		Digging of Water Ponds at Khol Hi Raitan Wildlife Sanctuary		4	4	No.	
		Crate-wire structure behind vulture care center, Bir Shikargah	-	LS	Û	No.	
	Protection of forests including maintenance of fire lines	-Nil-	DFO (T) Menni-Pinjora		- 18	No. of beats	
	Construction of buildings	RO Residence	DFO (T), Morni-Pinjon		· ·	1 . No.	
1			DFO (CFP), Ambala		i , 1 .	1. No.	

*DFO (WL) has constructed 5 Committed/crate wire mesonry structures instead of 2 Stone Masonry Dams at Surginar.

It is evident from the above table that the physical targets were fixed without mentioning any detail of works for Protection of forests including maintenance of fire lines

Further, the target of Crate-wire structures was not achieved during 2011-12.

9

Chapter-C

QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works done during the year 2011-12 in Panchkula district by the three implementing authorities, viz., DFO (T) Morni-Pinjore, DFO (CFP) Ambala and DFO (WL) Panchkula.

State CAMPA scheme has two components, viz., Compensatory Afforesistion (CA) and Net Present Value (NPV), DFO (T) Morni-Pinjore has carried out the works in both the components, but DFO (CFP) Ambala and DFO (WL) Panchkula have carried out the works in NPV component only.

To assess the performance during November 2013, 100% sites of works of CA component and >20% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

C.1 Plantations

Plantations were raised in Panchkula district under the following 2 components:

a. Compensatory Afforestation

b. Net Present Value

C.1.1 Compensatory Afforestation

In this component, plantations were raised by the DFO (T) Morni-Pinjors under the following 2 models:

a Ridge model

b. Tali plants model

C.1.1.1 Ridge model

In this model, plantation was raised by the DFO (T) Morni-Pinjore at Kanouli Section 38 area by achieving a target of 46.8 RKM.

Monitoring and Evaluation (M&E) was carried out during November 2013 by visiting this site resulting in M&E of 100% sites and the results of M&E were as given below:

s. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable to the area/ site.

e. Techniques of Planting Used and their Effectiveness

The technique of plenting used was Ridge planting technique. This technique is very effective in raising successful plantations in low lying/waterlogged and hard soils.

d. Survival of Planta

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and average height and girth of plantations was arrived.

Average survival of plantations was very good (77%).

The main shortcoming was the presence of Kana grass. This grass must be uprooted to reduce the root competition for moisture as well as to reduce the chances of fire hazard.

Details of survival %, average height, average girth and shortcomings, etc. were as given in Annecure 9.

C.1.1.2 Tell Plants model

In this model, plantations were raised by the DFO (T) Morni-Pinjore at the following 3 sites:

i. R 64 C2

ji. C108

jij. C32

Monitoring and Evaluation (M&E) was carried out during November 2013 by visiting all the 3 sites resulting in M&E of 100% sites and the results of M&E were as given below:

a. Suitability of Land afforested

Land was sultable for raising plantation.

b. Suitability of Species planted

The species planted were suitable to the areas/ sites.

Techniques of Planting Used and their Effectiveness

The technique of planting used was Pit planting technique. This technique was not very effective.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Average survival of plantations was 64%.

The survival % was very good (70-79%) at 2 sites and average (50-59%) at 1 site.

The main shortcomings were that:

The tall plants planted were not of proper (2 in) height.

ii. The Plants were browsed by animals at 2 sites

Details of site wise survival %, average height, average girth and shortcomings, etc. were as given in Annexare-a.

C.1.2 Net Present Value

In this component, plantations were raised under the following 2 sub-components:

Afforestation and management of Government forest lands

Afforestation in community and public lands

M&E of above works was done during November 2013 and the sub-component wise results of M&E were as given below:

C.1.2.1 Afforestation and management of Government forest lands

In this sub-component, plantations were raised by the DFO (T) Morni-Pinjore under the following 3 models:

i. Aideo Natural Regeneration

il. Plantation in linear ridges along roads and canals

iii. Plantation of tall plants in linear forests

C.1.2.1.1 Aided Natural Regeneration

In this model, plantations were raised by the DFO (T) Momi-Pinjore at 7 sites. M&E was carried out by visiting 3 sites resulting in M&E of 40% sites and the results of M&E were as siven below:

a. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were anitable for the areas/ sites.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not effective in hilly area. The appropriate technique was the trench-cum-pit technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Average survival of plantations was 71%.

The survival % was very good (70-79%) at all the 3 sites.

The main shortcomings were:

i. Under planting

ii. Close spacing

iii. Browsing of plants

iv. Pit planting technique instead of trench-cum-pit planting technique

Details of site wise survival %, average height, average girth and shortcomings, etc. were as given in Anneutre-b.

C.1.2.1.2 Ridge plantation

In this model, plantations were raised by the by the DFO (T) Morni-Pinjore at 1 site (Kot Section 5 area). M&E was carried out by visiting this site resulting in M&E of 100% sites and the results of M&E were as given below:

Suitability of Land afforested

Target of Ridge plantation was for strip forests (roads and canals), whereas the Kot Section 5 was a block/compact forest. Therefore, the land of Kot Section 5 was not suitable for raising plantation under this model.

b. Suitability of Specles planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Ridge planting technique. It is a very effective technique for raising successful plantation. But this technique was not so effective at this site due to close specing (2m x 2m) of plants and presence of sendy and stony soil.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plants was excellent (83%).

The main shortcomings were:

Area was not suitable for ridge model as explained above.

Close spacing as explained above.

Details of survival %, average height, average girth and shortcomings, etc. were as given in Anaccare-b.

C.1.2.1.3 Talk Plants

In this model, plantations were raised by the by the DFO (T) Morni-Pinjore at 2 sites. M&E was carried out by visiting 1 site (Nalaghat to Samlotha Road) resulting in M&E of 100% sites and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for reising plantation.

h. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not so effective in hilly area. The appropriate technique was the trench-cum-pit technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Average survival of plants was very good (72%).

The main shortcoming was that the tall plants planted were not of proper (2 m) height.

Details of survival %, everage height, average girth and shortcomings, etc. were as given in Annexure-b.

C.1.2.2 Afforestation in community and public lands

13

In this sub-component, plantations were raised by the DFO (CFP) Ambala under the model Tree Groves (TGs) at 14 sites. M&E was carried out by visiting 4 sites (Bhanu, Parwala, Tirlokpur School and Sultampur School) resulting in M&E of 30% sites and the results of M&E were as given below:

a. Suitability of Land afforested

Land was suitable for raising plantation

b. Suitability of Species planted

The species planted were suitable for the areas/sites.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils. The proper technique was the Auger Hole planting technique.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving plants.

Average survival of plants was \$1%.

Survival % was excellent (>79%) at 2 sites and very good (70-79%) at the remaining 2 sites.

The main shortcomings were:

Approved design of TG was not followed

ii. Plants were browsed at Sultanpur TG.

RL Uprooting of kana grass was not done at Bhanu TO

Details of survival %, average height, average girth and shortcomings, etc. were as given in Annexure-b.

C.2 Other Works

Other works carried out in Panchkula district under the Net Present Value (NPV) component by the 3 implementing authorities, viz., DFO (T) Morni-Pinjore, DFO (CFP) Ambala and DFO (WL) Panchkula were as given below:

Conservation, protection and management of wildlife and its habitat

ii. Protection of forests including maintenance of fire lines

ili. Construction of buildings

C.2.1 Conservation, protection and management of wildlife and its habitat

In this sub-component, following works were carried out by the DFO (WL) Panchicula.

