



GOVERNMENT OF SIKKIM
FORESTS, ENVIRONMENT & WILDLIFE
MANAGEMENT DEPARTMENT



ANNUAL ADMINISTRATIVE REPORT
FOR THE YEAR- 2011-12



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MESSAGE

Sikkim, located in the Eastern Himalayas is one of the smallest State of India with a geographical area of 7096 sqkm. Forest land constitutes one of the richest natural resources of the State on which depends the well being and prosperity of not only of Sikkim but also that of the neighbouring States. However, with ever increasing demand on the forest resources for goods and services, the forests are under tremendous biotic pressure.

In such a scenario, our Government's commitment to the forestry sector continues to be strong and has maintained a policy of consistency between protection of environment with development. Thus our endeavour has always been eco-friendly development.

It is the concerted efforts of the government in general and the Forest Department in particular that has resulted in 3.5 percent increase in forest cover between 1995 and 2011. The year 2011 was declared as the "Year of Innovation" in Sikkim to inculcate both the people's and government's action towards sustainable environment friendly development. Being the year of innovation, the Government of Sikkim has come up with an innovative state-level award scheme "Chief Minister's Green School Rolling Trophy" the first of its kind in the country. This scheme aims to recognize efforts of schools in promoting environment conservation and will be conferred to the best participants of top five schools within Sikkim on an annual basis.

School Eco-clubs have been strengthened with adequate trainings and provision of environment kits like biodiversity register, awareness posters, green caps & badges, green funds to instill sound environment consciousness in every young mind. At the community level, 111 registered environmental NGOs & Schools, throughout the State have been provided financial grant-in-aid up to Rs.15000/- each for carrying out various action based environment awareness drives. For daily commuters, tourists and drivers, GO GREEN sticker with DO'S & DON'T message have been provided in all tourist & passenger vehicles. New innovative & unique programmes like 10 Minutes to Earth, State Green Mission are being implemented in addition to other CSS. Therefore, the Government of Sikkim in its Forestry & Environment Mission 2015 has envisaged to achieve 100% environmentally conscious citizen in Sikkim by 2015.

I hope that this report will serve as useful sources of information to all who are interested in Forest management & conservation.

Bhim Pd. Dhungel



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FOREWORD

Forests are one of the most important natural resources in Sikkim. Forestry sector encompasses a wide gamut of activities comprising ecosystem services, wildlife management, biodiversity conservation, non timber forest product management. Over a period of time, forestry management in the State has gradually shifted from production oriented forestry to protection oriented and finally to conservation oriented forestry. Our mission is to involve every individual in our conservation programmes.

The Annual Administrative Report 2011-12 brought out by the Planning & Statistical Cell of the Department has attempted to highlight various programmes of different projects/schemes under the Forests, Environment & Wildlife Management Department.

I am sure, this publication will prove interesting & useful to all those who are connected with forestry at various levels within and outside the State.

(Arvind Kumar)
Principal Secretary-cum-PCCF

Forests, Environment & Wildlife Management Department, Sikkim

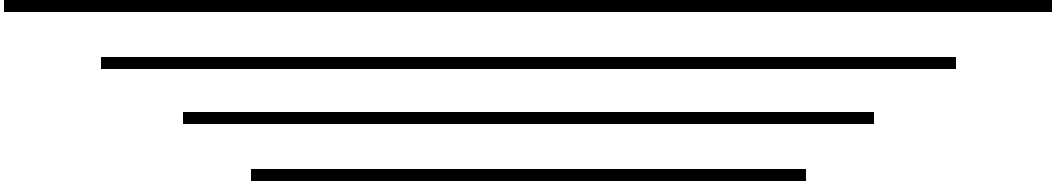
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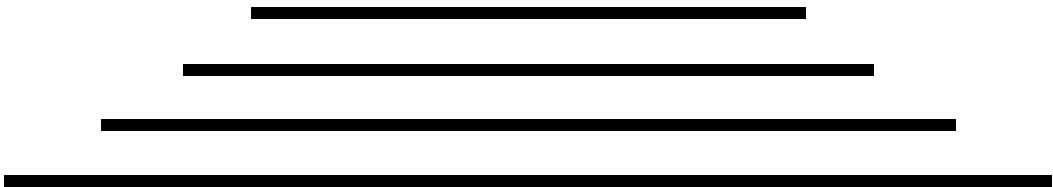
Introduction

Located on the lower Himalayas, Sikkim is one of the few regions in the world to have such diversity in such a small area. With a climate ranging from tropical to alpine, the forested regions of the state exhibit a varied range of flora and fauna, making it a paradise for nature lovers, bird watchers, conservationists, trekkers and tourists. Sikkim has around 5,000 flowering plants, 550 rare orchids, 36 rhododendron species and 650 species of butterflies and its diverse fauna include the snow leopard, musk deer, barking deer and red panda. Forests are not just integral to sustaining this rich biodiversity, but also the bulk of the population is dependent on forest resources. Nearly 81 per cent of the area of Sikkim comes under the administration of the forest department. The government has played a key role in formulating policies and programmes for protection and conservation of resources and maintaining a sustainable ecosystem. It has undertaken various innovative initiatives to create awareness on environmental issues. These efforts of the Government have produced a perceptible result which is manifested in the 3.5 per cent increase in forest cover between 1995 and 2009.





FORESTRY STATISTICS



Chapter-1

KEY STATISTICS OF SIKKIM

Geographical Area	7096 sq.km.
Capital	Gangtok
No. of Districts	4
No. of Sub-Divisions	9
Climate	Tropical, Temperate and Alpine
State Flower	Nobile Orchid- Dendrobium nobile
State Tree	Rhododendron niveum
State Animal	Red Panda – Ailurus fulgens
State Bird	Blood Pheasant – Ithaginis cruentus
Protected Area Network	2183.10 sq.km (30.77%)
No. of important Mountains & Peaks	28
No. of Glaciers	84
No. of Lakes (Wetlands)	227
No. of Hot Springs	9
No. of Rivers & Streams	104
Major Rivers of the State	Teesta and Rangit

No. of Species:

Flowering Plants – 5000	Mammals – 144
Rhododendron – 36	Birds – 552
Orchids – 550	Reptiles – 33
Conifers – 16	Amphibians – 16
Ferns & allies – 362	Fishes – 48
Tree Ferns – 9	Butterflies – 650
Bamboos – 28	
Oaks – 11	
Medicinal Plants – 424	
Recorded Forest Area	5841.00 sq.km. (82.31%)
	Reserve Forests – 5452 sq.km.
	Protected Forests (Khasmal)-285 sq.km.
	Protected Forests (Goucharan)-104 sq.km.
Forest Land with Tree Cover	3359 sq.km. (47.34%)
	Forest Cover – 3262 sq.km. (45.97%)
	Tree Cover -25 sq.km. (0.35%)
Forest Cover -	Very Dense Forest – 500 sq.km.
	Moderately Dense Forest – 2161 sq.km.
	Open Forest - 698 sq.km.

AREA STATISTICS OF SIKKIM- TOTAL STATE (IN SQ. KMS.)

(Table-1)

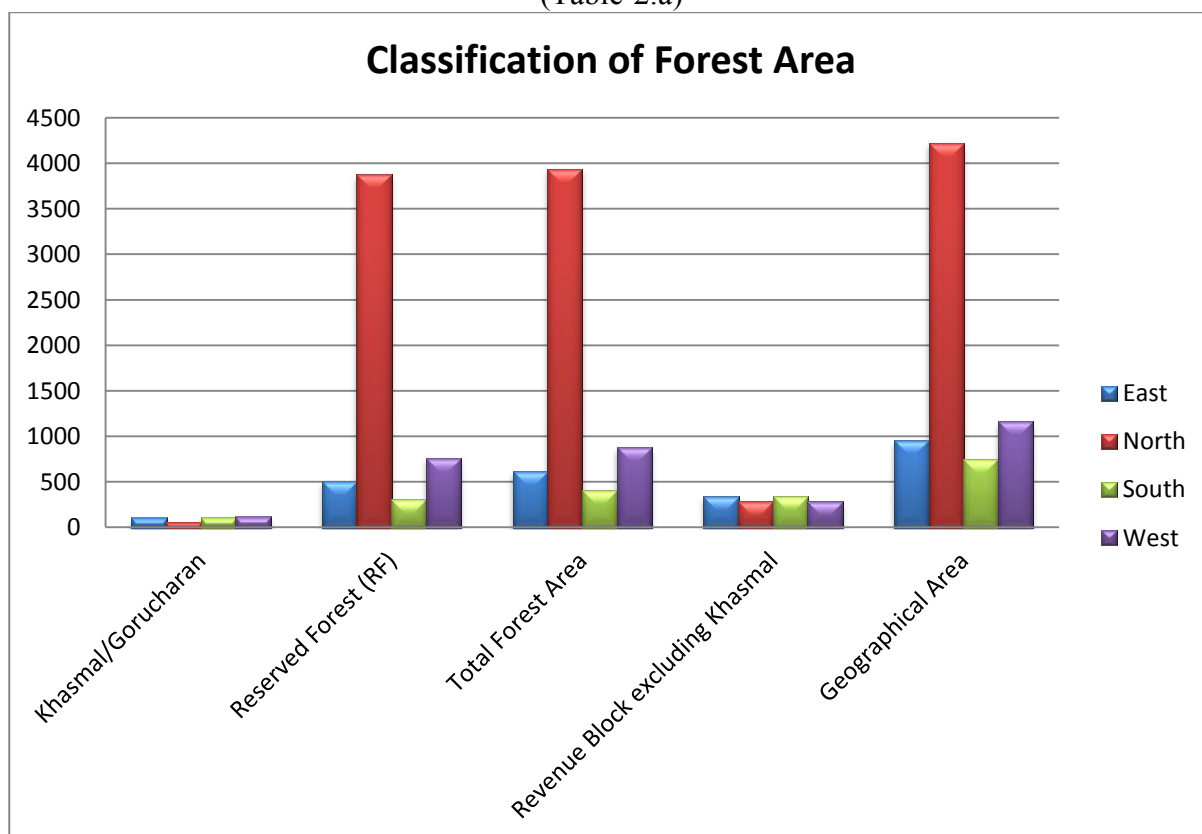
SL. No	CLASS	RESERVE FOREST	REVENUE BLOCK	TOTAL	%OF TOTAL
1.	CROP LAND (TERRACED./SEMI TERRACED)	0.00	604.85	604.85	8.52
2.	FALLOW/ SCRUB IN REVENUE BLOCKS	0.00	155.69	155.69	2.19
3.	SAL DENSE FOREST	5.30	0.77	6.07	0.09
4.	SAL OPEN FOREST	15.93	1.54	70.47	0.25
5.	SAL DEGRADED FOREST	3.32	0.71	4.03	0.06
6.	MIXED DENSE FOREST	464.46	138.88	603.34	8.50
7.	MIXED OPEN FOREST	433.37	333.38	766.75	10.81
8.	MIXED DEGRADED FOREST	194.56	235.06	429.62	6.05
9.	DENSE CONIFER FOREST	351.94	16.14	368.08	5.19
10.	OPEN CONIFER FOREST	340.63	21.55	362.18	5.10
11.	DEGRADED CONIFER FOREST	156.89	16.30	173.19	2.44
12.	OAK-RHODODENDRON FOREST	100.34	26.24	126.58	1.78
13.	SCRUBS IN RESERVE FOREST	101.87	0.00	101.87	1.44
14.	FOREST BLANKS	90.56	0.00	90.56	1.28
15.	ALPINE SCRUB	611.44	27.72	639.16	9.01
16.	ALPINE PASTURES	431.32	0.00	431.32	6.08
17.	ALPINE BARREN	815.80	2.35	818.15	11.53
18.	SNOW	1018.23	5.41	1023.64	14.43
19.	GLACIERS	208.23	0.00	208.23	2.93
20.	LAKES	32.30	0.70	33.00	0.47
21.	RIVERS/MAJOR STREAMS	31.81	32.50	64.31	0.91
22.	DRY RIVER BEDS	31.49	9.10	40.59	0.57
23.	BUILT –UP AREA	0.30	3.24	3.54	0.05
24.	LAND SLIDE AREAS	5.37	5.16	10.53	0.15
25.	MISCELLANEOUS	6.93	6.30	13.23	0.19
	Total	5452.39	1643.59	7095.98	100.00

Classification of Forest Area.

(Table-2)

District	Khasmal/Goucharan	Reserved Forest (RF)	Total Forest Area	Revenue Block excluding Khasmal	Geographical Area
East	105.01	505.50	610.51	343.49	954.00
North	60.20	3880.00	3940.20	285.80	4226.00
South	104.06	304.75	408.81	341.19	750.00
West	119.73	761.75	881.48	284.52	1166.00
Total	389.00	5452.00	5841.00	1255.00	7096.00

(Table-2.a)



Source: FCA Division

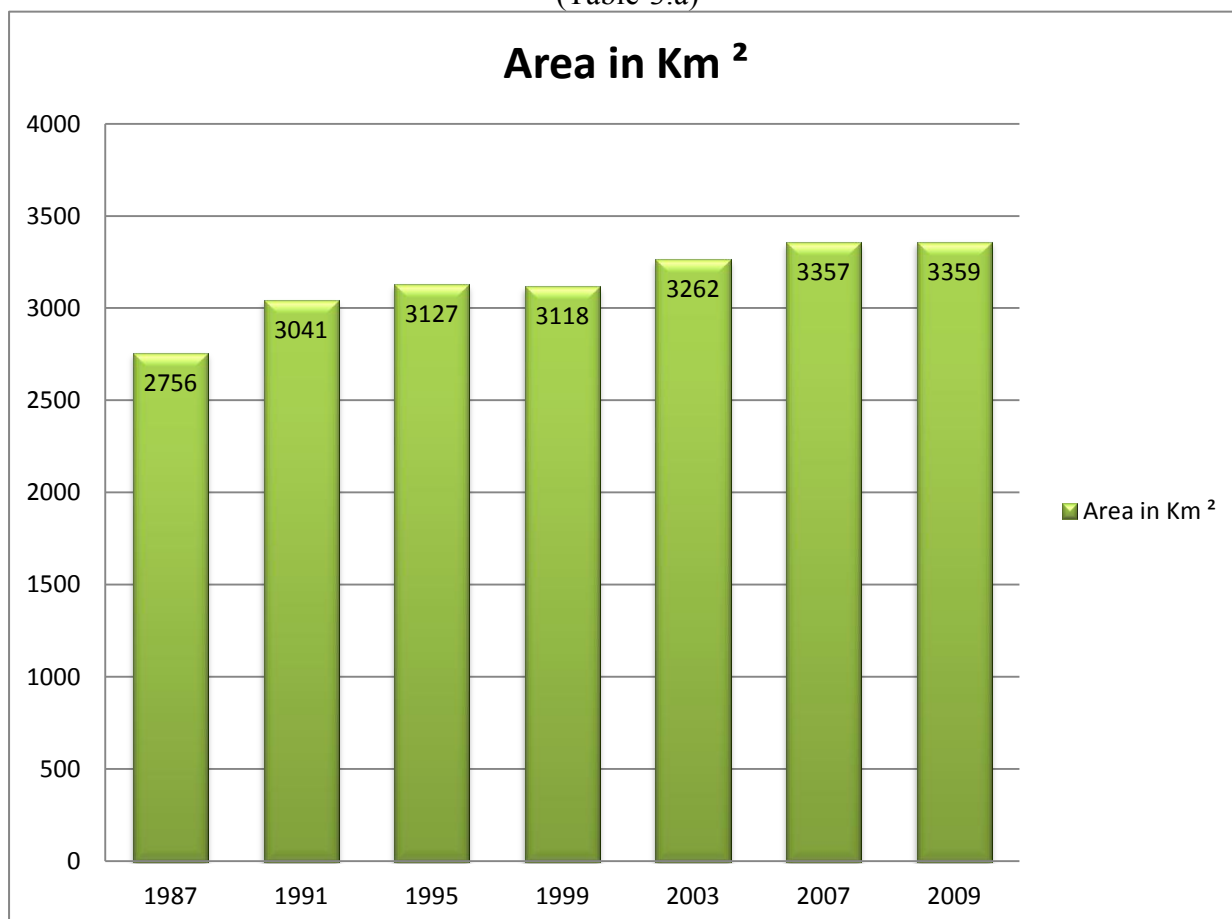
INCREASE IN FOREST COVER

Increase in Forest cover since 1987 in the State

(Table-3)