C.2.1.1 Digging of Water Ponds at Sorajper

DFO (WL) Panchkula has achieved a target of 2 water ponds at Surajpur against the target of 2 water ponds resulting in 100% achievement. M&E was carried out during November 2013 by visiting both the water ponds resulting in M&E of 100% water ponds and the results of M&E ware as given below:

Suitability of sites

Sites were suitable for the diaging of water ponds.

h. Purpose of work

The main purpose was to provide drinking water to the wild animals.

e. Fulfillment of purpose

The dug up water ponds were fulfilling the purpose by providing drinking water to the wild enimals.

d. Quality of work

Onality of work was good:

e. Measurement Book (MB)

MB was maintained.

f. Shortcouilngs, if any

The main shortcomings observed were as given below:

- First water pond along with a chabuara was constructed without any spillway, which may cause breach of water pond due to overflow of rain water.
- ii. The spill way pipe was wrongly fixed in the second water pond and has already caused heavy soil crosion in the down-stream. If not corrected, it may lead to damage of water pond due to back crosion

C.2.1.2 Construction of Stone Masonry Dams

In this model, there was a target of 2 Stone Masonry Dams. But instead of these, the DFO (WL) Panchkula has constructed 5 camented masonry structures. M&E was carried out during November 2013 by visiting all the 3 cemented masonry structures resulting in M&E of 100% structures and the results of M&E were as given below:

a. Suitability of sites

Sites were suitable for the construction of cemented masonry structures.

b. Purpose of work

The main purpose was to retain the croded soil upstream.

Folfillment of purpose

The constructed comented mesonry structures were fulfilling the purpose.

d. Quality of work

Quality of work was good.

e. Measurement Book (MB)

MB was maintained.

f. Shortcomings, if any

The main abortcomings observed was that the over flow of rain water has already caused soil erosion down streams in these structures.

C.2.1.3 Digging of Water Ponds at Khol Hi Raitan Wildlife Sanctuary

DFO (WL) Panchkula has achieved a target of 4 water ponds at Khol Hi Raitan Wildlife-Sanctuary against the target of 4 water ponds resulting in 100% achievement. MozE was carried out during November 2013 by visiting 2 water ponds resulting in M&E of 50% water ponds and the results of M&E were as given below:

a. Suitability of sites

Sites were suitable for the digging of water ponds.

b. Parpose of work

The main purpose was to provide drinking water to the wild animals.

Fulfillment of purpose

The dug up water ponds were fulfilling the purpose by providing drinking water to the wild enumate.

d. Quality of work

Onality of work was good.

Measurement Book (MB)

MB was maintained.

f. Shortcomings, if any

The main shortcomings observed were as given below:

- i. First water pond was constructed in the Upper Choki forest area in Khol Hi Raitan Wildlife Sanchuary; but without any spill way.
- ii. Second water pond was constructed in Gumthala forest area in Khol Hi Raitan. Wildlife Sanctuary, but without any spill way.
- iii. These earthen water ponds need annual repair after every rainy season, which has not been done.
- iv. Salt-licks have not been provided near the pands

C.2.2 Protection of forests including maintenance of fire lines

In this sub-component, an amount of Rs. 4 lakh was provided in DFO (T) Morni-Pinjore for the protection of forests including maintenance of fire lines.

But DFO has utilized the whole amount of Rs. 4 lakh on Protection Watchers.

Therefore, maintenance of fire lines was not done.

C.2.3 Construction of residential buildings

In this sub-component, following 2 buildings were constructed:

- i. RO Residence at Raipur Rani
- ii. RO Residence at Morni :

C.2.3.1 RO Residence at Raipur Rani

This building was constructed by DFO (CFP) Ambala. M&E of this building was done during November 2013 and the results of M&E were as given below:

a. Location of Building

This building was constructed in the Forast Complex, Raipur Rani.

Status of Building (completed or not)

Construction of this building was started during 2011-12 but completed during 2012-13.

c. Measurement Book (MB)

MB was maintained for labour component only. No bill of material was entered in the MB.

d. Completion Report (CR).

CR has been sent vide RO (CFP) No.-183p dated 19-10-2012.

Maintenance of Building

This building was being properly maintained.

f. Quality of Building

Quality of building was good.

g. Present Use of Building

This building was being used as RO residence.

f. Shortcoming, if say

This residential building was constructed without any boundary wall.

C.2.3.2 RO Residence at Moral

This building was constructed by DFO (T) Morni-Pinjoro. M&E of this building was done during November 2013 and the results of M&E were as given below:

a. Location of Building

This building was constructed at Mornl.

Status of Building (completed or not)

Construction of this building was started during 2011-12 but completed during 2012-13.

c. Measurement Book (MB)

MB was maintained for labour component only. No bill of material was entered in the MB.

d. Completion Report (CR)

CR has been sent vide RO Morni No.-415m dated 11-10-2012.

Maintenance of Building

This building was being properly maintained.

f. Quality of Building

Quality of building was good.

g. Shortcoming, if any

This residential building was constructed without any boundary wall.

C.3 Constraints faced by Implementing Authorities

Delay in allotment of physical targets.

b. Low cost norms of plantation.

c. Shortage of staff

d. Non-availability of 2 years old plants for planting in hilly tract

C.4

Suggestions of Implementing Authorities

- Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monscon.
- Norms, especially for earth work, must be increased.
- c. Staff must be provided as per Cadre Allotment.
- d. In hilly tract, at least 2 years old plants should be planted for which budget should be provided.

C.5 Suggestions of Evaluator

- a. Scheme should be continued.
- b. Physical and financial targets must be conveyed in time.
- c. Units of physical targets allotted must be mentioned.
- d. Pit planting technique must be replaced with Auger Hole/Ridge/Trench-cum-pit planting technique depending on the site condition.
- Close spacing and under planting must be stopped.
- f. Approved design of TOs must be followed.
- g. Protection of plantations should be improved
- h. Tall plants of less then 2 m height should not be planted.
- i. Proper spill way must be provided in water ponds.
- j. Measurement book should be maintained property

Annexure-a Assessment of CA Plantations (val % [Bocalient >79%, Vary good 70% -79%, Good 60% - 69%, Average 50% -39%, Poor <50%]

			Grading on 1	ine peris at si		ETaile	Species	<u> </u>		Rep	its of M&I	E	<u> </u>	
Sc. No.	Site .	Wing	Range	Block/ Beat	Achieva			Louginsen (East)	Latitudes (North)	Ay. Sarvival (%)	Av: Height (m)	Av. Carib (c=)	Grading	Ruberka
Ride	Plantation	·	<u> </u>	· _ ·	L	· ·	·	· ·						
1.	Kanonii Section 38	DFO (T) Morni- Pinjore	Panchkol A	Ramgath / Kot	46.8	RKM	Eucalyptu B	76457"51.8"	30"38'1.2"	17	3.5		VEYGON	of Kana grass is required.
Plan	tation of T:	di Piente							·- · ·	·	<u> </u>	1 _		
2.	R 64 C2	DPO (1) Morni- Pinjore	Pinjore	Mellah/ Jabrot	5.2	RKM	Pahari Papri, Cut- Sagwan, Arjun, Amla, Dek	76 ⁰ 59'42.8*'	30 ⁰ 46'27.2'	72	2.0			
3.	C108	DFO (T) Morni- Pinjare	'Pinjarê	Thapli/ Chandi	7	RKM	Arjun, Simble, Kachoar, Bahera	76 ⁹ 59'0.0''	30 ⁰ 43'40.5'	50	0.35	NM*	Average	Plants are prowsed by animals and have no future.
4.	C32	DFO (1) Moni- Pinjore	Raipur Rani	Mirpur/ Mirpur	19	RKM	i Bana, Tcak, Papri, Arjun	77°05*14.3**	30*37*00''	70	0.5	NM*	Very Good	Plants an browsed by animals.

"NM- Not Measureable

-

Аппехите-В Assessment of NPV Plantations Grading on the basis of anyiyal % [Excellent >79%, Very good 70% -79%, Good 60%- 69%, Average 10%-59%, Poor <50%] Results of M&E Species Unk Target Малье иГ Sc. phated Achieved Remarks Gradber Latitedet Ay. Å., Ar. Na. Lougitade Block/ Rangt Heigh Girt Wing Sarviv (Nerth) 5300 (Čest) 1 (00) - b **al** -Beat (000) (%) Abled Natural Regeneration NM Vαγ 12 3044911.91 73 76°52'15. He. Bens, Surgpu 3 Kelka Œ Good DFO ι. R71C5 -3** Papel, ď Morni Cui-30"49'8.4" 76451'52' Basola - -Pinjore sagwan, Tesk Clinse specing ŃM Very 1.0 30⁰51⁴0.1 70 75°49'55. Kikar, -Ha Nanako 3 the Kalka Good DFO ന 35 R7IC7 2 ** 1** Bana. plentica ÌB. шd'. Moral done on both Papri, 30451 '6'52 Nanako 76050'8.3 Pinters Mesquit sides of a 1 m *1 7** ш e. Teak wide oath. Under planting, Plants **1**6 NM 30045745.4 20 VeY 70 76*59*43. Anila Ha. Mailah/ đ. browsed by Pinjore Good (T) DFO R68. 3. 78 4" entmais. Mallab Momi Pinjore Ridge Plantation Close spacing Encellen 9 30 37 41. 83 4 76 56 28.8 Shisharu RKM 13 of 2m x 2m. Panchic Rancer DFÔ (T)t Q13 Kot Section 5 ... 4. W Kot Morai. tile. , Eucalypt Block/ Pinjore compact forest 15 is not suitable 21

•					<u> </u>					— I				for ridge model
				1					. <u></u> 1	1				
Tall	Pianta	<u> </u>			1	RKM	Paori	77°0,7'41.	30 ⁰ 39'9.5	72	1.5	NM	V. Good	Tail plants
5.	Nalaghat to Samlotha Road	DFO (1) Moni Pinjore	DARALLA .	Sher!=			Silver calk, Alstonia	יינ 	*			:		of proper (2 m) beight-
	<u> </u>		<u> </u>	. <u> </u>										<u> </u>
Ттэ 6.	Bhano	DFO (CFP), Ambela	Panchk ulis HQ	-	3.5	No.	Pilkhso, Neem,	76 ⁰ 55*04**	30 ⁰ 37'40'	95	3.0	10	Exection	Approved design of TG not followed.
		(-	at Reipur Rani	-			Bel, str.							Uprooting of Kama grass is required.
7.	Parwala	DFO (CFP), Ambala	Panchik ula HQ at Raipur	- - 	2	No.	Necan, Mahua, Jamum, Bel, etc.	77*00'55''	30 ⁰ 38'2.8	85	3.0	- 11	Exactleo	Approved design of TG not followed.
8.	Tirlokpur School	DFO (CFP), Ambela	Panchk ula HQ et Ratpur Rani	 - 	4	No.	Neem, Bel, Mahua, Amia, etc.	770°1*19.5	30 ⁸ 40*6.4	75	3	9	.Very Good	Approved design of TG not followed
9.	Sultanpur School	DFO (CFP), Ambala	Panchk ula HQ at Relpur Ranl		l	No.	Nesa, Bel, Mahus, Arjun, Jamun, Bar, etc.	77*03'.6"	30 ⁶ 34'33. 1''	. 70	2.5	8	Very Good	Approved design of TG not followed. Plants are browsed

*NM= Not Measureable
	Cons	servation and Ma	and surger	I <u>t of WUG L</u>	HE DY DEC (WDA I HAVE ST MAE
~ 1	Antivity Site			1 (No.)	RESURS OF MOUL
Sr. No			Fixed	Achieved	the second state with a shabing of a constructed without any
1	Digging of Weter Ponds	Sunipur	2	2	First pond along with a constant is constant to constant with spillway, which may cause breach of pond due to overflow of tain water. This spill way pipe is wrongly fixed in the second pond and has already caused heavy soll crossion in the down-stream. If not corrected, it may lead to damage of pond due to back erosion.
2	Construction of Stone Masonry Dams	Surajpur	2		Five comented masonry structures have been constructed instead of 2 Stone Masonry Dams. Over flow of rain water has already caused soil erosion down streams in these structures.
3 	Digging of Water Ponds	Khol Hi Raitan Wildlife Sanctutary	4	4	Two water ponds were visited out of the 4 water points constructed. First water pond is constructed in the Upper Choki forest area in Khol HI Raitan Wildlife Sanctuary, but without any spill way. Second water pond is constructed in Gumthala forest area in Khol Hi Raitan Wildlife Sanctuary, but without any spill way. These earthen water ponds need annual repair after every rainy season, which has not been done. Salt-licks have not been provided near the pands.
4 .	Crate-wire structure behind vulture care center, Bir Shikargah	Bir Shikargach Wildlife Sanctuary	,-	17	Seventeen crate-wire masonry subtances we condition these structures were visited and all found in good condition and fulfilling the purpose.

Annexare-C Conservation and Magagement of Wild Life by DFO (WL), Panchkula

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Bhano TG





Sultanpur School TG



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MONITORING & EVALUATION REPORT

Of

Works Carried Out During 2011-12

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YAMUNANAGAR DISTRICT OF HARYANA

UNDER

STATE CAMPA SCHEME

Submitted to: Conservator of Forest cum Nodal Officer (Forest conservation) State CAMPA, Haryana Department of Forest, Govt. of Haryana Van Bhawan, Sector-6 Panchkula, Haryana



AFC DIDIA LIMITED

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Monitoring & Evaluation Report

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Works Carried Out During 2011-12

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Yamunanagar District of Haryana

Under

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State CAMPA Scheme

March 2014

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Executive Summary

Ministry of Environment and Forests (MoEF), Gavt. of India had issued guidelines on 2^{nd} July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA) was created in Haryana State in the year 2010 vide notification No 5330-F1-409/511 dated 18.1.2010. Implementation of State CAMPA scheme in Yamunanagar district of Haryana was started in the year 2010-11.

The present Monitoring and Evaluation report pertains to the works done under the State CAMPA Scheme in Yamunanagar district during the year 2011-12 by the three implementing authorities, viz., DFO (T) Yamunanagar, DFO (CFP) Kurukshetra and DFO (WL) Panchkula.

State CAMPA scheme has two components, vis., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Yamunanagar only. But the physical targets under the NPV component were achieved by all the three implementing authorities.