Forest Cover	Area in Km ²
1987	2756
1991	3041
1995	3127
1999	3118
2003	3262
2007	3357
2009	3359

(Table-3.a)



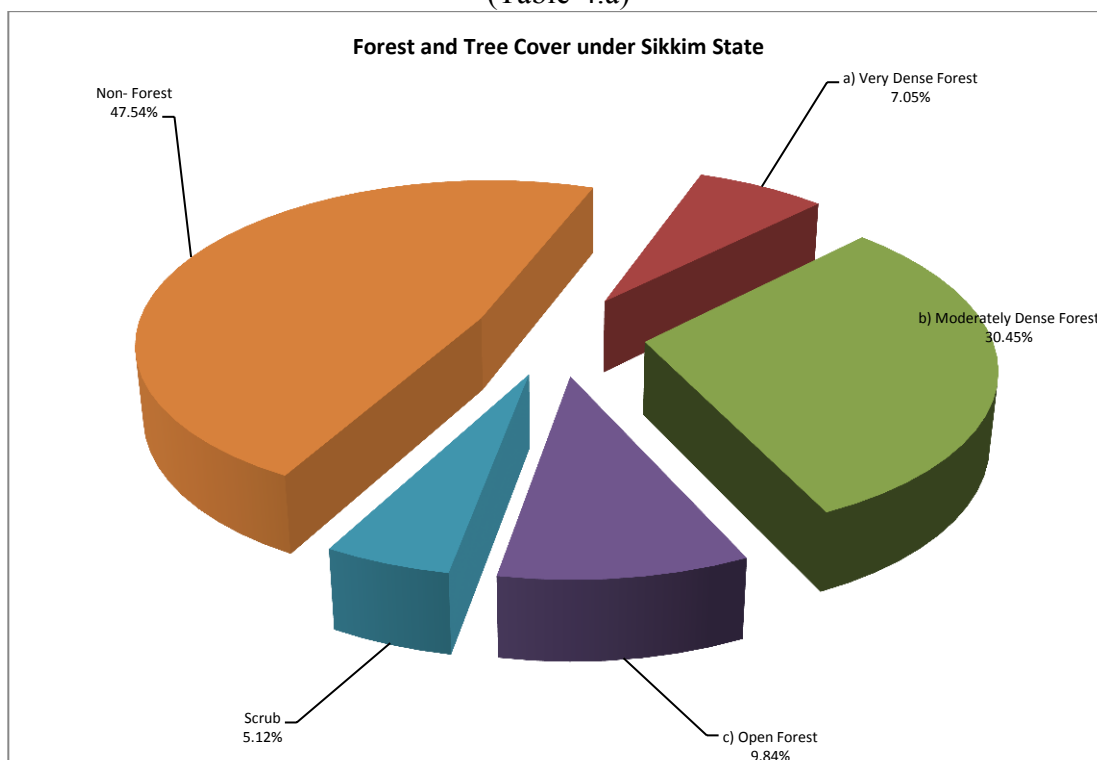
Forest Cover in Different Density Classes in Sikkim

(Table-4)

Class	Forest and Tree Cover under State Sikkim	
	Area (Km ²)	% of Geographical Area
Forest Cover		
a) Very Dense Forest	500	7.05
b) Moderately Dense Forest	2161	30.45
c) Open Forest	698	9.84
Total Forest Cover*	3359	47.34
Scrub	356	5.12
Non- Forest	3381	47.54
Total Geographical Area	7096	100

Source: As per State of Forest Report (SFR) published by Forest Survey of India 2011.

(Table-4.a)



Comparative statement of increase in Forest Cover

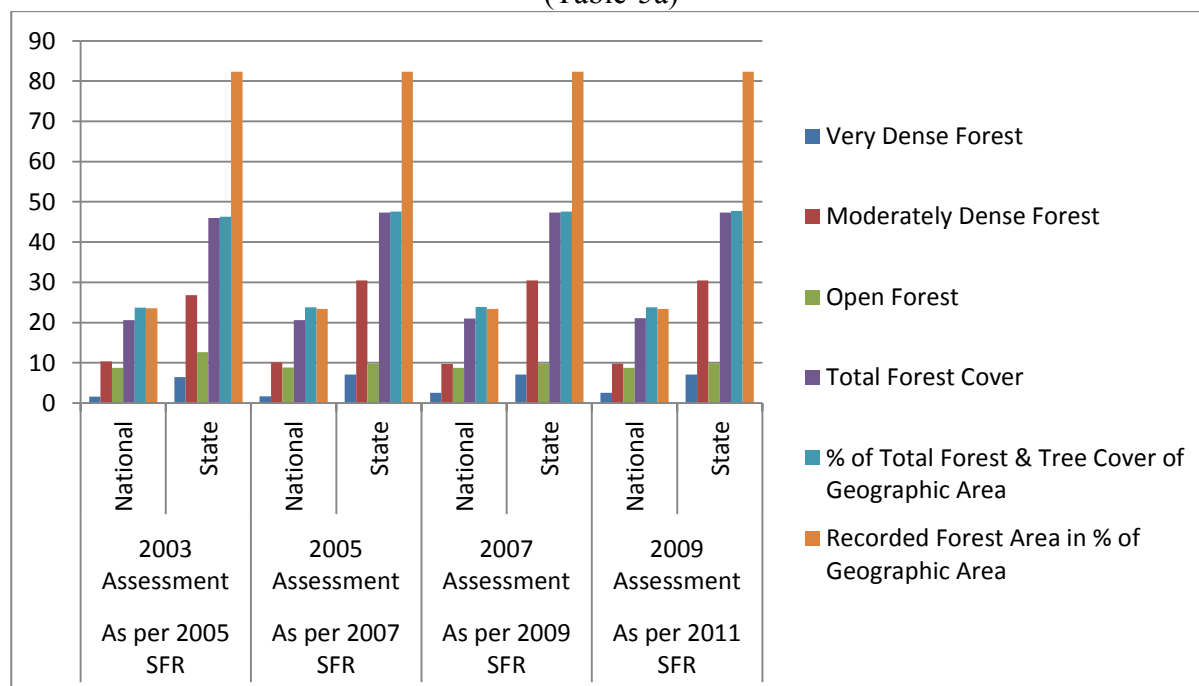
As per State of Forest Report (SFR) published by Forest Survey of India

(Table-5)

	As per 2005 SFR		As per 2007 SFR		As per 2009 SFR		As per 2011 SFR	
	2003 Assessment		2005 Assessment		2007 Assessment		2009 Assessment	
	National	State	National	State	National	State	National	State
Very Dense Forest	1.56	6.454	1.66	7.05	2.54	7.05	2.54	7.05
Moderately Dense Forest	10.32	26.832	10.12	30.45	9.71	30.45	9.76	30.45
Open Forest	8.76	12.683	8.82	9.81	8.77	9.81	8.75	9.84
Total Forest Cover	20.64	45.97	20.60	47.31	21.02	47.31	21.05	47.34
% of Total Forest & Tree Cover of Geographic Area	23.68	46.28	23.81	47.59	23.84	47.59	23.81	47.69
Recorded Forest Area in % of Geographic Area	23.57	82.31	23.41	82.31	23.41	82.31	23.41	82.31

Source: State of Forest Report (SFR) 2005, 2009 & 2011.

(Table-5a)



Chapter -2

MANPOWER

BRIEF WRITE UP ABOUT ADMINISTRATION CELL OF FOREST, ENVIRONMENT & WILDLIFE MANAGEMENT DEPARTMENT

The Administration Cell of the department is headed by Principal Secretary-cum-PCCF followed by Special Secretary, Joint Secretary, Deputy Secretary and Under Secretary. The above officers are supported by Office Superintendent, Head Assistants and numerous other clerical assistants. The main task of Administration Cell is to deal with the personal files of the members of Sikkim State Subordinate Forest Service, Sikkim State Subordinate Ministerial & Executive Service, Sikkim State Subordinate Accounts Service and other such unorganized services associated with the Forest Department. The personal files relate to leave, increment, retirement. Besides those activities the administration cell also deals the matter of promotion, recruitment and training of the employees. Brief descriptions of the achievements during the year reported upon are as follows;

- Promotion of 31 (thirty-one) Head Forest Guards to the post of Block Officer
- Promotion of 36 (thirty-six) Forest Guard to the post of Head Forest Guard
- Appointment of one Block Officer on compassionate ground
- Appointment of 8 (eight) Forest Guards on compassionate ground
- Appointment of 10 (ten) Drivers through direct recruitment
- Appointment of 10 (ten) Peons through direct recruitment
- Regularisation of 2 (two) Drivers from amongst the temporary employees
- Regularisation of 25 (twenty-five) LDCs from amongst the temporary employees
- Regularisation of one Peon from amongst the temporary employees
- Regularisation of one Bearer from amongst the temporary employees
- Clearance of many pending personal files on disciplinary ground
- Clearance of pending files of employees regarding Assured Career Progression Scheme (ACPS)
- 4 (four) MR employees brought into work-charged establishment
- Conducted two departmental co-ordination meeting
- And such other works comes under Administrative Cell.

MAN POWER: (2011-12)

(Table-1)

SL.NO.		DESIGNATION	IN POSITION	
I	IFS CADRE			
	01	Advisor	Nil	
	02	PCCF-cum-Pr. Secretary	01	
	03	P.C.C.F-cum-CWLW	01	
	04	P.C.C.F., JICA	01	
	05	Chief Conservator of Forest	02	
	06	Conservator of Forest	05	
	07	Deputy Conservator of Forest	05	
	08	Additional Directors	02	
	09	IFS Probationers	02	
	10	On Higher Study	-	
	11	On Central Deputation	-	
	12	On State Deputation	08	
A. TOTAL IFS (GAZETTED)			27	
II	SFS CADRE			
	01	Principal Director	01	
	02	Director	01	
	03	Additional Directors	01	
	04	Joint Directors	06	
	05	Deputy Conservators	24	
	06	Assistant Conservators	71	
	A. Gazetted			104
	06	Range Officer	75	
	07	Block Officer	124	
	08	Head Forest Guard	138	
	09	Forest Guard	200	
	B. Non-Gazetted			537
	Total (A+B)			104+537 = 641
III	SERICULTURE DIRECTORATE			
	01	Principal Director	01	
	02	Additional Director	01	
	03	Deputy Director	01	
	04	Assistant Director	02	
	A. Gazetted			05
	04	Sericulture Range Officer	01	
	05	Sericulture Block Officer	01	
	B. Non-Gazetted			02
	Total (A+B)			5+2 = 7
IV	STATISTICAL SERVICE			
	01	Joint Director	01	
	02	Deputy Director	01	
	03	Assistant Director	01	

	A. Gazetted	03
	04 Statistical Officer	06
	06 Statistical Inspector	Nil
	07 Statistical Investigator	01
	B. Non-Gazetted	07
	Total (A+B)	3+7=10
V	FINANCE AND ACCOUNTS SERVICE	
	01 Additional Director	01
	02 Chief Account Officer	01
	03 Sr. Accounts Officer	02
	A. Gazetted	03
	04 Senior Accountant	05
	05 Accountant	10
	06 Junior Accountant	13
	07 Accounts Clerk	08
	B. Non-Gazetted	36
VI	STATE CIVIL SERVICE	03+36=39
	01 Special Secretary	01
	02 Joint Secretary	01
	03 Deputy Secretary	01
	04 Under Secretary	01
	A. Gazetted	04
	04 Office Superintendent	05
	05 Head Assistant	12
	06 Upper Division Clerk	23
	07 Lower Division Clerk	56
	B. Non-Gazetted	96
	Total (A+B)	4+96=100
VII	OTHERS	
	01 Principal Scientist	01
	02 Principal/Chief Research Officer	01
	03 Scientist „B“	01
	04 Assistant Scientific Officer	01
	05 O.S.D.	01
	06 Assistant engineer (Civil)	01
	07 Assistant Engineer (Environment)	01
	A. Gazetted	07
	08 Senior Technical Assistant	02
	09 Cartographer	01
	10 Surveyor	01
	11 Assistant Surveyor	02
	12 Draftsmen	03
	13 Tracer	01
	14 Junior Engineer (Civil)	02
	15 Tally Clerk	01
	16 Sub-Inspector Wireless	01

	17	Supervisor	03 (W/C)
	18	Junior Lab Assistant	01
	19	Bearer	01
	20	Chowkidar	22 + 4 (W/C)
	21	Cook	01
	22	Peon	63 + 1 (W/C)
	23	Mali	18
	24	Driver	64
	24	Pipe Fitter	01
	B. Non-Gazetted		183+8(W/C)= 191
	Total (Other A+B)		7+183+8(W/C)=191
VIII	STENOGRAPHER SERVICE		
	01	Principal Private Secretary	01
	02	Senior Private Secretary	01
	03	Private Secretary	05
	A. Gazetted		07
	04	Stenographer	04
	B. Non-Gazetted		04
	Total - (A+B)		07+04=11

ABSTRACT:

(Table-2)

SL.NO.	PARTICULARS	IN POSITION
1	Total Gazetted Officer	160
2	Total Non-Gazetted Employees	865
3	Work-Charged Employees	08
4	Total	1033

LIST OF FRESH RECRUITMENT DURING 2011-12

(Table-3)

SL.NO.	NAME OF POST	NUMBER
1	IFS/SFS – A.C.F.	2
2	B.O.	1
3	L.D.C.	28
4	F.G.	8
5	Peon	11
6	Chowkidar	-
7	Bearer	1
8	Driver	12
	Grand Total	63

Chapter-3**Statement of revenues realised during last eleven years.**

(Table – 1)

Sl.No.	Financial Year	Estimated (in lakhs)	Realised (in lakhs)	Percentage	Remarks
1	2001-2002	200.00	664.77	332.39	Excess 232.39 %
2	2002-2003	438.00	7129.72	164.32	Excess 64.32 %
3	2003-2004	550.00	723.40	131.53	Excess 31.53 %
4	2004-2005	550.00	787.45	143.17	Excess 43.17 %
5	2005-2006	700.00	817.66	11.81	Excess 16.81 %
6	2006-2007	800.00	802.00	100.25	Excess 0.25%
7	2007-2008	700.50	800.26	114.24	Excess 14.24%
8	2008-2009	800.00	848.09	106.01	Excess 6.01%
9	2009-2010	1000.00	879.00	87.90	Shortfall 12.1%
10	2010-2011	1100.00	1115.17	101.37	Excess 1.37%
11	2011-2012	1100.00	1253.05	13.90	Excess 13.90%

STATEMENT OF EXPENDITURE

(Table -2)

SECTORS	ACTUAL EXPENDITURE						
	STATE PLAN	C.S.S		FCA	NEC	EAP	N-PLAN
		100 %	90:10%				
Soil and water conservation							
2007-08	97.07	NIL					149.04
2008-09	90.04	358.14					173.37
2009-10	101.35	NIL					289.05
2010-11		9841					286.7
2011-12	76.06						260.52
Forestry & Wildlife							
2007-08	1256.45	342.61					1273.47
2008-09	1251.20	284.50					1442.81
2009-10	1771.84	282.29					2539.46
2010-11	2851.08	297.82					2477.91
2011-12	3145.57	177.38		501.49	88.13		2396.65
Ecology & Environment							
2007-08	52.28	34.35					-
2008-09	52.53	46.98					24.23
2009-10	54.44	80.66					235.20
2010-11	20.27	24.51					14.62
2011-12	35.34	88.13					-