During the year 2011-12, physical target of 102.69 RKM, 140 Ha and 15 TGs was achieved against the fixed target of 102.69 RKM, 140 Ha and 15 TGs resulting in >100% achievement. Soil and Moisture Conservation works were also carried out in Kalesar forests

To assess the performance during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

<u>Observations</u>

Ξ.

- The works of bath the components were of very good quality.
- The average survival of plantations was 73.88%.
- Out of 6 sites of Ridge model of CA component, the survival % was Excellent (>79%) at 1 site, Very Goad (70-79%) at 2 sites, Good (60-69%) at 2 sites and poor (<50%) at 1 site.
- Out of 23 sites of Tall plants model of CA component, the survival % was Excellent (>79%) at 7 sites, Very Good (70-79%) at 4 sites, Good (60-69%) at 10 sites and poor (<50%) at 2 sites.
- Out of 20 sites of NPV plantations visited, the survival % was Excellent (>79%) at 16 sites, Very Good (70-79%) at 3 sites and poor (<50%) at 1 site.
- 6. The main shortcomings observed in plantations were:
 - Use of small sized plants in tall plants model.
 - Planting of small areas of <1ha.
 - III. Absence of barbed wire fencing/ tree guards in tall plant model.

- Not following the approved design of TGs.
- Wrong selection of sites of Kapoori village in biodrainage model.

Constraints faced by the implementing authorities

As told, the constraints faced by the implementing authorities were:

- Delay in allotment of physical and financial targets,
- Non-availability of finds for the maintenance of TGs.

Suggestions for further improvement

- 1. The State CAMPA scheme should be continued because it is helping in:
 - Enhancing the quality of degraded forests,
 - Improving the tree cover in non-forest lands, and
 - ili. Mitigating the changing climate.
- Physical and financial largets must be conveyed in time.
- Tall plants of 2m in height should be planted in tall plants model.
- Burbed wire/ tree guards should be used for the protection of plantations as sufficient funds were allotted for fencing.
- 5. Approved design of TGs should be followed.

-

- Funds for the maintenance of TOs must be provided in the 3rd year.
- Selection of sites of biodrainage plantations should be carried out carefully.
- Land bank should be identified and all plantations of <1 ha area should be done at this land bank.

Grading

(On a Scale of 1 to 10)

Quantitative Aspects	Physical	9
·		

Qualitative Aspects	L.	Plentations				
		Quality	7.			
		Maintenance	4			
		Sustainability	5			
-	2	Other Works				
		Quality	8			
		Maintenance	5			
		Sustainability	6			

Overall Grading of the	Outstanding	Very Good	Good	Poor
Project	(8 to 10)	(5 to <\$)	(3 to <5)	(<3)
	-	Very Good	-	-

Chapter A

GENERAL

- A.1 Name of District : Yamunanagar
- A.2 Name of State : Haryana

A.3 Name of Scheme

State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

A.4 Background of State CAMPA

Ministry of Environment and Forests (MoEF), Govt. of India had issued guidelines on 2nd July 2009 for establishing CAMPAs 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), Net Present Value (NPV), etc., currently available with the Adhoc CAMPA.

A.5 State CAMPA in Haryana

A.5.1 Establishment

The State CAMPA in Haryana was created in the year 2010 vide notification No 5330-Ft-409/511 dated 18.1.2010.

A.5.2 Aims and Objectives

State CAMPA shall seek to promote:

- Conservation, protection, regeneration and management of existing natural forests;
- b. Conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas;
- Compensatory afforestation;
- d. Environmental services, which include:-
 - Provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support;
 - ii. Regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
 - iii. Non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and
 - Supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.
- Research, training and capacity building.

A.5.3 Constitution

The State CAMPA of Heryane consists of a Governing Body, a Steering Committee and an Executive Committee.

A.5.3.1 Governing Body

The Ooverning Body of Haryana consists of the following:

1.	Chief Minister, Haryana	Chairperson
2	Minister of Forests, Haryana	Member
3.	Minister of Finance, Haryana	Member
4.	Chief Secretary, Haryana	Member
5.	Principal Secretary (Finance), Haryana	Member
6.	Principal Chief Conservator of Forests, Haryana -	Member
7.	Chief Wildlife Warden, Haryana	Member
8.	Principal Secretary (Forests), Haryana	Member Secretary

A.5.3.2 Steering Committee

The Steering Committee of Haryana consists of the following:

1,	Chief Secretary, Haryana	Chairperson
2.	Principal Secretary (Finance), Haryana	Member
3.	Principal Secretary (Forests), Haryana	Member
4.	Chief Wildlife Warden, Haryana	Member
5.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member
б.	Representative of the Ministry of Environment and Forests	, Member
	Government of India	-
7.	Two eminent NGOs nominated by the state Government	Members
8.	Principal Chief Conservator of Forests	Member Secretary

A.5.3.3 Executive Committee

~___

The Executive Committee of Haryana consists of the following:

1.	Principal Chief Conservator of Forests, Haryana	Chairperson
2,	Addl. Principal Chief Conservator of Forests (Forestry)	Member
3.	Chief Wildlife Warden, Haryana	Member
4,	Chief Conservator of Forests (Protection-I)	Member
5.	Chief Conservator of Forests (Protection-II)	Member
6.	Conservator of Forests (Planning)	Member
7.	Representative of Finance Department	Member
	Not below the rank of Addl. Secretary	Member
8.	Two eminent NGOs nominated by the state Government	Members
	for a period of 2 years at time who shall be eligible for re-r	mination
9.	Conservator of Forests (FC) & Nodal Officer (FCA)	Member Secretary

A.5.4 Meetings

A.5.4.1 Governing Body

The 1st meeting of the Governing Body is yet to be held.

A.5.4.2 Steering Committee

The 1^{n} meeting of the Steering Committee of the State CAMPA of Haryana was held on 2^{nd} June, 2010 at 3.30 PM under the Chairpersonship of Mrs. Urvashi Guleti, JAS, Chief Secretary Haryana. In this meeting, the Annual Plan of Operations (APO) and other items for the year 2010-11 were discussed and approved.

The 2^{st} meeting of the Steering Committee of the State CAMPA of Haryana was held on 7 July, 2011 at 3.45 PM under the Chairpersonship of Mrs. Urvashi Gulati IAS, Chief Secretary Haryana. In this meeting, the action taken report on 1^{st} meeting was discussed and the APO for the year 2011-12 was discussed and approved.

A.5.4.3 Executive Committee

The 1[#] meeting of the Executive Committee was held on 04.05.2010

The 2nd meeting of the Executive Committee was held on 21.12.2010

The 3rd meeting of the Executive Committee was held on 05.09.2011

The 4th meeting of the Executive Committee was held on 22.06.2012

The 5th meeting of the Executive Committee was held on 17.01.2013

A.5.5 Implementation

Implementation of State CAMPA scheme in Yemunanagar district of Haryana State was started in the year 2010 -11.

A.S.6 Monitoring and Evaluation

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Yamunanagar district of Haryana State by the three implementing authorities, viz. DFO (T) Yamunanagar, DFO (CFP) Kurukshetra and DFO (Wild Life) Panchkula.

QUANTITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Yamunanagar district of Haryana State by the three implementing authorities, viz. DFO (T) Yamunanagar, DFO (CFP) Kurukahetra and DFO (Wild Life) Panchkula.

B.1 Physical Targets

B.1.1 Plantation

i.

The physical achievement of plantation in Yamunenagar district during the year 2011-12 under the State CAMPA scheme by the DFO (T) Yamunanagar and DFO (CFP) Kurukshetra is as given below:

	Nana	e of		Р	hysical Targ	eix.
Component	Sub-component	Model	Implementing Authority	Fixed	Achieved	Unit
Compensatory Afforestation	-	Ridge planiation	DFO (T) Yamuranagar	51.63	51.63	RKM
(Tall plants plantation	1	28.06	28.06	RKM
Not Present Value (NPV)	Afforestation and management of Constants	Assisted Netural Regeneration		40,00	40.00	Ha
	forest lands	Plantation of tall plants in linear forests		10.00	10,00	RKM
		Ridge plantation		13.00	13.00	RKM
	Afforestation in community and public lands	Planeation of Tree Grooves (TGs)	DPO (CFP) Kuruksbotra	13.00	13.00	No.
		Biodrainage		100.00	100.00	Ha
	Tot	102,69	102.69	RKM		
		140.00	140.00	Ha		
				15.00	15.00	No

Above table indicates that during the year 2011-12, a physical target of 102.69 RKM, 140 Ha and 15 TGs was achieved against the fixed target of 102.69 RKM, 140 Ha and 15 TGs resulting in >100% achievement.

B.1.2 Other Works

B.1.2.1 DFO (T) Yamunanagar

In NPV component, Soil and Moisture Conservation works carried out in Kalesar forests by the DFO (T) Yamunanagar were as given below:

- Construction of Retaining Wall in front of old rest house Kalesar
- Repair of Cement Stone Masonry Structure (CSMS) in 20° N Jeepable road of Compartment No. 2 of Kalesar National Park
- c. Repair of Cause way and Retaining wall on Choti Mohi Nala of 20' N Jeepable road of Compartment No. 2 of Kalesar National Park
- d. Construction of Retaining wall in 20° N Jeepable road of Compariment No. 2 of Kalesar National Park
- Construction of Cause way in 20' N Jeepable road of Compartment No. 2 of Kalesar National Park
- f. Surface dressing and construction of CSMS and Cause way structure in 20' N & S Jeepable road of Kalesar Forests.

B.J.2.2 DFO (WL) Panchkula

In NPV component, Soil and Molsture Conservation works carried out in Kalesar forests by the DFO (WL) Panchkala were as given below:

- Seven silt retention dams in Wild Life Sanctuary Kalesar
- b. One slit retention dam in National Park Kalesar
- c. Two crate wire structures in National Park Kaleaar
- d. Ten retaining walls National Park Kalesar
- Ten crate wire structures in National Park Kalesar
- g. Construction of cause way in 20' N Jeepable road of Compartment No. 2 of Kalesar National Park
- f. Stone Masonry check dams in National Park Kalesar

QUALITATIVE ANALYSIS

The present Monitoring and Evaluation report pertains to the works carried out during the year 2011-12 in Yamunanagar district of Haryana State by the three implementing authorities, viz. DFO (T) Yamunanagar, DFO (CFP) Kurukahetra and DFO (Wild Life) Panchkula.

State CAMPA scheme has two components, viz., Compensatory Afforestation (CA) and Net Present Value (NPV). Physical targets under the CA component were achieved by the DFO (T) Yamunanagar only. But the physical targets under the NPV component were achieved by all the three implementing authorities.

During the year 2011-12, physical target of 102.69 RKM, 140 Ha and 15 TGs was achieved against the fixed target of 102.69 RKM, 140 Ha and 15 TGs resulting in >100% achievement. Soil and Moisture Conservation works were also carried out in Kalesar forests

To assess the performance during March 2014, 100% sites of works of CA component and >10% sites of works of NPV component were visited and evaluated and the results of M&E were as given below:

C.1 Compensatory Afforestation

C.1.1 Ridge Model

In this model, plantations were raised by the DFO (T) Yamunanagar by achieving a target of 51.63 RKM at 6 sites. All the 6 sites were visited during March 2014 and the results of M&E were as given below:

Suitability of Land afforested

Except I aite (Sandhai PF), the land of other 5 sites was suitable for raising ridge plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Ridge planting technique. This technique is very effective in raising successful plantation in waterlogged areas.

d. Survival of Plants

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Survival % was estimated statistically by laying out adequate number of sample plats of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving seedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 65%.

Out of 6 sites of Ridge model of CA component, the survival % was Excellent (>79%) at 1 site, Very Good (70-79%) at 2 sites, Good (60-69%) at 2 sites and poor (<50%) at 1 site,

Detail of site wise survival %, average height, average girth and shortcomings, etc. were as given in *Annexure-a*.

C.1.2 Tali Plants Model

In this model, plantations were raised by the DFO (T) Yamunanagar by achieving a target of 28.06 RKM at 23 sites. All the 23 sites were visited during March 2014 and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

The technique of planting used was the Pit planting technique. But this technique was not so effective due to soil compaction.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected. The numbers of surviving scedlings were counted in the sample plots. The computed total numbers of seedlings found in the sample plots were aggregated and percentages of survival arrived against the area of sample plots. This was interpolated to total area of the plantation and survival % arrived. While counting the survival of seedlings the height and girth of the same was noted and by interpolating the average height and girth was estimated and the average height and girth of plantations was arrived.

Average survival of plantation was 69,26%.

Out of 23 sites of Tall plants model CA component, the survival % was Excellent (>79%) at 7 sites, Very Good (70-79%) at 4 sites, Good (60-69%) at 10 sites and poor (<50%) at 2 sites.

The main shortcomings were:

- B. Use of small sized plants in the name of tall plants.
- Absence of barbed wire fencing /tree guards.
- c. Achievement of small targets of < that a number of sites.</p>

Detail of site wise survival %, average height, average girth, etc. were as given in Annexure-a.

C.2 Net Present Value

In this component, works were carried out in Yamunanagar district under the following 3 sub-components:

- i. Afforestation and management of Government forest lends
- H. Afforestation in community and public lands

iii. Other works

C.2.1 Afforestation and management of Government forest lands

In this sub-component, works were carried out by DFO (T) Yamunanagar under the following 3 models:

i. Assisted Natural Regeneration

- Ridge plantation in linear forests
- Tall plants plantation in linear forests

Plantations of above 3 models were visited during March 2014 and the results of M&E were as given below:

C.2.1.1 Assisted Natural Regeneration

In this model, plantation works were carried out by the DFO (T) Yamunanagar by achieving a target of 40 ha at 6 sites. M&E was carried out by visiting 2 sites resulting in M&E of 30% sites and the results of M&E were as given below:

a. Suitability of Land afforested

Lend was sultable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Average survival of plantations was 85%.

The survival % was Excellent (>79%) at both site.

Detail of site wise survival % and average height and girth of plantations was as given in **Annexure-b**,

C.2.1.2 Ridge Plantation

In this model, plantations were raised by the DFO (T) Yarminanagar by achieving a target of 13 RKM at 3 sites. M&E was carried out by visiting 1 site resulting in M&E of 33% sites and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

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The species planted were suitable for the area,

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Ridge planting technique

d. Survival of Plants

Survival % was estimated statistically by laying out edequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was Excellent (85%).

Detail of survival % and average height and girth of plantations was as given in Amnexureb.