Chapter-4**MINOR FOREST PRODUCE:****STATE AND DISTRICTWISE PRODUCTION PRICE AND VALUE OF FOREST PRODUCT
FROM 2009-10 TO 2011-12**

(Table-1)

SN.	Particulars	Rate	2009-10		2010-11		2011-12	
			Production	Value	Production	Value	Production	Value
1	Other Forest Produce (non-medicinal plants)							
	a. Mushroom	80/- kg/	1200.00	0.96	2600.00	2.08	2900.00	2.32
	b. Sishnu	10/-bundle	1600.00	0.16	10300.00	1.03	10050.00	1.00
	c. Ningro	10/-bundle	1100.00	0.11	30000.00	3.00	37000.00	3.70
	d. Canes	10/-bundle	290.00	0.15	8000.00	0.80	10500.00	1.05
	e. Bamboo Shoot	40/-kg	1050.00	0.42	18500.00	7.40	18600.00	7.44
	f. Nakima	200/-kg	500.00	0.10	850.00	1.70	1050.00	2.10
	g. Thotney	10/-bundle	3000.00	0.30	8500.00	0.85	80500.00	0.85
	h. Vakimlo	50/-kg	0.00	0.00	65.00	0.03	80.00	0.04
	i. Bokey Timbur	40/-kg	0.00	0.00	1700.00	0.68	1700.00	0.68
	j. Okhar	30/-kg	3000.00	0.72	5700.00	1.71	5600.00	1.68
	k. Lapsi	20/-kg	1500.00	0.30	11390.00	2.28	11140.00	2.23
	l. Siltimbur	40/-kg	0.00	0.00	160.00	0.06	145.00	0.05
	m. Amliso	20/-kg	0.00	0.00	14000.00	2.80	15600.00	3.12
	Sub-Total			3.22		24.42		26.26
2	Silk (Coocon)							
	a. Mulberry	Rs 150/kg	221.00	0.33	312.00	0.46	384.00	0.65
	b. Muga	Rs. 1 per Cocoon	2495.00	0.02	12108.00	0.12	27364.00	0.27
	c. Eri	Rs. 150/-kg	186.00	0.27	214.00	0.32	200.00	0.34
	Total			28.10		87.23		1.26
3	Medicinal Plants Herbs	Rate	Production	Value	Production	Value	Production	Value
	a. Aconitum heterophyllum	Rs. 400/-kg dry	500.00	2.00	45.00	0.18	75.00	0.30
	b. Aconitum ferox	Rs. 400/-kg dry	1200.00	4.80	45.00	0.18	75.00	0.30
	c. Picrorhiza	Rs. 350/-kg dry	30.00	0.11	45.00	0.16	75.00	0.26
	d. Nardostachys jatamnsi	Rs. 1500/-kg dry	25.00	0.13	33.00	0.50	50.00	0.75
	e. Gloriosa superba	Rs. 672/-kg	900.00	6.05	1900.00	1.28	2000.00	13.44
	f. Emblica officinalis	Rs. 20/-kg	1950.00	0.39	3200.00	0.64	3200.00	0.64
	g. Rubia cordifolia	Rs. 100/-kg	950.00	0.95				

3	Medicinal Plants Herbs	Rate	Production	Value	Production	Value	Production	Value
	h. Terminalia chebula	Rs.40/-kg	250.00	0.10	140.00	0.06	130.00	0.05
	i. Terminalia bellerica	Rs.40/-kg	290.00	0.12	105.00	0.40	95.00	0.04
	j. Azadirachta indica	Rs.10/-bundle	100.00	0.10	700.00	0.07	900.00	0.09
	k. Juniper	Rs.80/-kg	1150.00	0.92	2200.00	1.76	2200.00	1.76
	l. Rhododendron anthopogan	Rs. 100/-kg	900.00	0.90	610.00	0.61	710.00	0.71
	m.Swertia chirata	Rs.175/-kg	2400.00	4.20	550.00	0.96	630.00	1.10
	n. Chimping heracium wallichi	Rs.10/-bundle	600.00	0.06	950.00	0.10	1250.00	0.13
	o. Orchis latifolia	Rs.2000/-kg	9.50	0.19	7.00	0.14	11.00	0.22
	p. Stevia revaudiana		45.00					
		Total		21.02		7.04		19.79
		Grand Total-		63.27		138.07		76.94

Chapter-5**I- FOREST DEVELOPMENT AGENCIES****WORK CARRIED OUT UNDER FOREST DEVELOPMENT AGENCIES,
TERRITORIAL CIRCLE AS ON 31.03.2012**

(Table-1)

Sl. No.	Name of FDA	Project Period	Total Outlay (Rs.in lakhs)	Total Physical Target (in hac.)	Fund released till date (Rs.in lakhs)	Fund utilized (Rs.in lakhs)	Physical Achievement (area in hac.)
1.	North Sikkim FDA	2011-12	204.46	265	191.43	191.43	265
2.	East Sikkim FDA	-do-	191.32	225	161.47	115.39	225
3.	South Sikkim FDA	-do-	118.52	170	118.52	118.52	170
4.	West Sikkim FDA	-do-	135.95	160	113.51	113.51	160
	Total		650.46	820	584.93	538.85	820

**NO. OF HOUSEHOLDS COVERED UNDER JFMCs
AS ON 31.03.2012**

(Table-2)

Sl. No.	Name of FDA	No. of JFM Cs	Name of Household in Project Village			Name of Household Directly Benefiting								
						From EPA Activities			From Silvicultural Works			From Wages		
			SC	ST	Total	SC	ST	Total	SC	ST	Total	SC	ST	Total
1	North Sikkim FDA	32	28	1673	4435	28	645	875	34	534	558	22	534	895
2	East Sikkim FDA	51	656	340	6230	230	200	430	67	35	421	528	280	2680
3	South Sikkim FDA	39	1767	4829	169245	165	282	274	153	597	1826	680	9812	5680
4	West Sikkim FDA	40	589	2312	9598	133	241	374	98	382	480	254	743	997
	TOTAL	162	3040	9154	189508	556	1368	1953	352	1548	3285	1484	11369	10252

**WORK CARRIED OUT UNDER FOREST DEVELOPMENT AGENCIES, WILDLIFE
CIRCLE AS ON 31.03.2012**

(Table-3)

Sl. No.	Name of FDA	Project Period	Total Outlay (Rs.in lakhs)	Total Physical Target (in hac.)	Fund released till date (Rs.in lakhs)	Fund utilized (Rs.in lakhs)	Physical Achievement (Area in ha.)
1	North Sikkim FDA	2011-12	24.82	28	24.82	24.82	28
2	East Sikkim FDA	-do-	122.97	232	122.97	122.97	232
3	South Sikkim FDA	-do-	53.18	145	53.18	53.18	145
4	West Sikkim FDA	-do-	102.30	122	102.30	102.30	122
5.	KNP FDA	-do-	107.95	192	107.95	107.95	192
	Total		411.22	719	411.22	411.22	719

**NO. OF HOUSEHOLD COVERED UNDER ECO-DEVELOPMENT COMMITTEES
AS ON 31.03.2012**

(Table-4)

Sl. No.	Name of FDA	No. of ED Cs	Name of Household in Project Village			Name of Household Directly Benefiting								
						From EPA Activities			From Silvicultural Works			From Wages		
			SC	ST	Total	SC	ST	Total	SC	ST	Total	SC	ST	Total
1	North Sikkim FDA	1	0	66	66	0	20	20	0	21	21	0	25	25
2	East Sikkim FDA	3	405	2371	2776	80	180	260	280	1300	1580	250	850	1100
3	South Sikkim FDA	2	192	1516	1708	7	372	379	280	1300	1580	250	850	1100
4	West Sikkim FDA	1	337	1771	2108	25	410	435	25	1520	1545	15	44	59
	Total	7	934	5724	6658	112	982	1094	585	4141	4726	515	1769	2284

II-AFFORESTATION UNDER TWENTY POINT PROGRAMME

The 20 point programme (TPP) was launched by the Government of India in the year 1975 and was first revised in 1982, 1986 and recently in 2006-07 with a view of setting up effective monitoring system and thus strengthening the planning & implementation machinery. The restructured TPP -2006 consists of 20 Point & 66 monitorable items where under point No.15 pertains to Environment Protection & Afforestation and covers all the plantation works carried out under different programmes & schemes. Though the primary responsibility of monitoring the individual programme/scheme lies with the Central Ministry / State Government, the Ministry of Statistics & Programme Implementation, will monitor the programme in totality.

(Table-5)

15 a – Area covered under plantation (Government land)					15 b- Seedling planted (Private land). (in lakhs)		
Sl.No	Year	Target	Achievement (ha)	% Ach.	Target	Achievement	% Ach.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
01	1971-80		7463.00			6.59	
02	1980-85		3332.65			3.38	
03	1985-86		1666.25			2.79	
04	1986-87		1470.00			2.45	
05	1987-88		1511.25			2.52	
06	1988-89		1616.25			2.69	
07	1989-90		1852.50			3.09	
08	1990-91		3416.25			5.69	
09	1991-92		4622.47			7.90	
10	1992-93		5484.00			9.14	
11	1993-94		5786.70			9.64	
12	1994-95		6900.00			11.50	
13	1995-96		7189.50			11.99	
14	1996-97		7500.00			12.50	
15	1997-98		6356.56			13.05	
16	1998-90		7537.00			2.50	
17	1999-00		6923.00			20.91	
18	2000-01		8048.00			15.15	
19	2001-02	12000	6217.00	51.81	22	12.42	56.45
20	2002-03	7500	3696.00	49.28	22	14.73	66.95
21	2003-04	7500	6125.19	81.67	22	8.66	39.36
22	2004-05	8000	6191.00	77.39	22	10.32	46.91
23	2005-06	12000	8012.87	66.77	15	6.13	40.86
24	2006-07	15000	3550.26	23.66	15	9.75	65.00
25	2007-08*	12000	3456.73	28.80	*78	30.84	39.54
26	2008-09	12000	3862.37	32.2	78	23.04	29.55
27	2009-10	25000	8006.85	32.02	162.50	48.61	29.54
28	2010-11	5000	2734.07	54.68	32.50	55.68	105.60
29	2011-12	6000	7454.76	124	39	5033470	129.06%

STATE – SIKKIM**Achievement under P.M,s 20 Point Programme – 2011 -2012.****51 – b Seedlings Planted.**

(Table-6)

Afforestation Agency	Implementing Circle/Divs.	Target	Achievement (in No.)	% of Ach.
A. By Forest Department		39 Lakhs.		129.06%
1.State Green Mission	Territorial		487980	
2.Ten Minutes to Earth	Territorial		121000	
3.Catchment Area Treatment (Plan)	Social Forestry		1014131	
4.Conservation & Management of Wetland Complex	Land Use & Environment		12000	
5.FDA (T)	Territorial		652630	
6.FDA (WL)	Wildlife		389828	
7.FDA (KNP)	Khangchendzonga National Park		165150	
8.Bio-diversity Conservation (KNP)	Khangchendzonga National Park		68000	
9. Sikkim Ecology Fund & Env. Cess	Social Forestry		132000	
10.Bio-diversity Conservation for habitat improvement under CAMPA	Wildlife		26081	
11.Integrated Watershed Management Programme (IWMP)	Social Forestry		798000	
12.13 th . Finance Commission	Land Use & Env.(N), Working Plan		121584	
13.Bamboo Mission	Social Forestry		325000	
14.JICA Assisted Sikkim Bio-diversity Conservation & Forest Management	JICA (SBFP)		58120	
15. River Valley Project.	Social Forestry		154000	
16.State Compensatory Afforestation	Forest (Conservation) Act	42501		
	Total:		4568005	
B. By other Department				
1.RMDD			465465	
	Total:		465465	
	A+B		5033470	

Achievement under P.M,s 20 Point Programme – 2011 -2012.

51 – a Area Covered under plantation.

(Table-7)

Afforestation Agency	Implementing Circle/Divs.	Target	Achievement (in ha.)	% of Ach.
A. By Forest Department				
1.State Green Mission	Territorial	6000 Ha.	750.86	124 %
2.Ten Minutes to Earth	Territorial		186.60	
3.Catchment Area Treatment (Plan)	Social Forestry		1280.00	
4.Conservation & Management of Wetland Complex	Land Use & Environment		30.00	
5.FDA (T)	Territorial		769.00	
6.FDA (WL)	Wildlife		587.00	
7.FDA (KNP)	Khangchendzonga National Park		202.00	
8.Bio-diversity Conservation (KNP)	Khangchendzonga National Park		50.00	
9. Sikkim Ecology Fund & Env. Cess	Social Forestry		200.00	
10.Bio-diversity Conservation for habitat improvement under CAMPA	Wildlife		54.200	
11.Integrated Watershed Management Programme (IWMP)	Social Forestry		1227.00	
12.13 th . Finance Commission	Land Use & Env.(N), Working Plan		171.00	
13.Bamboo Mission	Social Forestry		924.00	
14.JICA Assisted Sikkim Bio-diversity Conservation & Forest Management	JICA (SBFP)		100.00	
15. River Valley Project.	Social Forestry		140.00	
16.State Compensatory Afforestation	Forest (Conservation) Act		65.00	
	Total:		6738.66	
B. By other Department				
1.RMDD			716.1	
	Total:		716.1	
	A+B		7454.76 Ha.	

Chapter-6

A-State Plan

I- STATE GREEN MISSION

A Unique Innovative Environment Programme Launched in Sikkim

The Government of Sikkim launched a unique and innovative programme called “State Green Mission” with the view to raise avenue plantation along the roads and beautification of all vacant and waste lands to further reinforce wide spread recognition of Sikkim being a Green State. Hence the State Government has taken initiative to generate Avenue plantation in massive scale by using all the manpower in various departments in the Government, and other nature lovers from the Government and Non Governmental Organizations including different Eco clubs and Self Help groups. Accordingly Government had taken out a notification vide no 15/Home/06 dated 24/2/2006 in this regard.

Aims and Objectives

The major objectives of the programme are to create green belt and avenues for meeting aesthetic recreational needs of the people and beautify the areas for tourist attraction. This programme is expected to provide fringe benefits like reduction in the surface run-off discharge and checking erosion in the downhill side and will also create a store house of genetic diversity by planting all the indigenous trees, shrubs, herbs, climbers, creepers, conifers and green foliages including fruits and medicinal plants.

Total saplings (in lakhs) planted under State Green Mission (updated)

(Table-1)

Sl.No.	District	Phase-I 2006-07	Phase-II 2007-08	Phase-III 2008-09	Phase-IV 2009-10	Phase-V 2010-2011	Phase-VI 2011-12	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	East	2.66	3.49	0.10	1.51	0.035	4.01	11.81
2	South	1.19	3.51	0.33	0.23		0.66	5.92
3	West	1.58	1.83	1.45	4.91		0.11	9.88
4	North	0.33	2.31	0.52	0.96		0.08	4.20
Total		5.76	11.14	2.40	7.66	0.035	4.86	31.81

(Table-2)

Notional Area Covered @ 650 seedlings/hac.						
2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	Total
886 ha.	1713 ha.	1018 ha.	558 ha.	6 ha.	747 ha.	4928 ha.

Impact of Green Mission: - Green Roads



Ten Minutes to Earth - plantation drive



II-10 MINUTES TO EARTH

Sikkim's Earth Hour planting for the planet through "Ten Minutes to Earth" supporting the United Nation Environment Programme (UNEP) worldwide Tree Planting Campaign "Plant for Planet: Billion Tree Campaign", the Government of Sikkim initiated this programme in the year 2009 & since then the State has been observing this day every year on 25th June.

Total No. of Saplings planted during Ten Minutes to Earth programme.

(Table-3)

Sl. No.	Name of District	No. of Saplings Planted on 15/07/2009	No. of Saplings Planted on 25/06/2010	No. of Saplings Planted on 25/06/2011	No. of Saplings Planted on 25/06/2012	Total
1	North	60465	54104	9224	11041	134834
2	East	203740	185000	64277	66422	519439
3	West	186039	115586	21895	28305	351825
4	South	160450	117341	18472	15232	311495
	Total	610694	472031	113868	121000	1317593

(Table-4)

Notional Area Covered under Ten Minutes to Earth Programme (@ 650 seeding/ha. as per TPP restructure programme)				
2009	2010	2011	2012	Total
939.52 ha.	726.20 ha.	175.18 ha.	186.15 ha.	2027.06 ha.

III-Aesthetic Forestry

The Aesthetic Forestry Programme initiated since 1992 for maintenance its aesthetic valued spots like Water garden, 32th mile Picnic spot, Namprikdang Park, DAC Garden in South, West and North District. Daily wages Labours has been engaged for its regular maintenance of those aesthetic spots. The annual budget for the year 2010-11 was Rs 16.26 Lakhs with deficit to Rs 50,000, and it was Rs 17.24 Lakhs for the year 2011-12.

Plantation carried out under Aesthetic Forestry

(Table-5)

2007-2008		2008-2009		2009-2010		2010-2011		2011-2012	
Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
31 hac.		31 hac.		30 hac.		30 hac.		31 hac.	

B-EXTERNALLY AIDED PROJECTS

SIKKIM BIODIVERSITY CONSERVATION AND FOREST MANAGEMENT PROJECT (SBFP) ASSISTED BY JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

Government of Japan through Japan International Cooperation Agency (JICA) is providing financial assistance for Sikkim Biodiversity Conservation and Forest Management Project (SBFP) that is being implemented by the Forest Environment and Wildlife Management Department, Government of Sikkim from the financial year 2010-11.

The SBFP programme assisted by JICA has been prepared keeping in consideration the requirements of the State of Sikkim. It is a project aimed to further strengthen, improve and create the existing policies, programmes and infrastructure development of the Department of Forest, Environment & Wildlife. The program listed below is a brief point wise reference of the activities that will be covered under the SBFP Project.

The main components of this project are:-

1. Joint Forest Management

Under this component JFMCs/EDCs/PSS will be supported. Some of these already exist; others will be established as required. Over a period of ten years, the project plans to work in 180 villages. Entry point activities (EPAs) will be undertaken to gain the confidence of the committees. Activities will be identified by villagers themselves during the preparation of micro-plans in each village. Self help groups will also be created which will be able to access loans for income generation activities.

Activities to be undertaken under this component are:-

- i) Capacity Building of Community Organizers and Micro-planning Activities in JFMs/EDCs/PSS.
- ii) Development of JFM and Community Organisation Manuals.
- iii) Training Need Assessment of JFMCs/EDCs.
- iv) Management of JFMC/EDC/PSS in JFM.
- v) Micro-planning, Village and Forest Development Planning initiated.
- vi) Plantation, Afforestation and Creation of Nurseries.

2. Biodiversity Conservation

Conserving the rich heritage of biological diversity is the focus of this project component. This will include disseminating biodiversity information to raise public awareness, and establishing and improving the zoning and management of reserved forests and protected areas. Activities will be supported by research, ex-situ conservation and extension. Activities to be undertaken under this component are:-

- i) The Sikkim Biodiversity Action Plan (SBAP) has been revised and newly formulated through assistance from the Project.
- ii) Creation of Butterfly Park at Rangrang.
- iii) Proposals to designate Wetlands under Ramsar Convention.
- iv) Assistance for revision of Management Plans for a Bird Sanctuary and Maenam Wildlife Sanctuary in the South District.
- v) Process for inclusion of Khangchendzonga National Park (KNP) as a World Heritage Site initiated.

3. **Ecotourism**

A Five-Year National and International Marketing strategy will be developed under the project to guide the Ecotourism Marketing Cell (EMC) in domestic and international markets, and a funding mechanism for sustainable ecotourism and livelihood development will be developed. Emphasis will be given to developing wildlife viewing areas as a means of attracting nature eco-tourists; trekking trails with campsites, the introduction of environmentally friendly waste collection and disposal systems at and around the prioritized villages are planned. Nature Interpretation Centres at areas of touristic interest are also planned. Activities undertaken under this component are:-

- i) Ecotourism Policy notified.
- ii) Ecotourism Marketing Cell was set up.
- iii) Survey for future potential ecotourism in Sikkim.
- iv) Draft National and International Ecotourism Marketing Strategies is being developed.
- v) Villages for ecotourism interventions selected.
- vi) Identification of Trekking Routes, Campsites and development of Wildlife Watching Areas.
- vii) Development of Ecotourism Facilities and Forest Rest House upgradation to promote ecotourism.

4. **Organisational Developmental Activities Envisaged**

The success of this project will be based on the foundation of a strong and capable host organisation, for which capacity building is necessary. This will promote prompt public service delivery, bring transparency and help develop and disseminate correct information to visitors. Activities undertaken under this component are:-

- i) Progress made Biodiversity Training Institute at Pangthang.
- ii) Construction and Development works, Officer's Quarters, Range & Block Offices and Check post.

Total Financial Achievement of 11th FYP (2010-2012)

(Table-6)

Sl. No.	Financial Year	Financial Target	Achievement	Total Financial Achievement
1.	2010-2011	20 Crore	1.43 Crore	7%
2.	2011-2012	60 Crore	9.13 Crore	15%

C-Centrally Sponsored Schemes**I- INTENSIFICATION OF FOREST MANAGEMENT SCHEME.**

The Intensification of Forest Management scheme is a revised version of Integrated Forest Protection Scheme that was in operation during the 10th Five Year Plan and has been allowed to continue in the 11th Five Year Plan as well. The CSS: Intensification of Forest Management Scheme is aimed at integrated development and protection of Forests. Under the CSS: Intensification of Forest Management Scheme, Forest Protection Division, Ministry of Environment and Forests, Government of India conveyed the sanction of work programme for the financial year 2011-12, at a total cost of Rs. 164.24 (Rupees one hundred sixty four lakhs twenty four thousand only) on 90%: 10% cost sharing basis vide sanction order no. 3-7/2007-FPD dated 19.07.2011.

(Table-7)

S. No.	Items	All amount in Rs. in lakhs				
		Unit	Unit rate	Physical Target	Amount	Remarks
Component (A): Forest Fire Control & Management						
1	Fire line					
	(a) Fire line maintenance (km)	km	0.0260	100	2.60	
	(b) Engagement of Firewatchers @ Rs. 130/ day for 4 months	Man days	0.156	30	4.68	
	(c) Water Storage Tanks (in east, west and south Sikkim.	Man days	1.5000	6	9.00	
2	Fire fighting equipments					
	(a) Strengthening of Fire Control Rooms	LS	2.00	1	2.00	
	(b) Procurement of power sprayers/portable pumps	LS	0.500	5	2.50	
	(c) Procurement of blower, fire assistant coats, Boots, Fire beaters, water bottles, torch lights roe, First aid kit etc	LS	0.060	12	0.72	
	(d) Establishment of toll free number for forest fire and other offences	LS	1.000	1	1.00	
	(e) Procurement of fire fighting mobile van/double cabin utility van for front line staff	LS	7.000	2	14.00	Subject to approval from Department of Expenditure, Ministry of Finance, GOI
3	(a) Training, Publicity & awareness					
	(b) Awareness camps @ Rs. 30,000/camp	LS	0.300	40	12.00	

	(c) Fire mapping/monitoring and evaluation (Crisis Management Plan)	Nos.	0.500	4	2.00	
	Component Total (A):				50.50	
Component (B): Strengthening of Infrastructure for Forest Protection						
1	Buildings					
	(a) Range Officers Office-cum-Quarter (Plinth Area: 1000 sq. ft.) + Site Development Charges (Melli, Singtam)	Nos.	10.00	2	20.00	
	(b) Block Officers Office-cum-Quarter (Plinth Area: 700 sq. ft.) + Site Development Charges in Lachung and Lingmoo	Nos.	7.00	1	7.00	
	(c) Forest Guards Quarters (Plinth Area: 500 sq. ft.) + Site Development Charges (Namthang, Saffo, Namchi)	Nos.	5.00	3	15.00	
	(d) Forest check-post cum Forest Guard quarter (1000 sq. ft.) two storied + Site Development Charges at Rangpo (2 Rooms Barrack)	Nos.	10.00	1	10.00	
	Component Total (B):				52.00	
Component (C): Working Plan / Survey & Demarcation						
1	(a) Erection of Forest boundary pillars (Low Altitude) (No)	Nos.	0.050	600	30.00	
	(b) Erection of Forest boundary pillars (High Altitude) (No)	Nos.	0.067	30	2.01	
2	Preservation plots					
	(a) Upgradation and strengthening of Permanent Preservation/Experimental plot (Low Altitude)	Nos.	2.000	5	10.00	
	Component Total (C):				42.01	
	Project Cost (A+B+C)				144.51	
	Contingency (5%)				7.23	
	Grand Total				151.74	
(New Component)						
Component (D): Protection and Conservation of Sacred Grooves						
1	Improvement of Works					-
	(a) Laying of eco-trails for education purposes	km	LS	LS		6.5
	(b) Protection measures	LS	LS	LS		2.00
2	Research/studies	LS	LS	LS		1.00
	Component Total (D):					9.50

Component (E): Conservation and Restoration of Unique Vegetation and Eco-Systems						
1	Survey/Inventory	LS	LS	LS	1.50	Procurement of bikes is subject to approval from Department of Expenditure, Ministry of Finance, GOI
2	Procurement of motor bikes 120cc		0.500	1	0.50	
3	Research/studies	LS	0.500	2	1.00	
Component Total (E):					3.00	
New Component Total					12.50	
Grand Total		164.24				

Central share (90%)	:	147.82	lakhs
State share (10%)	:	16.42	lakhs
Total	:	164.24	lakhs

Forest Protection Division, Ministry of Environment and Forests, Government of India has further conveyed the sanction of additional work programme for the financial year 2011-12, at a total cost of Rs. 171.63 (Rupees one hundred seventy one lakhs sixty three thousand only) on 90%: 10% cost sharing basis vide the sanction order no. 3-7/2007-FPD dated 17.11.2011 as per the detailed work programme given below.

(Table-8)

S. No.	Items	Unit	Unit rate	Physical Target	Amount
Component (A): Forest Fire control & Management					
1	Procurement of wireless communication system and accessories	LS	1.000	20	20.00
2	Fire Station at Singtam	1	25.000	25	25.00
3	Control Burning	Km	0.018	125	2.25
Component Total (A):					47.25
Component (B) : Strengthening of infrastructure for Forest Protection					
1	Range Office cum Quarter (1000 sqft) Ranipool	No	10.00	1	10.00
2	Block Office cum Quarter (1000 sqft) Tashiding, Lachung	No	10.00	2	20.00
3	FG Quarters (Mangan, Namthang, Rhenock)	No	5.00	3	15.00
Component Total (B):					45.00
Component (C) : Working Plan/Survey & Demarcation					

1	On demand survey of protected forests of Khasmal and Goucharan (km)	Km	0.135	50	6.75
2	Demarcation of Forest Boundaries through Walled angle iron fencing along the forest boundary in very highly encroachment prone high value forest areas	Km	0.5	44	22.00
3	Purchase of equipments/items for surveying in the field	LS	1.0	2	2.00
Component Total (C):					30.75
Project Cost (A+B+C)					123.00
Contingency (5%)					6.15
Total					129.15

New Components

Component (D): PROTECTION AND CONSERVATION OF SACRED GROOVES

	Improvement works				
1	1. Labelling of important species and signage	Nos.	0.0040	398	1.59
2	Garbage Management	Nos.	1.00	5	5.00
3	Toilet facilities	Nos.	1.00	5	5.00
4	Construction of footpaths	Km	0.60	10	6.00
5	Laying of eco-trails for education purposes	Km	0.60	15	9.00
6	Protection measures	LS	0.25	8	2.00
7	Other miscellaneous works	LS	0.25	4	1.00
Component Total (D):					29.59

Component (E): CONSERVATION AND RESTORATION OF UNIQUE VEGETATION AND ECO-SYSTEMS

1	Identification of anthropogenic pressure	LS	0.25	2	0.50
2	Dry stone wall fencing around vulnerable patches	Km	6.07	2	12.14
3	Awareness programme	LS	0.25	1	0.25
Component Total (E):					12.89
New Component Total					42.48
Grand Total					171.63

Central Share (90%)		154.47
State share (10%)	:	17.16
Total	:	171.63

However, due to some reasons all the works could not be carried out in the same financial year. The remaining works would be carried out in the next financial year.

II- NATIONAL BAMBOO MISSION

Bamboo is one of the most important forest resources in Sikkim. It is one of the fast growing species which has high potential for ecological balance in the environment. Its wide range of uses and its great versatility qualifies it to be a multiple use alternative to timber, food to the rural poor and tribal in particular. The genera found in the State are *Arundinaria* (Mailing), *Bambusa nutans* (Mala Bans), *Bambusa tulda* (Karanti bans), *Cephalostachyum* (Pareng/Singhana), *Dendrocalamus hamiltunii* (Choya bans), *Phyllostachys edulis* (Katta bans), *Dendrocalamus sikkimensia* (Bhalu bans), etc, are commonly found in Sikkim and used by the villagers for different purposes in different forms which helps for economic upliftment of the poor villagers.

Bamboo are usually found in the moist valley, sheltered depressions, along the streams and the lower hill slope of the Sal forests, moist deciduous forests, wet temperate forests and sub-alpine coniferous forests of the State. Substantial Bamboo stocks are also available in contiguous agricultural land areas. Large size bamboo occurs along the streams. Sal belt, Goucharan and Khasmal forests lands roadside, private land and in the homestead gardens.

The Government of India has initiated a flagship programme in the North-East region considering the potential of production of bamboo as minor forest produce to handicraft purposes and other edible produces with multipurpose uses in the region under National Bamboo Mission. To execute this programme, there was a plan outlay of Rs 2.10 cores in the year 2010-11 and Rs 2.29 Cores in the year 2011-12. The scheme is 100%css and Horticulture Department is the Nodal Department of Sikkim State.

Objectives of the Mission:

- To promote the growth of bamboo sector through an area based regionally differentiated strategy.
- To increase the coverage of area under bamboo in potential area, with suitable species to enhance yields.
- To promote marketing of bamboo and bamboo-based handicrafts.
- To establish convergence and synergy among stakeholders for the development of bamboo.
- To promote, develop and disseminate technologies through a seamless blend of traditional wisdom and modern scientific knowledge.
- To generate employment opportunities for skilled and unskilled persons, especially unemployed youths.

Strategy of the Mission:

- Adopt a coordinated approach covering production and marketing to assure appropriate returns to growers/producers.
- Promote Research and Development (R&D) of genetically superior clones of suitable species and technologies for enhanced production.
- Enhance acreage (in forest and non-forest areas) and productivity of bamboo through species change and improved cultural practices.
- Promote partnership, convergence and synergy among R & D and marketing agencies in public as well as private sectors, at all levels.

- Promote where appropriate, cooperatives and self-help groups to ensure support and adequate return farmers.
- Facilitate capacity-building and Human Resource Development.