C.2.1.3 Tail Plants Plantation

In this model, plantations were raised by the DFO (T) Yamunanagar by achieving a target of 10 RKM at 2 sites. M&E was carried out by visiting 1 site resulting in M&E of 50% sites and the results of M&E were as given below:

Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitebility of Species planted

The species planted were suitable for the area.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. But, this technique was not very effective due to compaction of soils.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was \$0%.

Detail of survival % and average height and girth of plantations was as given in Annexure-b.

C.2.2 Afforestation in community and public lands

In this sub-component, works were carried out by DFO (CFP) Kurukshetra under the following 2 models:

i. Tree Groves

ii, Biodrainage

C.2.2.1 Tree Groves (TGs)

In this model, DFO (CFP) Kurukshetra has planted 15 TGs in 10 villages. Out of these, 3 TGs planted in 2 villages were visited and the results of M&E were as given below:

s. Suitability of Land afforested

Land was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the areas/model.

c. Techniques of Planting Used and their Effectiveness

Technique of planting used was the Pit planting technique. This technique is not so effective due to soil compaction. For early establishment of plantation, the Auger Hole planting technique should be used.

d. Survival of Plants

Survival % was estimated by counting the total number of plants planted and the surviving number of plants.

Average survival of plants was 75%.

Main shortcoming was that approved design of TGs was not followed.

The village wise survival %, average height and average girth, etc. were as given in *Annexare-b*.

C.2.2.2 Biodrainage

In this model, DFO (CFP) Kurukshetra has achieved a target of 100 ha in 5 villages. Out of these, 21 ha plantations belonging to 14 farmers of 5 villages were visited and the results of M&E were as given below:

a. Suitability of Land afforested -

Except Kapoori village, the land of other villages was suitable for raising plantation.

b. Suitability of Species planted

The species planted were suitable for the areas/model.

Techniques of Planting Used and their Effectiveness

Technique of planting used was the Ridge planting technique.

d. Survival of Plants

Survival % was estimated statistically by laying out adequate number of sample plots of 0.1 ha to the extent of a minimum of 20% of the plantation areas inspected.

Survival of plantation was 84.43%.

Detail of survival % and average height and girth of plantations was as given in Annexureb.

C.2.3 Other Works

Soil and Moisture Conservation (SMC) Works were carried out by DFO (T) Yamunanagar and DFO (WL) Panchkula under the NPV component.

C.2.3.1 DFO (T) Yamunanagar

The SMC works carried out by the DFO (T) Yamunanagar were as given below:

- h. Construction of Retaining Wall in front of old rest house Kalesar
- Repair of Cement Stone Masonry Structure (CSMS) in 20' N Jeepable road of Compartment No. 2 of Kalesar National Park
- j. Repair of Cause way and Retaining wall on Choti Mobi Nala of 20' N Jeepable road of Compartment No. 2 of Kalesar National Park
- k. Construction of Retaining wall in 20' N Jeepable road of Compartment No. 2 of Kalesar National Park
- Construction of Cause way in 20' N Jeepable road of Compariment No. 2 of Kalesar National Park
- m. Surface dressing and construction of CSMS and Cause way structure in 20' N & S Jccpable road of Kalesar Forests.

Out of above, the SMC Works of Sr. No.- a to c were visited and the results of M&E were as given below:

C.2.3.1.1 Construction of Retaining Wall in front of old rest house Kalesar

a. Location

This work was located at 77°35'04" E longitude and 30°20'27.3" N Latitude.

b. Quality

Quality of work was good.

c. Measurement Book (MB)

MB was maintained for labour component only.

d. Completion Report (CR)

CR has been sent by FRO Kalesar to DFO (T) Yamunanagar vide No. 700 dated 6-11-2012.

C.2.3.1.2 Repair of Cement Stone Masoury Structure (CSMS) in 20' N Jeepable road of Compariment No. 2 of Kelesar National Park

a. Location

This work was located at 77°32'28.2" E longitude and 30°23'27.5" N Latitude.

b. Quality

Quality of work was good.

c. Measurement Book (MB)

MB was maintained for labour component only.

d. Completion Report (CR)

CR has been sent by FRO Kalesar to DFO (T) Yamunanagar vide No. 700 dated 6-11-2012.

C.2.3.1.3 Repair of Cause way and Retaining wall on Choti Mobi Nale of 20° N Jeepable road of Compartment No. 2 of Kalesar National Park

s. Location

This work was located at 77°31'59.4" E longitude and 30°23'38.7" N Latitude.

b. Quality

Quality of work was good.

c. Measurement Book (MB)

MB was maintained for labour component only.

d. Completion Report (CR)

CR has been sent by FRO Kalesar to DFO (T) Yamunanagar vide No. 738 dated 19-11-2012.

C.2.3.1.4 Construction of Retaining wall in 20' N Jsepable road of Compariment No. 2 of Kalesar National Park

a. Location

This work was located at 77°32'28.2" E longitude and 30°23'27.5" N Latitude.

b. Quality

Quality of work was good.

c. Measurement Book (MB)

MB was maintained for labour component only.

d. Completion Report (CR)

CR has been sent by FRO Kalesar to DFO (T) Yamunanagar vide No. 700 dated 6-11-2012,

C.2.3.1.5 Construction of Cause way in 20' N Jeepable road of Compartment No. 2 of Kalesar National Park

a. Location

This work was located at 77°31'54.2" E longitude and 30°23'41.9" N Latitude.

b. Quelity

Quality of work was good.

c. Measurement Book (MB)

MB was maintained for labour component only.

d. Completion Report (CR)

CR has been sent by FRO Kalesar to DFO (T) Yamunanagar vide No. 238 dated 19-11-2012.

C.2.3.2 DFO (WL) Panchkula

The SMC works carried out by the DFO (WL) Panchkula were as given below:

- Seven silt retention dams in Wild Life Sanctuary Kalesar
- b. One silt retention dam in National Park Kalesar
- c. Two crate wire structures in National Park Kalesar
- d. Ten retaining walls National Park Kalesar
- c. Ten crate wire structures in National Park Kalesar
- f. Construction of cause way in 20' N Jeepable road of Compartment No. 2 of Kalesar National Park
- g. Stone Masonry check dams in National Park Kalesar

Out of above, the works of sr. no. b, d and f were visited and the results of M&E were as given below:

C.2.3.2.1 One silt retention dam in National Park Kalesar

a. Location

This work was located in Pipal Bara Kalesar National Park

b. Quality

Quality of work was good.

c. Measurement Book (MB)

MB was maintained for labour component only,

d. Completion Report (CR)

CR has been sent by Inspector WL to DFO (WL) Panchkula.

C.2.3.2.2 Teo retaining walls in National Park Kaleser

Out of 10 retaining walls, 3 were visited and their details are as given below:

a. Location

Three retaining walls were located at:

77°32'47.9" E Longitude and 30°23'12.3" N Latitude

77°32'39.5" E Longitude and 30°23'18.1" N Latitude

77⁰32'29.1" E Longitude and 30⁰23'5.01" N Latitude

b. Quality

Quality of work was good.

c. Measurement Book (MB)

MB was maintained for labour component only.

d. Completion Report (CR)

CR has been sent by Inspector WL to DFO (WL) Panchkula.

C.2.3.2.3 Construction of cause way in 20° N Joepable read of Compartment No. 2 of Kalesar National Park

a. Location

This work was located 77°31'37.3" E Longitude and 30°23'48.4" N Latitude

b. Quality

Quality of work was good.

c. Measurement Book (MB)

MB was maintained for labour component only.

d. Completion Report (CR)

CR has been sent by Inspector WL to DFO (WL) Panchkula.