Set up National, State and sub-State level structures, to ensure adequate returns for produce of the farmers and eliminate middlemen, to the extent possible. Promoting cultivation of bamboo in private, non-forest and agricultural areas would be facilitated if the regulations on cutting, transport and use of bamboos under the Forests laws are as relaxed for better return and market to the development of bamboos. The export of bamboos would provide better return and market to the farmers. In this respect vide circular NO. 12/F/FEWD dated 04.04.2004; the royalty imposed on villagers for bamboo for their bonafide use has been withdrawn and had been made free, but for commercial / industrial purposes the existing rate of royalty continue. To promote the bamboo cultivation on private lands as well as on forest lands through the JEMCs and EDC's, the State Government decided the followings in respect of bamboos development, marketing and export.

1. For bonafide use from private holding, it would be free of royalty and for commercial sale / Industrial use, the existing rate of royalty would continue. Those villagers who are the members of JFMCs / EDC's and have actively involved in extraction of bamboo from their private holding on sale.
2. For bamboos extracted from the forest areas, the existing rate of royalty would continue.
3. All transit permits for bamboo within state shall be issued by the Divisional Forest Officer (T) concerned after the verification report from the concerned Range as per the (1) & (2) above.
4. The export of bamboos and bamboo product outside the state shall be permitted on the existing rate of royalty and the export license/ permit would be issued by the office of the Conservator of Forest (Territorial).

PROGRESS ON PHYSICAL AND FINANCIAL ACHIEVEMENT UNDER NATIONAL BAMBOO MISSION, 2011-12

(Table-9)

Sl. No	Components	Rate (Rs.)	Target		Achievement	
			Phy.	Fin.	Phy.	Fin.
1	Maintenance of plantation in Forest area during 2010-2011 (Ha.) (50%)	0.125	244.00	30.50	244.00	30.50
2	Maintenance of plantation in Non- Forest area during 2010-2011 (Ha.) (50%)	0.04	837.00	33.48	837.00	26.28
3	Plantation in Forest Area (Ha.) (50%)	0.125	928.00	116.00	924.00	67.90
4	Plantation in Non- Forest Area Ha. (50%)	0.04	1200.00	48.00	1197.00	42.52
5	Plantation in Non- Forest Area on Government Land Ha.(50%)	0.08	300.00	24.00	300.00	19.28
6	Improvement of Existing stock in Non-Forest Areas (Ha.)	0.08	200.00	16.00	200.00	9.00

7	Training of farmers within state (in nos.)	0.0152	96	1.45	96	0.76
8	Training of farmers outside state (in nos.)	0.025	51	1.27	51	1.27
9	Training of Field Functionaries (in nos.)	0.08	10	0.80	10	0.8
11	Workshop/Seminars - District Level (in nos.)	1.00	2	2.00	Nil	Nil
12	Innovative Intervention					
	(a) Bambusetum-cum-Museum	PB	1	15.00	1	5.94
	(b) Outsourcing of seedlings	PB	2,00,000	30.00	2,00,000	Nil
	(c) Handicraft Development and skill development training	PB	100 nos.	5.00	100	5.00
16	Coloured brochures, leaflets	PB		2.00		1.00
18	Consultancy Services @ 1.5 %			5.17		4.15
	GRAND TOTAL			350.00		221.00

The State of Sikkim started its bamboo plantation programme under the National Bamboo Mission in both the forest and private land from 2009. The Department of Forest, Environment & Wildlife Management is executing the scheme by raising bamboo seedlings in the nurseries through Joint Forest Management Committee. The plantation in private land is being executed by the Horticulture and Cash Crop Development Department and for forest land; it is being implemented by Forest, Env. & wildlife Management Department in Reserve Forest, Khasmal Forest, Gaucharan, degraded waste land, slip and erosion prone areas.

The Bamboo Plantation scheme taken up under National Bamboo Mission by the Forest Department during 2009-10 to 2012-13 in Forest land is as under.

(Table-10)

Sl.No	Division	2009-10	2010-11	2011-12	2012-13	Total
1	East	85	50	321	220	676
2	West	55	70	250	110	485
3	South	70	85	230	110	495
4	North	40	45	123	60	268
Total area		250	250	924	500	1924

III-13th FINANCE COMMISSION**GRANTS IN AID FOR FORESTS RECOMMENDED BY THE 13th FINANCE COMMISSION 2011-12**

In order to manage ecology, environment and climate change consistent with sustainable development, while making its recommendations 13th Finance Commission has recommended, inter-alia, a grant to all states for forest development. State of Sikkim has been provided with a grant of Rs 5.07 crores for forests during 2011-12. The broad objectives of the grants-in-aid for forests are to provide the wherewithal for preservation, so as to halt and reverse the past declines in the quantum and quantity of areas under forest; and to provide fiscal resources by which the state can enable alternative economic activities as a substitute for constraints economic development imposed by forest cover. The action plan for the year 2011-12 had a total outlay of Rs.507 lakhs out of which an amount of Rs. 501.74 lakhs was spent as below.

(Table-11)

Approved Activities ** (Separately for development purposes)		Unit of Activity	Unit cost (in lakhs)	Physical/Financial Target and Achievements during the year (Cumulative of the Year of Progress Report)			
				Cumulative Physical Targets and Achievements during the Year		Cumulative Financial Targets and Achievements during the Year	
				Physical Target	Physical achievements	Financial Targets (Rs in lakhs)	Financial Achievements (Rs in lakhs)
DEVELOPMENT PURPOSES							
1	Brick surfaced footpath from Damthang Bazar to Tendong in South Sikkim	Km		1.00	1.00	50.00	50.00
2	Water storage tanks for water supply/storage and fire fighting (2 in each district, all districts)	km		8.00	8.00	16.00	15.99
3	Development of muck dumping sites in						
	i. East Sikkim (Topakhani and other urban areas) (cum of sausage wall)	cum		100.00	100.00	2.51	2.51
	ii. West Sikkim (Soreng, Gyalshing)	cum		155.00	155.00	3.89	3.89
	iii. North Sikkim (Mangan and other urban areas)	cum		100.00	100.00	2.51	2.50
	iv. South Sikkim (Namchi, Rabongla, Namthang)	cum		300.00	300.00	7.53	7.50
4	Stabilisation of Hill slopes (through CRSM walls)						

	i. East Sikkim (Pangthang and Gangtok areas)	cum		200.00	200.00	7.40	7.39
	ii. West Sikkim (Sribadam , Karthok and other vulnerable areas)	cum		250.00	250.00	9.26	9.24
	iii. North Sikkim (in vulnerable areas of North Sikkim)	cum		50.00	50.00	1.85	1.85
	iii. South Sikkim (in vulnerable areas of South Sikkim)	cum		52.69	52.69	1.95	1.94
5	Development of ecotourism facilities in Khechudumra	no.		1.00	1.00	75.00	75.00
6	Rain water harvesting in dry areas of PWLS /FLWL and other sanctuaries	no.		6.00	6.00	9.00	8.98
7	Distribution of LPG Cylinders areas surrounding Protected Areas like Dalapchen, Regu and Singaneybas etc.	LS		50.00	50.00	1.00	1.00
8	Construction of eco-trails/inspection paths/ patrolling trails in Wildlife and other Reserve Forest Areas	Km		3.00	3.00	12.00	12.00
9	Stabilisation of Hill slopes (Sausage walls)						
	i. East Sikkim (Pangthang)	cum		70.00	70.00	1.76	1.76
	ii. West Sikkim (Sardung and other vulnerable areas)	cum		100.00	100.00	2.51	2.48
11	Construction of catchwater drains in West Sikkim (in running meters)(in Salley and other areas)	cum		300.00	300.00	2.06	2.05
12	Construction of catchwater drains in East Sikkim (in running meters)(Pangthang and other areas)	Rm		200.00	200.00	6.86	6.86
13	Distribution of Solar lights to villagers (Shingba-Faka and other needy areas)	LS		4.00	4.00	1.00	1.00
14	Veterinary Health Camp	no.		1.00	1.00	1.00	1.00
15	Augmentation of water sources including through experimental development of recharge zone for spring water augmentation)	Nos.		4.00	4.00	6.00	5.77
16	Ecotourism facilities at Yumthang Hot Springs/other locations in North Sikkim	LS		1.00	1.00	19.00	19.00

17	Infrastructural Improvement in Chuba-Lakha Sacred groves for biodiversity conservation and fro ecotourism	LS		1.00	1.00	6.00	6.00
18	Brick Walled angle iron demarcation along the forest boundary in very highly encroachment prone areas Gtk. (KM)	Km		0.50	0.50	22.00	22.00
19	Landscaping & beautification works (Amladen, Tamlachaur-Sadam etc.)	LS		1.00	1.00	10.00	10.00
20	On demand survey of user agencies and protected forests of Khasmal and Goucharan (km)	LS		50.00	50.00	6.75	6.75
21	Upgradation of road to Melli FRH	LS		0.30	0.30	6.00	6.00
22	Training & capacity building of field staff No)	No.		20.00	20.00	2.00	2.00
23	Publicity and awareness in Print/electronic media (FM)	LS		40.00	40.00	6.00	5.96
24	Awareness camps at Block and other administrative centre levels @Rs.20,000/camp	No.		30.00	30.00	6.00	6.00
25	Placing of Flex/ sheet hoardings at Strategic places	LS		40.00	40.00	3.20	3.20
26	Strengthening of Permanent Preservation/Experimental plot (No)	No.		10.00	10.00	10.00	9.99
27	Upgradation of climate change Cell	LS		1.00	1.00	4.00	4.00
28	Upgradation of Sustainable Forest Cell	LS		1.00	1.00	4.00	3.99
29	Printing and archiving of all the old inventory reports and other documents	LS		7.00	7.00	7.00	7.00
30	Revision of Management Plan in Shingba Wildlife Sanctuary, including field work, data analysis and preparation of management plan	LS		3.00	3.00	3.00	2.99
31	Development and augmentation of springs and other water sources through treatment	No.		10.00	10.00	15.00	15.00

32	Stone wall fencing around regeneration/plantation areas/ along forest boundary line /sacred groves/ newly created biodiversity parks /gardens etc.	Km		3.00	3.00	15.30	15.30
33	Dibbling and deciduous tree plantation of wild fruit bearing species/ conifers at high altitudes	Ha		17.00	17.00	6.76	6.55
34	Stabilisation of vulnerable and damaged earth mass/barriers for prevention of man-animal conflict	Cum		215.00	215.00	7.96	7.95
						Sub total	380.39
Environmental Purpose							
35	Production of seedlings for plantation/Upgradation/strengthening of nurseries/procurement of seeds (Ha)	Ha		25.00	25.00	80.00	79.89
36	Creation of avenue plantation and maintenance in urban and sub-urban areas	Ha		5.00	5.00	2.65	2.65
37	Regeneration of degraded forest areas through various models of Afforestation	Ha		111.00	96.00	31.58	27.18
38	Regeneration of degraded forest area, demarcation of areas and vegetative fencing through agave plantation	Ha		15.05	15.05	4.97	4.96
39	Assisting natural regeneration	Ha		40.00	40.00	5.03	4.95
						Sub total	119.64
Total						505.28	500.02
Monitoring and evaluation						1.72	1.72
Grand Total						507.00	501.74

Chapter-7**FOREST (CONSERVATION) ACT 1980 CELL**

Forest (Conservation) Act, 1980 is a unique piece of legislation, and a regulatory mechanism that reflects the collective will of the nation to protect its rich biodiversity and natural heritage and that permits only unavoidable use of forest land for various developmental purposes. It embodies the firm commitment of the Government of India and the State Government to balance the conservation of forests with the sustainable development need of the country contributing to better environment, health and economy. The remarkable feature of this Act is that it is regulatory and not prohibitory.

Since 1980, Rules and Guidelines have been framed for diversion of forest land for non-forestry purposes. Since its inception, the Act has facilitated developmental activities like construction of power projects, irrigation projects, roads, railways, schools, hospitals, rural electrification, telecommunication, drinking water facilities, mining etc. on forest lands and checked the indiscriminate diversion of pristine forest areas. Between 1950 and 1980, forest lands have been diverted at the rate of 1.50 lakh hectare per annum by the various State Government / UT Administrations. This diversion has however, come down to as low as 0.38 lakh hectare per annum after 1980.

This circle mainly, deals with obtaining forest clearance for projects related to developmental activities under the Forest (Conservation) Act, 1980. Realization of amount for Crop Compensation, Compensatory Afforestation and Net Present Value (NPV) of forest land being diverted for non-forestry purposes is done by this circle. The statement of diversion of forest land for non forestry purposes and progress of Compensatory Afforestation till 31st March 2012 are given below:

(Table-1)

Sl. No	Item	DISTRICT -WISE				Total
		North	East	South	West	
1	Number of cases approved for diversion	70	127	96	49	342
2	Total forest land diverted (in ha)	779.92	988.33	415.07	123.63	2306.95
3	Compensatory Afforestation Stipulated (in ha):					
	a) In forest land	2012.34	1561.41	647.57	417.56	4638.88
	b) In non-forest land	74.27	0.00	10.50	7.78	92.55
	TOTAL (a+b)	2086.61	1561.41	658.07	425.34	4731.43
4	Compensatory Afforestation Completed (in ha):					
	a) In forest land	1078.34	674.95	541.30	359.87	2654.46
	b) In non-forest land	74.27	0.00	10.50	0.00	84.77
	TOTAL (a+b)	1152.61	674.95	551.80	359.87	2739.23

Chapter - 8

FOREST FIRE

(Table-1)

Calendar Year	Number of fire incidents in forest area			Forest area affected by fire (in ha.)			Estimated Loss				Casualties		
	Within Protected Area(PA)	Outside Protected Area(PA)	Total	Within Protected Area(PA)	Outside Protected Area(PA)	Total	Loss of Timber		Damage to Plantation Areas	Damage in PAS Area	Human Life	Cattle	Wildlife
							Volume in cu.mt.	Value in lakhs					
2002	4	28	32	16	154	170	2.00	1.00	15.00	1.00	Nil	Nil	Nil
2003	5	18	23	12	110	122	2.00	1.00	9.77	1.00	„	„	„
2004	5	16	21	18	100	118	2.00	1.00	12.16	1.00	„	„	„
2005	6	36	42	30	332	362	3.00	1.50	38.14	1.80	„	„	2
2006	8	50	58	100	308	408	3.00	1.50	37.46	10.00	„	„	2
2007	2	29	31	25	75	100	1.00	0.50	9.50	2.00	„	„	Nil
2008	3	39	42	8	320	328	2.00	1.00	31.00	2.00	„	„	„
2009	11	120	300	131	1003	1303	20.00	3.50				4	4
2010 *	-	-	34	-	-	133	25 no of Chewri bushes	1600 Rhizomos	-	-	-	-	-
2011			64			523.60							

Source: - www.sikenvis.nic.in (ENVIS).

Chapter-9**WORKING PLAN****DETAILS OF SCHEME WISE PROGRESS REPORT (PHYSICAL AND FINANCIAL)
UNDER WORKING PLAN DIVISION DURING 2010-2011.**

(Table-1)

SI No	Schemes	Name of work	Unit (Physical)	Financial (Rs. in Lakhs)
1	IFMS	Field inventory on sampling basis LA in Protected Forests	50 plots	3.60
2		Laying fencing of PP in LA	10 plots	15.00
3		Field inventory on sampling basis LA in Protected Forest	20 plots	1.70
4		Laying fencing of PP in HA	3 plots	5.70
5		Upgradation of Remote Sensing and GIS Lab	1	4.00
6		Strengthening of sustainable Forest Mgmt. Cell	1	1.11
7		Purchase of GPS	2	0.50
8		Preparation climate data set	1	1.61
9		Contingencies		7.47
10		Other expenses in Working Plan		1.90
11		Labelling of important species	1	2.00
12		Construction of footpath	2	8.80
13		Forest invasive species		10.00
14		Unique Vegetation		10.00
15		Extension and community involvement	1	1.00
16		Preparation of mgt Plan on Sacred Groves	1	3.00
17		Contingencies 9-10		1.77
18	TFC	Field inventory on sampling basis LA in Protected Forests	10	7.20
19		Laying fencing of PP in LA	6	33.00
20		Laying fencing of PP in HA	4	28.70
21		Up gradation of Climate Change Cell	1	5.00
22		Strengthening of sustainable Forest Mgmt. Cell	1	5.00
23		Purchase of handheld PDA GPS	1	2.00
24		Preparation of Wildlife fruit data		2.00
25		Footpath to Preservation Plots		4.40
26	TFC HQ	Production of quality seedling materials		28.94
27		Awareness programme on TV Channel		2.25
28		Publicity and awareness		2.02
29		Monitoring and Evaluation		2.49

**DETAILS OF SCHEME WISE PROGRESS REPORT (PHYSICAL AND FINANCIAL)
UNDER WORKING PLAN DIVISION DURING 2011-2012**

(Table-2)

Sl No	Schemes	Name of Work	Unit (Physical)	Financial (Rs in Lakhs)
WORKING PLAN				
1	IFMS	Upgradation and strengthening of Permanent preservation plots	5 plots	10.00
PROTECTION AND CONSERVATION OF SACRED GROVES				
2	IFMS	Laying of Eco-Trial for Educational purposes		6.50
3		Protection Measures		2.00
4		Research and Study in Sacred Groves		1.00
CONSERVATION AND RESTORATION OF UNIQUE VEGETATION				
5	IFMS	Survey and Inventory (Malagiri)		1.50
6		Research and Study in Unique Vegetation		1.00
7	IFMS ADDL WP	Labelling of important tree species		1.59
8		Garbage management in Sacred Groves	5 nos	5.00
9		Toilet facility in Sacred Groves	5 nos	5.00
10		Improvement of foot path	10 km	6.00
11		Laying of Eco- Trial for Educational purposes	15 km	9.00
12		Protection Measures		2.00
13		Misc. items		1.00
14		Revalidated component of WP 2010-2011	Sustainable Forest Management Cell	1
15	Preparation climate data set		1	1.39
16	Other expenses in Working Plan			1.10
17	Misc. items			2.85
COMPONENT (E) : Conservation and Restoration of Unique Vegetation and Eco- Systems				
18	IFMS	Identification of Anthropogenic Pressure		0.50
19		Dry Stone Wall Fencing		12.14
20		Awareness Programme		0.25
21	TFC	Strengthening of Permanent Preservation Plots	10 plots	10.00
22		Up gradation of Climate Change Cell		4.00
23		Up gradation of sustainable Forest Management Cell		4.00
24		Printing and Archiving of Old and existing Documents of Working Plan		7.00
25		Dry Stone Wall Fencing		5.10

Chapter-10**RESEARCH****I-SILVICULTURE****ACTIVITIES CARRIED OUT BY THE SILVICULTURE DIVISION DURING LAST THREE YEARS**

(Table-1)

Sl.No	Name of Works	Units	2009-10	2010-11	2011-12	Total
1	Creation of green strip plantation for fire control;	Ha	10		10	20
2	Supplementary regeneration trial , Plantation of broad leaved sp in monoculture Dhuppi	Ha	3	3		6
3	Floral survey & silviculture	Ha		3		3
4	Introduction trial of hybrid Lapsi	Ha	1			1
5	Dry Stone Wall fencing	Mts.	975			975
6	Creation of experimental Seed production area in natural forest	Ha		10		10
7	Further development of Bharikhola Nursery by introducing Nursery Technique with relation to potting media, schedule of irrigation, application of bio-fertilizers	Ha		1.20		1.20
8	Identification of mother trees	No		100		100
9	Creation of winter plantation(dibbling) of fruit plants for wildlife	Ha			21.4	21.4
10	Raising of wildlife fruit plants including malagiri	LS			1	1
11	Experimental plantation for prevention and control of forest fire in fire prone areas	Ha			10	10
12	Experimental development of recharge zone for spring water augmentation	Ha			4	4

II- BIODIVERSITY RESEARCH IN WILDLIFE

PHYSICAL ACHIEVEMENT DURING 10TH PLAN (2007-12) UNDER BIODIVERSITY RESEARCH IN WILDLIFE
(Table-2)

No.	Item	Unit	Physical achievement during 10 th Plan (2007-12)		Physical achievement during 2011-12		Remarks
			3	4	5	6	
	1	2	3	4	5	6	10
	Biodiversity Research in Wildlife						
1	Survey & Documentation of Key Biodiversity Species of Sikkim						
	Kitam, Lowlands Forests, Peafowl banded, translocated, Bear issue facilitated,	No. of Surveys	05	05	0	0	Conflict species research
	State Forest Herbarium	No. of Specimens	500	422	119	119	Maintenance of Heritage Herbarium
	Vulture (Diclofenac ban, Meloxicam awareness activities with Chemists, Drug Controller, Vet Dept, BNHS, RSPB,)	No. of Activities	06	04	02	02	1 st in country for vulture conservation activities, ongoing
	Snow Leopard conservation (Project SL)	No. of Activities	04	02	02	02	Project SL to be continued
	Butterflies, Moths documentation	No. of Species	100	80	20	20	Identification done using Facebook
	Rabdentse Bird Park Brochure	No.	01	01	0	0	Rabdentse Bird Park
	Migratory sap	No. of Species	50	50	0	0	Mostly Water birds
	Status of 04 State Symbols	No. of Symbols	04	0	0	0	State bird study to be initiated
	Cold Desert Species	No. of Species	20	15	05	05	Mostly Mammals
	Ramsar Sites (Wetlands) identification, documentation.	No. of Sites	03	03	0	0	Proposed for International Recognition

Invasive Species study	No. of Species	04	04	0	0	Plant and Animal species
Bird ringing (Banding)	No. of birds	500	554	0	0	Scientific studies
Researchers facilitation (108)	No. of projects facilitated	108	77	31	31	On various Biodiversity issues
Raj Bhavan Biodiv (Fl-200, Fauna-150)	No. of Species	350	0	350	350	Documentation continues
Compilation of research (>50)	No. of Reports, etc					Based on permitted research
Regional Museum of Natural History, NMNH, Marchak	-----	-----	---	...		NMNH initiated
Research & Doc. on Heritage Trees, Exotic Trees, Living Fossil Tree	No. of Trees	58	45	13	13	Priority program of GoS
Education & Extension						
Biodiv. Awareness, Capacity Bldg. programs, Bird Tourism Charter release	No. of Talks	82	74	08	08	Biodiv. Awareness thro'' various agencies
Publications: 3 Posters, 1 RajBhavan Book, 1 RajBhavan Book Chapter	No. of Items	05	03	02	02	Posters on Butterflies, Mushrooms-Ferns, State Symbols, Book & Chapter on Biodiv. of Raj Bhavan
Research for Centenary 1909-2009						
Archival studies for Centenary Souvenir	No. of Studies	01	01	00	00	For Centenary Souvenir
Mobile exhibition at Saramsa, East and Yumthang, North Sikkim	No. of Exhibitions	02	02	00	00	
Centennial Tree, Butterfly, Red Panda Stamp	No. of Items	03	03	00	00	
State Biodiversity Board SBB						
Office establishment of SBB	Office	01	01	00	00	Furniture & Equipments
Calendars (Desk & Wall) on Butterflies,	No. of items	01	01	00	00	Publicity material
2 Books (Mushrooms & Ferns)	No. of Books	02	02	00	00	Biodiversity Series
Bio Div. Heritage Sites proposed,	No. of Sites	13	13	00	00	As required by NBA
Threatened Species Proposed	No. of Species	56	56	--	--	As required by MoEF
IYB-2010 One-sp-per-day (365) in media	No. of Days	365	365	00	00	International Year of Biodiv.

III- HIGH ALTITUDE RESEARCH CENTRE**ACHIEVEMENT OF HARC DURING 2011-12**

(Table-3)

TITLE/s OF WORKS	PHYSICAL ACHIEVEMENT
Books publication	15
Articles / scientific papers publication	9
Software development	1
Guidance to the MCA Thesis	3
Major policies drafted	4
Proposal prepared for general public	2
Survey formats development	4
Survey conducted	3
Community meeting for farmers and SHG federations	6
New Discovery	Five new strains of Cordyceps and other plants
Presentation with State and Centre	7
Annual Action Plan	2
Micro planning	1
Video for Media strategy	2
Programme performed for student	2
DPR prepared	5
Training	11
Enlisted new lakes	17
Upgraded medicinal plants list from 424 to 986	1
Training provided as resource person	9

PUBLICATIONS:

(Table-4)

Sl.No.	Titles of Books	Financial Year
1	Compilation of important letters, circulars, rules and regulations of Sikkim Forestry before merging to Indian territory	2011-2012
2	PCR on sustainable Harvesting of Cordyceps	2011-2012
3	Report of Jatamansi, Bikma, Kutki, Chirayita, Amla, Harra and Barra	2011-2012
4	Sikkim in 15 th January 1934 Earthquake	2011-2012
5	Compendium of Medicinal Plants of Sikkim (suitable in Sikkim Himalaya, Volume I	2011-2012
6	Emblica officinal is Gaertn-a source of natural vitamin C	2011-2012
7	Micro-planning for Shingba Faka Eco-Development Committee of North Wildlife Forest Development Agency	2011-2012
8	Policies and strategies for the Development of Medicinal plants of Sikkim at the Eastern Himalayas	2011-2012
9	Aftershock Report of Dzongu and adjoining areas (based on 18 th September, 2011 Earthquake).	2011-2012
10	Field Report of Medicinal Plants study - 2010	2011-2012

Sl.No.	Article/ Scientific papers	Financial Year
1	Overview on new strains of edible mushroom in the prairie Himalayas of Sikkim	2011-2012
2	Issues in the context of cultivation policies in Sikkim at early days from 1905 to 1948	2011-2012
3	Protected trees and other species of Sikkim since pre-merging state to recent	2011-2012

Chapter-11

I-MEDICINAL PLANT

THE PROGRESS OF JARI BUTI KHOSH SCHEME (HERBAL MEDICINAL FUND) DURING 11TH PLAN PERIOD

(Table-1)

Sl. No	Activities	2007-08		2008-09		2009-10		2010-11		2011-12		Total	
		Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	Maintenance of Herbal Garden Nurseries	4 Ha	8.00	4 Ha	8.00	3 Ha	5.84	2Ha	1.60	1 Ha	0.63	13 Ha	24.07
2	Engagement of JFR, FA , Computer Operator	JFR – 1 FA – 1	1.32	JFR 1 FA –1	1.35	-	-	-	-	-	-	JFR – 1 FA – 1	2.67
3	Collection of medicinal plants data and specimens and procurement of instrument	Specimen – 50 GPS – 1 Camera –I	4.48	-	-	-	-	-	-	-	-	Specimen 50 GPS – 1 Camera –I	4.48
	Total:		13.80		9.35		5.84		1.60		0.63		31.22

Note: Under Jari Buti Khosh Scheme the financial outlay of Rs. 50.00 lakhs was granted during the 10th Plan period of 2005-2006 for Conservation of medicinal plants diversity through people's participation programme and to revitalize the traditional knowledge of herbal practitioners for health security. Out of total fund allotted expenditure incurred during 10th plan period was Rs. 18.78 lakhs and the balance fund spilled over to 11th Plan period was Rs. 31.22 lakhs (i.e. Rs. 50.00lakhs – Rs. 18.78 lakhs = 31.22 lakhs)

SOME IMPORTANT MEDICINAL PLANTS & THEIR USES



Ginseng (*Panax pseudoginseng*)

Deciduous herb, roots used as Aphrodisiac, tonic & diuretic, etc.

Dwarf evergreen shrub-leaves used as stimulant & to induce sneezing. High aromatic value. Extensively used by Buddhists for incense.



Gurans (*Rhododendron anthopogon*)



Yarch-gunbu (*Cordyceps sinensis*)

High energetic fungi, known to increase body strength. Used in Tibetan and Chinese medicinal system for treatment of variety of ailment from fatigue, cancer, aphrodisiac, energy booster etc.

II- PROGRESS/ACHIEVEMENT OF DIFFERENT SCHEME/PROJECT UNDER NTFP/SMPB

CUMULATIVE PROGRESS/ACHIEVEMENT OF DIFFERENT SCHEME/PROJECT UNDER NTFP/SMPB CIRCLE DURING 11TH FIVE YEAR PLAN w.e.f. 2007-08 TO 2011-12

(Table-2)

Sl No.	Scheme/Projects	Indicators	Unit	2007-08	2008-09	2009-10	2010-11	2011-12	Total	Total financial Achievement of 11 th FYP (2007-08 to 2011-12) (Rs.in lakhs)
1	Contractual Farming Projects implemented by farmers in Private holdings with 30% subsidy as financial assistance provided by National Medicinal Plants Board (NMPB), Government of India from 2007-08 to 2009-10 & extended to 2011-12 (100% CSS Scheme)	Cultivation of selected medicinal plants having high market demand in private holdings by farmers.	Nos. of projects	5	20	13	-	-	38	20.89
	Total:									20.89
2	Jari Buti Kosh (State Plan)	i. Maintenance of Existing herbal nurseries	Ha.	4	4	3	2	1	14	31.22
		ii. Extension activities and organization of awareness about the importance of medicinal plants		4					4	

		iii. Registration of Traditional herbal healers		72	37	08	11	01	129	
		iv. Small grant to renowned folk healer		-	20	-	-	-	20	
		v. Engagement of Junior Research Fellow and Field Assistant		2	2	-	-	-	4	
		vi. Documentation of Traditional Herbal Healers				19			19	
		vii. Collection of Medicinal Plants specimen and data	Species	-	-	20	30	-	50	
	Total:									31.22
3	Creation and maintenance of nurseries of Medicinal Plants of Tree species having high medicinal value in four districts under Promotional scheme funded by National Medicinal Plants Board (NMPB), Government of India w.e.f 2007-08 to 2008-09 and extended upto 2010-11	i. Propagation and production of Quality Planting Materials of Trees, and Shrubs of Medicinal plants having high medicinal value in four district	Ha	2	2	2	-	-	2	73.84
		i. North –								
		ii. East –	Ha		2	2	2	-	2	
		iii. South –	Ha		2	2	2	-	2	
	Total:								8	73.84

6	Inventory of Medicinal Plants of Sikkim to be implemented in collaboration with FRLHT, Bangalore funded by National Medicinal Plants Board (NMPB), Department of AYUSH, Ministry of Health and Family Welfare, Government of India from 2010-11 to 2011-12 (100 % CSS Scheme)	Inventorisation of medicinal plants resources of Sikkim and its documentation by GFRLHT, Bangalore in collaboration with State Medicinal Plants Board (SMPB) Project under progress	Inventory of Medicinal plants species					Survey completed in East District		10.50 (Rs. 10.00 transferred to FRLHT, Bangalore)
7.	Preparation of Action Plan of SMPB for Conservation, Development and Sustainable Management of Medicinal Plants in Forest Areas for the period of 5(five) years	Prepared the Strategy Paper and an Action Plan of SMPB					Prepared Action Plan of SMPB			3.97

Chapter-12**EXTRACTION AND SALE OF FOREST PRODUCE**

Utilization Circle is the commercial wing of the department. Extraction of Wind-fallen trees, trees from project sites where forest land is diverted to the user agencies, extraction of poles from thinning of old plantations and conversion into timber, firewood and charcoal and sale of these forest produce is done by this Circle.

The Division has one saw mill situated at Chuba in Government land, where the Division converts timber, firewood out of those trees/poles from above mentioned areas.

Detail of extraction and sale of forest produce and import fee during 2011-12.