C.3 Constraints faced by Implementing Authorities

As told, the constraints faced by the implementing authorities are as given below:

- Delay in allotment of physical and financial targets,
- Non-availability of funds for the maintenance of TGs.

C.4 Suggestions of Implementing Authorities for Further Improvement

- Physical targets must be conveyed in April/ May so that earth work may be completed before the onset of Monsoon.
- ii. Norms, especially for earth work, must be increased.
- iii. Staff must be provided as per Cadre Allotment.
- Funds must be provided for the maintenance of TGs in 3rd year of planting.

C.5 Suggestions of Evaluator

- The State CAMPA scheme should be continued because it is helping in:
 - a. Enhancing the quality of degraded forests,
 - b. Improving the tree cover in non-forest lands, and
 - c. Mitigating the changing climate.
 - Physical and financial targets must be conveyed in time.
 - e. Tall plants of 2m in height should be planted in tall plants model.
 - f. Barbed wire/ tree guards should be used for the protection of plantations as sufficient funds were allotted for fencing.
 - Approved design of TGs should be followed.
 - h. Funds for the maintenance of TGs must be provided in the 3rd year.
 - i. Selection of sites of biodrainage plantetions should be carried out carefully.
 - j. Land bank should be identified and all plantations of <I ha area should be done at this land bank.

Annexure a

Assessment of CA Plantations

Sr. No.		Name of		Targe Unit		Targe		Unit Species		- F	Re	ults of M	46		
	Site	implementi og Authority	Range	T Achib yed		pianted	Longitudes (Eest)	Latitudes (North)	Av. Sarviv Al (%)	Av. Heigh (Av. Girth (cm)	Gradbag	Remarko		
Ridg	e Plantation			1	. <u>,</u>			L					1		
Ι.	Augmentation canal 3-6 L&R	DPO (T) Yamunanagar	Jagadhari	5.92	RKM	Tesk, Papri, Eucalyptus	77°15'22.8' ,	30°04°04.3*	72	3.0	10	V. Good	-		
2.	Along Chiaing drain	-do-	-do-	10.00	-do-	Kikar	7706'51.4'	30 ⁶ 01*39.4"	3	2.0	NM	Peor	-		
3.	WJC 76-80	-dio-	-do-	2.66	-do-	Papri, Bucalyptus	77 ⁰ 15'27''	30°06'07.5''	68	3.0	12	Good	-		
4	Avardhan canal 0-3 B/sides	-de-	-do-	7.05	-do-	Papri, Shisham, Bucalyptus	77 ⁰ 16'17.2'	30°03'42.4''	65	2.5	7	Good	-		
5	WJC 3.5 to 25 R/side	-do-	Kalesar	14.00	-do-	Teak, Cut Sagwan, Papri	77*29*56.6*	30 ⁰ 16'24.7''	70	2.0	NM	V. Good	Close spacing		
6	Sændhei PF	-do-	Sadhaura	12.00	-40-	Teak, Papri, Mesqult, Cut Sagan, Jamun.	77 ⁰ 19'44.2'	30 ⁰ 21*28.8**	80	2.5	10	Excellen t	Area not suitable for ridge planting		

Grading on the hasts of survival % [Excellent >79%, Very good 70% -79%, Ocod 60% - 69%, Average 50% -59%, Poor <50%]

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					—	Amia			T -		-		-
	<u> </u>		Total	51.634	-do-				-		-	+	
Tel	Plaute Phintetion	<u> </u>	L										
I	Jagadhari - Buria read	DFO (T) Yamuqanagar	Jagadhari	0.09	-do-	Shisham	77°19'55.6"	30 ⁰ 09'36,4''	70	3,0	10	V. Good	<u>-</u>
2	Jagadhari - Bilaspuroid road	-do-	-40-	0.10	-do-	Toon, Alstonia	77°18'2.8"	30°10'48.4''	Ø	3.0	12	Poor	-
3	Jagadhari - Bilaspor road Km 0-1	-do-	-40-	0.15	-do-	Jamin, Toon	77 ⁰ 17'33''	30 ⁰ 10'35.7''	65	3.0	10	Good	-
4	Jagadhari – Ambala road Km 2-3	-do-	-do-	0.12	-do-	Taon, Jamun	77 ⁰ 17'3.8''	30°10*17.0**	76	3,5	12	V. Good	
5	Jegedhari - Bilespur road Km 0-i	-do-	-do-	0.10	-do-	Teon, Jamun	77 ⁰ 17'51''	30 ⁰ 11'3.9''	70	2.5	5	V. Good	-
6	lagadhari — Ambala road Km 0-0.5 L/Sida	-do-	-do.	0.13	-do-	Toon, Jamue	77 ⁰ 18'30.4''	30 ⁰ 09"30.8"	67	2.5	б	Geod	
7	SK road Km 28-30 L&R	-do-	-do-	0.56	-do-	Alstonia	77 ⁰ 19'16.0" ¹	30 ⁰ 05'54.2'''.	60	2.0	NM	Good	Small sized plants were planted
ß	SK road Km 32-33 L&R	-do-	-do-	0.28	-40-	Mahua	77 ⁰ 17'44 <i>.</i> 6''	30 ⁶ 06'44.0''	82	2.5	7	Exceilen t	•

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1 0	Tanadhari	1 .				— –							_
Ľ	Bilaspur road Km 2-3	-40-	-do-	0.16	-do-	Toon, Jamun, Alstonia	77°19'16''	30 ⁰ 05'54''	60	2.0	NM	Good	Small sized plants were planted
10	SK roed Km 30-31 L&R	-do-	-40-	0.08	-do-	Papri	77°18'14.6"	30 ⁴ 06'28.6"	70	2.0	NM	V. Good	Small sized plants wore planted
11	Burla road KM 2-4 L&R	-do-	-do-	0.13	-40-	Shisham	77°19'56.2''	30 ⁹ 09'35.8'*	68	3.5	12	Good	
12	Jagadhari — Bilaspur road Km 0-1	-do-	-do-	0.10	-do-	Toon, Jaman, Teak	77917:51"	••••••••••••••••••••••••••••••••••••••	65	2.5	5	Good	
13	Old Saharangtar road	-do-	-do-	0.10	-do-	Тоол	77 ⁰ 19'46.2''	30 ⁹ 07'56.6''	B0	2.5	6	Excellen t	
14	Mustfabed Thana Chhapar road	-do-	-do-	0.05	-do-	Teak	77909'50.7''	30°12'48.7''	30	2.5	7	Poor	
15	Dadupur – Chhechhrauli road Km 0-1	-do-	-do-	0.08	-cio-	Tcak	77*23'31.2"	30 ⁰ 13'0.3"	85	2.5	5	Excellen †	- ·
16	WIC RD 74-78 L&R	-do-	-do-	8.00	-de-	Jamun, Shishan, Toon	77°15'6.6"	30 ⁴ 05*53.7*'	62	2.5	7	Good	-
17	WJC RD 80-85 L&R	-do-	-do-	4.85	-do-	Shisham	77 ⁰ 13'45.5"	30 ⁰ 04*55.0**	72	2.5	8	Good	
18	WJC Yemunanagar R	-do-	-do-	12.00	-40-	Shisham	77 ⁰ 13'30.4''	30°04'43.1"	60	1.5	NM	Good	Small sized plants were planted
19	Sandhai PF	-do-	Sadhaura	0.10	-do-	Jamon,	77 ⁰ 19'40.2''	30 ⁰ 12'26.2''	80	2.0	NM	Good	-do-