(Table – 1)

Sl. No.	Forest Produce	Rate/Unit	Quantity extracted & sold (in cft. / piles /No)	Revenue realized (Rs.in lakhs)
1	Industrial Wood			
	a) Hard Wood	750/- 350/- 450/-	1479.60 Cft.	9.23
	b) Soft Wood	250/-	3732.40 Cft.	9.33
	c) Off cut	130/-	485.41 Cft.	0.63
2	Firewood	600/- 750/-	271 Pile	1.64
3	Disposed of tree	No.	54 Nos.	2.85
4	Disposed of ballies	No.	57 Nos.	0.51
5	Sawing Charge	30/-	5669.77 Cft.	1.58
6	Royalty			0.27
7	Saw dust			0.36
	TOTAL			26.40
	<u>IMPORT FEE</u>			
	Timber	40/- 25/- 12/-	1,18,152 Cft.	32.50
	Bamboo	6/-	775 Nos.	.05
	License Fee	-	-	0.65
	TOTAL			33.20
	GRAND TOTAL			59.60

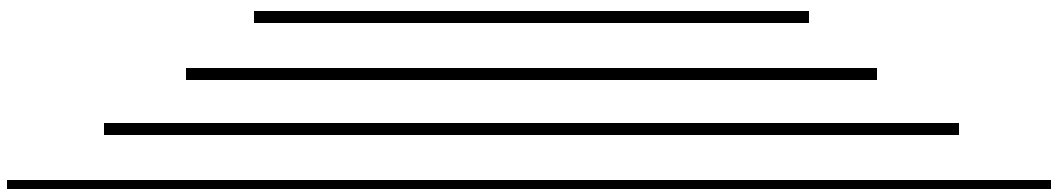
Details of Extraction and Sale of Forest Produce for the last fourteen years.

(Table-2)

Year	Timber		Firewood		Charcoal		Total
	Quantity extracted and sold (Cubic feet)	Revenue realized (Rupees)	Quantity extracted and sold (Piles)	Revenue realized (Rupees)	Quantity extracted and sold (Bags)	Revenue realized (Rupees)	Revenue realized (Rupees)
1997-1998	2153.50	2.75	36	0.50	986	0.57	3.82
1998-1999	1004.75	1.41	58	0.22	180	0.18	1.81
1999-2000	1535.52 1872 Nos. (Ballies)	2.23	157	0.84	620	0.45	3.52
2000-2001	1741.75 1393 Nos. (Ballies)	2.93	168	0.83	245	0.18	3.94
2001-2002	11869.54 1225 Nos. (Ballies)	22.31	95	0.18	77	0.37	22.86
2002-2003	13421.31 cft.	20.13	379.72	1.90	213	0.28	22.31
2003-2004	4863.50cft.	10.28	151.82	0.76	176	0.26	11.30
2004-05	3852.62 cft.	8.23	169.15	0.85	13	0.21	9.29
2005-06	3367.52cft	8.14	111.80	0.77	13	0.19	9.1
2006-07	1876.43cft	2.81	224	1.21	-	-	4.08
2007-08	1007.53 cft	1.91	90.80	0.56	-	-	2.47
2008-09	2659.95 cft 354 no of trees 1493 no of ballies	11.01	149.65	0.81	-	-	11.82
2009-10	1627.98 cft 183 nos. trees	8.77	150.5	0.82	-	-	9.59
2010-11	5966 cft + 619 nos. trees	26.90	248.50	1.55	-	-	28.45
2011-12	5697.41 Cft. 111 nos. trees	22.55	271.00	1.64	-	-	24.19



WILDLIFE SECTOR



Chapter-13**WILDLIFE**

In the field of wildlife conservation, the State of Sikkim has made significant progress with the establishment of one National Park, one Biosphere Reserve with the National Park as the Core Zone, seven Wildlife Sanctuaries and one Wildlife Conservation Reserve for the purpose of protection and conservation of wildlife. Details of Wildlife Protected Areas (WPA) are as under:

(Table-1)

Sl. No.	Name of WPA	Location	Area(Sq.km)	Date of Notification.
1.	Khangchendzonga National Park	North-West	1784	August, 1977, May, 1997 (expansion)
2.	Fambonglho Wildlife Sanctuary	East	51.76	02-04-1984
3.	Kyongnosla Alpine Sanctuary	East	31	05-12-1992
4.	Barsey Rhododendron Sanctuary	West	104	08-07-1996
5.	Shingba Rhododendron Sanctuary	North	43	25.01.1999
6.	Pangolakha Wildlife Sanctuary	East	128	25-01-1999
7.	Maenam Wildlife Sanctuary	South	35.34	25-01-1999
8.	Kitam Bird Sanctuary	South	06	17-06-2006
9.	Sling Dong Fairreanum Orchid Conservation Reserve	South	0.06	05-11-2008
		Total area	2183.16	

The Wildlife Protected Area covers as much as 30.76 % in terms of geographic area (7096 sq.kms) and 37.37% in terms of total recorded forest area (5841.39 sq.kms) of the State. It is the highest and best covered State in PA network in the country today.

Another heartening aspect of endeavours of the State Government towards protection of mute plants and animals is the declaration of the wildlife heritages.

- (a) The fine and rare Rhododendron species, *Rhododendron niveum* as the State Tree.
- (b) One of the finest decorative Orchid, *Dendrobium nobile* as the State Flower.
- (c) The cute Cat-Bear, the Red Panda *Ailurus fulgens* found in the temperate bamboo forest as the State Animal and
- (d) The gaudy Blood Pheasant, *Ithaginis cruentus* found in alpine land as the State Bird of Sikkim.

Wildlife Protected Area Network

- Wildlife Sanctuaries - 7 Nos
- National Park - 1 No
- Biosphere Reserve - 1 No

Total Protected Area
 2183.10 sq km

i.e. 30.77% of the State's TGA



(Table-2)



(Table.3)

Progress under Different Schemes during 2011-12

(Table-4)

Sl. No.	Project/ Schemes/Programme	Physical Achievement 2011-2012	Total Financial Achievement of 11th FYP (2007-08 to 2011 -12) (₹ in lakhs)
1.	Development of Shingba Rhododendron Sanctuary, North Sikkim (100% CSS).	Habitat characterization of Sanctuary for future planning (43 sq.kms.), Purchase of camera traps (7 nos.), Installation of automated weather station (1 no.), Installation of solar power (1 set), Clearance of wildlife trails (5 kms.), Anti-poaching & Trap demolition operation (43 sq.kms.), Cattle vaccination (5 villages), Engagement of fire watchers (4 nos.).	96.51
2.	Development of Fambonglho Wildlife Sanctuary, East Sikkim (100% CSS).	Erection of boundary pillars (120 nos.), Anti-poaching & Trap demolition operation (3 operations), Population census of Barking Deer, Cattle vaccination (2 villages), Clearance of fire line (10 kms.), Engagement of fire watchers (6 nos.), Compensation for crop damage by wild animals, Salt-lick blocks (10 blocks), Renovation of Log House at Golitar (1 no.).	134.48
3.	Development of Kyongnosla Alpine Wildlife Sanctuary, East Sikkim (100% CSS).	Construction of NIC (1 no.), Anti-poaching & Trap demolition operation (3 operations), Population census of Musk Deer, Control of menace of feral animals, Engagement of fire watchers (5 nos.), Strengthening of protection measures, Salt-lick blocks (10 blocks).	122.48
4.	Development of Pangolakha Wildlife Sanctuary, East Sikkim (100% CSS).	Survey & demarcation of Sanctuary boundary (3.5 kms.), Construction of entry gate (1 no.), Anti-poaching & Trap demolition operation, Population census of Red Panda, Salt-lick blocks (5 blocks), Cattle vaccination (1 village), Compensation for crop damage by wild animals, Engagement of fire watchers (6 nos.), Revision of management plan, Renovation of FRH at Phadamchen (1 no.)	130.86
5.	Development of Maenam Wildlife Sanctuary, South Sikkim (100% CSS).	Habitat improvement (10 Ha.), SMC works (5 Ha.), Construction of water harvesting structures, (2 nos.) Up-gradation of patrolling hut (1 no.), Fire line creation & engagement of fire watchers, Up-gradation of RO office & quarter at Ravangla.	100.00

Sl No.	Project/ Schemes/Programme	Physical Achievement 2011-2012	Total Financial Achievement of 11 th FYP (2007-08 to 2011 -12) (₹ in lakhs)
6.	Development of Barsey Rhododendron Sanctuary, West Sikkim (100% CSS).	Survey & demarcation of Sanctuary boundary (5 kms.), Construction of Nature Trail (4 kms.) Water hole development (1 no.), Construction of patrolling camp (1 no.), Capacity building of field staff, Engagement of fire watchers (5 nos.), Compensation for crop damage by wild animals, Anti-poaching & Trap demolition operation.	99.87
7.	Propagation & Conservation of Wildlife Products, North.	Employed 6 temporary protection staff in the Sanctuary.	18.17
8.	Propagation & Conservation of Wildlife Products, East.	Employed 22 temporary protection staff in the Sanctuary.	46.84
9.	Propagation & Conservation of Wildlife Products, South.	Employed 5 temporary protection staff in the Sanctuary.	12.52
10.	Propagation & Conservation of Wildlife Products, West.	Employed 7 temporary protection staff in the Sanctuary.	16.86
11.	Eco-Tourism Development in Barsey Rhododendron Sanctuary, West Sikkim (NEC)	—	19.82
12.	Construction of Stone Trekking Trail from Deorali to Sammatar inside Barsey Rhododendron Sanctuary, West Sikkim (NEC).	Construction of Stone Trekking Trail from Deorali to Sammatar inside Barsey Rhododendron Sanctuary, West Sikkim (2 kms.).	23.55
13.	Creation of Banbas Project at Barsey Rhododendron Sanctuary, West Sikkim (NEC).		97.02
14.	Establishment of Sidkeong Tulku Bird Park, Rabdentse, West Sikkim (ACA/SPA)	Facility Centre (1 no.), Bird Clinic (1 no.), Research Centre (1 no.), Staff Quarter (1 no.), NIC (1 no.), Approach Road,	474.12
Total			1468.20

Khangchendzonga National Park & Khangchendzonga Biodiversity ReserveProgress during 2011-12 in terms of relevant physical & financial indicators.

(Table.5)

Schemes	Indicators	Physical (Unit)	Financial (Unit in lakhs)
Integrated Development of wildlife habitats.	Boundary pillar Erection	12 Km	8.40
	Construction of forest guard quarter	1 no.	8.00
	Livestock immunization	100 nos.	1.00
	Ex-gratia compensation	L.S.	2.00
	Renovation of log huts	1 no.	2.00
	Social Welfare Activities		
Management Action Plan KBR.	Toilets	15 families	8.25
	LPG connection	30 families	1.65
	Electric rice cooker	45 families	0.9
	Solar lamps	60 families	2.70
	Water supply at Lachen Gumpa	L.S.	1.50
	Habitat Management		
	Bamboo plantation	30 ha.	18.57
	Maintenance of 2 nd year plantation	60 ha.	4.75
	Plantation of wild fruit & fodder	30 ha.	10.65
	Improvement & maintenance of high altitude water bodies	6 nos.	12.00
	Forest Protection		
	Patrolling and surveillance	2 nos.	4.00
	Infrastructure Development		
	Drinking water supply at log house	1 no.	2.50
	Maintenance of log bridge	2 nos.	6.00
	Renovation of log huts	1 no.	4.00
	Forest Research, Extension & Education		
	Awareness on protection of N.R.	1	2.00
	Signage and posters	1	1.50

Integrated Development of Wildlife Habitats under KNPWork carried out under Integrated Development of Wildlife habitats during XIth. Plan.

(Table-6)

Physical Indicators	Expenditure (in lakhs)					
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Boundary pillar erection	9.24	7.00	5.00	2.10	8.40	31.74
Construction of check post	6.00					6.00
Drinking water provision	1.00					1.00
Construction of water holes	1.50	2.00	2.50	3.00		9.00
Up gradation trekking trail	5.00	0.00	1.00	3.40		9.00
Up gradation of interpretation centre	2.00					2.00
Soil & moisture conservation		3.50		5.85		9.35
Gap filling through pltn. of trees		3.00				3.00
Purchase of camping equipments		1.00	0.50			1.50
Construction of Hides		1.50	1.50			3.00
Livestock immunization		1.00	0.50	1.00	1.00	5.00
Control of forest fire		3.00	3.00	1.26		7.26
Habitat improvement		3.00	2.00	2.00		7.00
Improvement of sinking & landslide areas		1.80	1.00	1.80		4.60
Awareness & extension education		0.50	0.25			0.75
Patrolling & surveillance		1.00	1.00			2.00
Renovation of F.G. quarter		1.00	1.00	2.00	2.00	6.00
Renovation of log hut		1.00	1.00			2.00
Posture, brochures, pamphlets, signage, etc.		0.50	1.00			1.50
Construction of rescue centre & staff quarter			5.00			5.00
Eco-developmental			1.00			1.00
Activities			2.00			2.00
EX-gratia payment				2.00	2.00	4.00
Construction of log bridge				2.10		2.10
Construction of F.G. quarter.					8.00	8.00
Engagement of firewatchers			1.35			1.35
Control burning			1.00			1.00
Wildlife Enforcement, combining operation of the entire park			1.00			1.00
Creation of fire line			2.00			2.00
Purchase of fighting tools			1.00			1.00
Sprayer for fire fighting			0.50			0.50
Procurement of searchlight			0.30			0.30
Procurement of GPS set			0.50			0.50

Management Action Plan, Khangchendzonga Biodiversity Reserve

(Table-7)

Eco-Development Activities	Expenditure (in lakhs)					
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Piggery Farming						
Milching Cows						
Handlooms & Handicrafts	5.50					5.50
Distribution of Cardamom rhizomes	4.80					4.80
Social Welfare Activities						
Toilets	6.30	5.25			8.25	19.80
LPG connection	3.50				1.65	5.15
Cattle immunization		3.00				3.00
Health camp	2.00					2.00
Construction of muel trek						
Nature trip		1.00				1.00
Solar Light	3.60				2.70	6.30
Distribution of low fuel wood consuming devices						
Water supply at Lachen Gumpa					1.50	1.50
Habitat Management						
Silvi-pasture development						
SMC			3.29			3.29
Broom Grass Plantation	3.96					3.96
Bamboo plantation	6.42	7.54	7.54		18.57	40.07
Maint. of 2 nd year plantation	1.15	2.40	2.40		4.75	10.70
Plnt. of wild fruit & fodder			6.56		10.65	17.21
Improvement & maint. of high altitude water bodies		6.00			12.00	18.00
Forest Protection						
Biodiversity check post						
KBR Boundary demarcation			9.00			9.00
Office cum quarter			12.00			12.00
Patrolling & surveillance					4.00	4.00
Infrastructure Development						
Up gradation of Interpretation centre	3.00					3.00
Renovation of log huts	6.00	4.00			4.00	14.00
Furnishing of Beh Log Hut	1.50					1.50
Construction of trekking trail	5.00		9.00			14.00
Approach road to interpretation centre, Yuksom		8.00				8.00
Development of camp site		4.00	5.00			9.00
Drinking water supply at log house		5.00			2.50	7.50
Audio video equipment in WL interpretation centre						
Purchase of camping equipments						
Maintenance of log bridge					6.00	6.00
Forest Research, Extension & Education						
Awareness on protection of N.R.		2.00				2.00
Signage and posters	1.50	1.00			2.00	4.50
Documentary film on KBR	5.00				1.50	6.50

Himalayan Zoological Park

The works carried out at Himalayan Zoological Park in the financial year 2011-12 were segregated in four broad categories and executed through two schemes, Sikkim Ecology & Env. CESS and State CAMPA. These categories are as follows:

1. Infrastructure Development (including repairs & renovation).
 2. Promotional and Publicity.
 3. Education & Research.
 4. Beautification & maintenance.
1. Infrastructure development works included are:
 - a) Construction of post with stone design bending of iron square pipe endless knot design railing and gate providing flat stone flooring on slab and approach footpath towards keeper shed.
 - b) Construction of flat stone for footpath under Leopard Cat enclosure for shifting of Common Leopard enclosure.
 - c) Partition of Large Indian Civet enclosure.
 - d) Changing of Clouded Leopard big iron door.
 - e) Construction of wooden flooring inside the feeding house Snow Leopard.
 - f) Construction of wooden flooring inside Leopard Cat Feeding home for shifting For Common Leopard enclosure.
 - g) Upgradation of old Leopard Cat enclosure for shifting of Common Leopard enclosure.
 - h) Construction of H.P. stone wall below B.O. quarter.
 - i) Construction of Den inside Leopard Cat enclosure shifting of Common Leopard.
 2. In promotion and publicity the works included are Designing & printing of entry tickets, Brochures, Animal stickers, Animal Posters and a picture booklet.
 3. Education & Research- Floral documentation of the zoo Plants, printing of the Book installing sings and interpretation, Materials throughout the zoo.
 4. Beautification & Maintenance.
 - a) Cleansing of jungle in and around enclosures, for path and roads including weeding and old plantation.