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20	Herbal Park Chuharpur RF	-do-	Kalesar	0.092	-do-	Misc. Species	77 ⁰ 29'20.09'	30°16'07.6"	85	1.0	NM	Excellen t	-do-
21	Khizrabed - Bilaspur Road Km 0-2 L&R	-do-	-do-	0.096	-do-	-se-	77 [°] 29°57,2''	30 ⁰ 17'47.5*'	80	3.0	3	Exceiling	-
22	Tejewala Kansli JeepableRoad (Kani Line)	-do-	-de-	0.06	·do-	-dic-	77 ⁹ 30'26.7''	30°19'39.5''	85	2,0	NM	Excellen i L	Small sized plants were planted
23	Sandhai PF	-do-	Sadbaura	0.66	-60-	Ama, Jamun, Dek	77 ⁰ 19'40.0''	30 ⁰ 12'26.0"	8t	2.3	6	Excellen !	
			Total	28.06	-de-				_ <u>.</u>			-	<u></u>
Gru	ud Total			79.70	RK M								

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Annexure-b

Assessment of NPV Plantations

Grading on the basis of survival % [Excallent >79%, Very good 70% -79%, Good 60%- 69%, Average 50%-59%, Poor<50%]

Sr. No.	Name of			Target	Valt	Species	Replice of M&E								
- 1-	Site	Implementia g Authority	Raoge	Anhieve d		planted	Longitzdar (East)	Latätudes (North)	Av. Sarviva	Av. Height (m)	Ay. Girth (tm)	Grading	Remarks		
	Afforestation	and manager	neat of Go	varnnien(forest	⊥ lands			[(%)]						
	Assisted Natural	Regeneration			_						_				
ľ	WJC RD 3.5-25 R/side	DFO (T) Yamunanagar	Kalesar	5	Ha	Papri	77*29*57.7**	30°16'22.5''	85	2.0	NM	Excellent	Ţ		
2	ChBcan C-6 PF	-do-	Kalsia	5	Ha	Papri, Teak, Arjon, Neco, Babera	77°26'18.5''	30 ⁶ 21'12.5'	85	2.3	6.0	Excellent	-		
þ,	Ridge Plantation					·									
1 	Dachspur - Nälvi Nehar	-do-	Jagadhuri	5	RKM	Eucalyptus	77 ⁹ 06'52,3''	30010'51.0**	\$5	7.0	16	Excelient	·		
- T	Tall Plants Plants	ntiop		<u> </u>					[_			
1	Hydel channel L/side	-do-	Kalerar	5	RKM	Teak, Cut Sagwan, Shisham	77 ⁶ 34'24,0''	30 ⁰ 18'24,4''	Ô	1.0	NM	Average	-		
ı [Afforestation i	n community	and public	c landa								_			
	Tree Graves														

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(a) Solution of the second probability of the second se Second s Second seco

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1 1	Rampor Gainda	DFO (CFP) Kurulahetra	Yentunana. gar	2	No.	Mise. species	77°21'19,5'*	30°26'26''	60	2,0	NM	Excellent	Approved design of
2	Reijitpur	-do-	-10-	I	No.	Misc. species	77 ⁶ 20'42''	30°25'44.8''	70	2.5	7	V. Good	-do-
b.	Biodratunge		-	-	· _				<u> </u>		<u> </u>		
	Kapoori village	_	<u> </u>	<u> </u>	<u> </u>	- -	-	Γ———	· 	T -			
1	Giyan Chand a'o Ratana Rara	-do-	-do-	3.54	Ha	Clonal Eucalyptus	77°15'19.6"	30°18'59.6"	- 86	7.0	14	Excellent	Area not suitable for bindminate
2	Sarwan Singh 3/0 Kandhara Ram	-do-	-do-	0.32	Щ	-dc-	77°18'25.1"	30 ⁶ 19°07.5''	92	8.0	17	Excellen	-do-
3	Jaswant Singh 3/0 Raghbir Singh	-do-	-40-	2.36	Нь		77*)4*25**	30*19'29''	95	7.0	15	Excellent	-do-
4	Karnail Singh ¥0 Nika Ram	-do-	-00-	2.19,	H	-do-	77°14'32.8''	30 ⁰ 18'28''	90	7.0	15	Excellen:	
	Mujefat village						·					<u> </u>	<u> </u>
I	Pawan Kamar s/o Sheo Ram	-00-	-60-	0.15	H	-do-	77 ⁰ 20'51.5"	30 ⁶ 21'42.7"	87	6.5	13	Excellent	
2	Sher Singh s/o Nanak Daas	-do-	-do-	2.13	Ha	-do-	77 ⁶ 20'49,8''	30°21°39.4**	50	6.0	15	Excellent	- <u>-</u>
3	Rajbir s/o Kuda Ram	-do-	-do-	2.10	Ha	-do-	77 ⁹ 20'57.2''	30°21'53.6''	70	6.0	12	V. Good	
4	IshumDass s/o Nenak Dass	-do-	-do	1.27	На	-do-	77*20*53.3**	30°21'46,8"	80	65	15	Excellent	
5	Dharam Pal s/o Ratti Ram	-do-	-40-	0.25	H.	-40-	77*20*44**	30*21'30,4"*	R 5	6.0	12	Excellent	

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]	Koten Khase still				ſ					·			
		age							1		i i		
I	Hakim Singh s/o RamjiLal	-do-	-30-	0.82	Fin	-40-	77*20*0.8**	30[*]20 '12,6'*	80	6.5	13	Excelient	<u> </u>
2	Kanan Singh s/e Babu Ram	-do-	-de-	1.79	На	-de-	77*20`6.6*'	30°20'8.2"	90	7.0	16	Excellent	-
	Rainyawala ville	ige								<u> </u>	+		<u> </u>
ı	Surjan Singh s/o Data Ram	-de-	-do-	3.54	Ha	-40-	77*20*26**	30*19*01.4**	\$5	7.0	15	Excelient	
2	Gurdev Singh s/o Ishwar Singh	-do-	-do-	2,0	Ha	-do-	77°20'22.5''	.30°18'35.5''	92	.6.5	13	Excallent	
	Uddam Carb välaga					F -	+			<u> </u>			
1	Dilbug Singh s/o Bahadar Singh	-00-	-do-	0.70	Ha	-do-	77 ⁰ 20'4 5.6''	30 ⁴ 20'21.8''	70	6.0	12	V. Good	

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Photos



Tajewala-Kanali Jeepable Road (Kanni Line)


WJC RD SI-35 L&R



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Avardhan canal 0-3 B/sides



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WJC RD 74-78 L&R 2 - DFO (T) Yamunanegar - CA - Ridge



WJC RD 3.5 to 25 R Side

WJC RD 3.5 to 25 R Side

5-DFO (WL) Panchimie- NPV-Soli Conservation



One silt retention dam in National Park Kalesar



Cause way in 20' N Jeepeble road of Compartment No. 2 of Kalesar National Park



5-DFO (T) Yauwaaagar-NPV-Soli Conservation

Construction of Retaining Wall in front of old rest house Kalesar