Estimate of 2011-2012 for development works in the Himalayan Zoological Park, Bulbulay under the Sikkim Ecology fund and Environment CESS, done during the year 2011-2012.

(Table-8)


Sl. No	Item of works	Physical	Financial Rate	Amount	Total
1.	Construction of post with stone design bending of iron square pipe endless knot design railing and gate providing flat stone flooring on slab and approach footpath towards keeper shed at HZP during 2011-2012	189.52sqm	-	250000	250000.00
2.	Construction of flat stone for footpath under Leopard Cat enclosure for shifting of Common Leopard enclosure.	60m	-	109978	109978.00
3.	Partition of large Indian Civet enclosure	32sqm	-	50000	50000.00
4.	Estimate for floral documentation of HZP, Bulbulay, naming of important plants of flora near enclosure along the road, publication of Zoo flora.			50000	50000.00
5.	Improvement of Clouded Leopard big iron door.	4 Nos.	-	72000	72000.00
6.	Construction of wooden flooring inside the feeding house of Snow Leopard.	7.5sqm	-	38697	38697.00
7.	Construction of wooden flooring inside the Leopard cat feeding home for shifting of Common Leopard enclosure.	7.5sqm	-	38697	38697.00
8.	Upgradation of old Leopard Cat enclosure for shifting of Common Leopard enclosure.	196sqm	-	190164	190164.00
9.	Construction of H.P. Stone wall below B.O. quarter at HZP	95.76 cum	-	108000	108000.00
					13,57,536.00

(Rupees thirteen lakhs fifty seven thousand five hundred thirty six) only**Estimate for development works in the Himalayan Zoological Park, Bulbulay under the CAMPA fund, done during the year 2011-2012.**


(Table-7)

Sl. No	Item of works	Physical	Financial Rate	Amount	Total
1.	Cleaning of jungle in and around enclosure, for path and roads including weeding old plantation.	127139sqm	-	316000	316000.00
2.	Construction of Den inside Leopard Cat enclosure shifting of Common Leopard.	3 x 2 =6sqm	-	161163	161163.00
3.	Printing of entry ticket, post card, brochure, picture booklet, of animal tickets, posters including designing all complete.	-	-	523000	523000.00
					1,00,163.00

(Rupees one lakh one hundred and sixty three) only.



**SOIL & WATER
CONSERVATION**



Chapter-14**SOIL & WATER CONSERVATION****I-WETLAND****List of identified wetlands in Sikkim state under NWCP.**

(Table-1)

Sl. No.	Name of the State	Sl. No.	Name of Wetlands
1.	Sikkim	1.	Khechupari Holy Lake
		2.	Tamze Wetland
		3.	Tembao Wetland Complex
		4.	Phendang Wetland Complex
		5.	Gurudongmar Wetland
		6.	Tsomgo Wetland

Distribution of Wetlands in Sikkim

(Table-2)

Wetland Category	Wetland Class	No. of Wetlands	Wetland Area (ha)	Water Spread (ha)	
				Post-M	Pre-M
Natural	Lake/Pond	160	1985.00	1985.00	1749.50
<2.25 ha.	-	67	-	-	-
Total		277	1985.00	1985.00	1749.50

Source:- Wetlands of India, Nation-wide Wetland Mapping Project, sponsored by MoEF, Space Application Centre (ISRO, Ahmadabad-June 1998)

District-wise Distribution of Wetlands

(Table-3)

District	Wetland Class	No. of Wetlands	Wetland Area (ha)	Water Spread (ha)	
				Post-M	Pre-M
1. East Sikkim	Lakes/Ponds	14	120.75	120.75	100.7
	<2.25 ha	3	-	-	-
2. West Sikkim	Lakes/Ponds	11	56.50	56.50	56.50
3. North Sikkim	Lakes/Ponds	135	1807.75	807.75	1592.25
	< 2.25 ha	64	-	-	-
4. South Sikkim	-	-	-	-	-
	Total	227	1985.00	1985.00	1749.50

Source: - Wetlands of India, Nation-wide Wetland Mapping Project, sponsored by MoEF, Space Application Centre (ISRO, Ahmadabad-June 1998)

Turbidity

(Table-4)

Turbidity Status in Wetlands of Sikkim (Note : M=Monsoon)						
Wetland Class	Low		Moderate		High	
	Pre-M	Post-M	Pre-M	Post-M	Pre-M	Post-M
Lakes/Ponds	60	107	3	29	14	24

Source: - Wetlands of India, Nation-wide Wetland Mapping Project, sponsored by MoEF, Space Application Centre (ISRO, Ahmadabad-June 1998)

MAJOR WETLANDS IN SIKKIM

The wetlands listed below are amongst the most productive & biologically rich ecosystems and are also amongst the most endangered.

➤ **Khecheopalri Wetland**

Centred in a dense forest, Khecheopalri Lake is located at West Sikkim at an altitude of 1700 m. It is cirque type and is considered as one of the most sacred lakes by the Sikkimese people both by the Buddhists and the Hindus (Jain et al. 1999 and 2000 and Jain, 2000). The lake is subjected to high influx of tourists and number of pilgrims. It is accessible by a motorable road right up to the lake area. The lake watershed has mixed broad leaved forests and agricultural land with a total area of 12 sq. Km. having two villages which includes 91 ha area specifically as the lake watershed. Significant land use cover change during past four decades has resulted in its deterioration. Heavy sediment loads have been recorded which is posing big threat.

➤ **Tsomgo (Chhangu) Wetland**

It is situated at an altitude of 3660-3700 m in an alpine area on the way to Nathula about 40 km away from Gangtok. The lake is oval in shape, about 1 km long, 22 ha in area and is considered sacred by the local people. This lake remains frozen during the winter months till mid-May. This wetland is a lake complex joined by some other water bodies Manju-I and Manju-II. It has also varied biodiversity in terms of flora and fauna. It is subjected to high influx tourists.

➤ **Gurudongmar Wetland**

It is complex of three glacial water bodies situated in North Sikkim at an altitude of 5180 meters having an area of 40 hectares. It is one of the largest lakes with 1.8 km circumference. It is a sacred water body opened for regulated tourism. It is the north flowing moraine dammed lake and one of the potentially dangerous glacial lakes in the Sikkim Himalaya. It is a pristine glacial wetland which is subjected to pressures of encroachment, siltation, thin vegetal cover unplanned tourism. This is a typical high altitude wetland a source of fresh water.

➤ **Phedang Tso Wetland Complex**

It is situated in Kupup in East District at an altitude of 4400-4600 meters and is alpine in character. It is 45 hectare in area and a source of water for Jaldhaka power station in Bhutan and is surrounded by defence installations and road networks. Threats posed are tourism influx, excess field exercises by army and civilians around the lake, grazing, avalanches and shrinkage in area. It also serves as means of domestic water supply to army and local populations. Numbers of water fowls use the water body for nesting and transit.

➤ **Menmoitso and Hangu Complex**

These twin wetland habitats are situated in East Sikkim with an area of 42 ha and 58 hectares. It is in the conifer forest mixed with Acer, Viburnum, Prunus. It is a typical habitat for trout fish. Hangu is a swampy typical Wetland area suitable for variety of Avifauna. In 1962, the Chinese attacked Indian camp here killing more than 200 Indian soldiers.

➤ **Tamzey Wetland Complex**

This wetland complex is situated near Chola pass at Tamzey valley at an altitude of 4200-4600 meters having an area of 35 hectares. During past 40 years all matured fir trees have been removed from this area to meet the defence purposes during Chinese aggression. The area is subjected to threats like poor regeneration, heavy population, shrinkage in area, grazing, etc. These threats also cause problem of contamination of water supply to Gangtok town.

➤ **Tembaowetland Complex**

It is situated in North Sikkim at an altitude of 4400 meters having an area of 15 hectares. This wetland burst out in December 1998 because of which it came in to prominence. It has good wildlife and is subjected to threats of shrinkage, catchment degradation, poor vegetation cover, traditional grazing, rapid formation of marine gullies, and excessive use of hot springs. In spite of its smaller size, it is a significant Wetland which needs protection.

WORK CARRIED OUT DURING 2011-12

(Table-5)

Sl.no	District	Location	Item of work	Achievement	
				Physical	Financial
(1)	(2)	(3)	(4)	(5)	(6)
01	North	Gurudongmar	1. Survey & Demarcation	20 Ha	3.06
			2. Construction of DRM Wall fencing	1 Km	5.77
			3. DRSM for gully plugging	300 .00 cum	4.74
			4. Seabuckthron Plantation	15 Ha	4.13
			5. Maintenance of Nursery at Munshithang	0.50 Ha	1.10
			6. Soil and moisture conservation	10.00 Ha	3.93
			7. Public Awareness Programme	L.S	1.00
			8. Fuel wood alternative	100 Nos.	1.95
			Sub-total -	-	25.75
02	East	Tsomgo	1. DRSM	500.25 cum	9.91
			2. SMC	1.55 Ha.	0.77
			3. Maintenance of Plantation	5 Ha.	0.25
			4. Livelihood programme	5 Nos.	1.00
			Sub-total -		11.93
		Phedang	1. DRSM	300.95 cum	5.95
			2. Stone wall fencing	1 Km.	6.48
			3. Maintenance of Plantation	1 Km.	0.57
			Sub-total -		13.00
03	West	Khecheopalri	1. Aided Natural regeneration	30.00 Ha.	3.73
			2. Sausage Wall	428.67 cum	16.82
			3. Jhora Training	160.00 Rmt.	8.00
			4. Construction of Drain	155.00 Rmt.	10.00
			Sub-total -		38.55
			Grand Total -		89.23

**II-STATEMENT SHOWING THE PROGRESS REPORT FOR
COMPENSATORY AFFORESTATION SCHEME**

(Table-6)

Sl.No.	Name of Schemes/Project	Names of Scheme	Unit	1980-2009		2009-12		Total	
				Phy. (Ha)	Fin.	Phy. (Ha)	Fin.	Phy.	Fin.
1	Compensatory Afforestation Scheme	Afforestation	Ha	2307.16	1118.27	573.33	345.19	2880.49	1463.46
	TOTAL			2307.2	1118.27	573.33	345.19	2880.49	1463.5
2 (a)	Catchment Area Treatment (CAT) Plan for Chujachen HEP BY Gati	AR/Med/Avn. Plantation	Ha		-	170.00	45.61	170	45.61
2(b)	Catchment Area Treatment (CAT) Plan for TLDP (H. Degraded & Very H. Degraded by NHPC	AR/Med/Avn. Plantation	Ha		-	145.40	36.49	145.4	36.49
2(c)	Catchment Area Treatment (CAT) Plan for Jorethang Loop HEP by DANS Energy	AR/Med/Avn. Plantation	Ha		-	75.00	19.6	75.00	19.60
2(d)	Catchment Area Treatment (CAT) Plan for Ramam HEP by NTPC Ltd.	AR/Med/Avn. Plantation	Ha		-	235.00	24.98	235.00	24.98
2(e)	Catchment Area Treatment (CAT) Plan for Rangit-IV HEP by JPCL	AR/Med/Avn. Plantation	Ha		-	386.00	80.33	386.00	80.33
2(f)	Catchment Area Treatment (CAT) Plan for Stage-VI HEP by Lanco	AR/Med/Avn. Plantation	Ha		-	373.00	126.13	373.00	126.13
2(g)	Catchment Area Treatment (CAT) Plan for Teesta Stage-III HEP by Teesta Urja	AR/Med/Avn. Plantation	Ha		-	735.00	167.11	735.00	167.11
	TOTAL					2119.40	500.25	2119.40	500.25

III-INTEGRATED WATERSHED MANAGEMENT PROGRAMME **(IWMP)**

The Government of India has issued a new common guideline -2008 for **Integrated Watershed Management Programme (IWMP)**. The guidelines mainly focus on the management of micro- watershed in a phased manner and the entire area of the state has to be covered by 14th Plan. State Level Nodal Agency (SLNA) has been constituted under the new Common guidelines. The SLNA approves the State Perspective and Strategic Plan wherein prioritization of watersheds has to be done and will oversee all watershed projects in the state. The SLNA will act as nodal agency for coordinating the activities of Project Implementing Agency, implementing the Programme in the watershed area. The Government of Sikkim has Constituted SLNA as per the guidelines and separate Bank account has also been opened after due approval of FR&ED and Planning and Development Department as well as AG, Government of India, Sikkim.

IWMP aims to achieve sustainable development by way of soil & moisture conservation to increase productivity for livelihood to the poor villagers. This helps to prevent soil degradation and draught prevention. The main component of works envisages activities like soil and moisture conservation works with local resources and vegetative measures, plantation with suitable tree and fodder species in the degraded areas, Pasture Development in the private as well as nearby forest land, minor maintenance work etc. deploying JFMC, EDC, local human resources through Watershed Committee for its implementation. Thus, it will help to employment generation, poverty alleviation and upliftment of socio- economic condition of the villagers in the project area. Each project will be for a period of five-seven years.

The IWMP programme is centrally sponsored which has started from 2009-10 with cost sharing bases of 90:10. The GOI releases 6% as 1st instalment to the State Level Nodal Agency (SLNA). The further release will base on the work progress and the released matching state share.

IWMP aims to achieve sustainable development by way of soil & moisture conservation to increase productivity for livelihood to the poor villagers and emphasize on poverty alleviation programme. This helps to prevent soil degradation and draught prevention.

The Government has approved and sanction the following watershed projects in phase manner with the release pattern of 6%, 14%, 25%, 25%, 15%, and 15% considering the work progress of the project. The scheme is CSS 90:10 SS.

(Table-7)

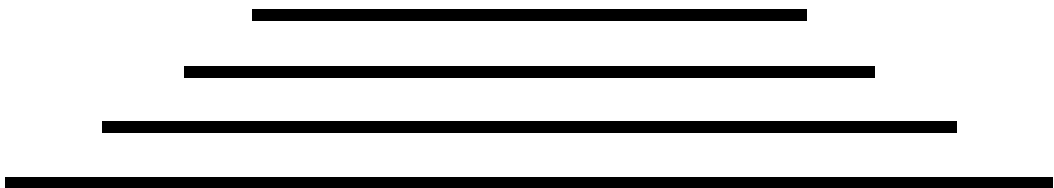
(Rs. In lakhs)

Name of District	Name of Watershed	Area taken for treatment	Year of sanction	Total Project Cost	Central Share (90%)	State Share (10%)	Fund released 2011-12
North IWMP-I	Dzongu	6500	2009	975.00	877.5	97.5	122.85
East IWMP -I	Tsomgo	4000	2009	600.00	540.00	60.00	75.60
East IWMP -II	Aritar Dalapchand	4000	2009	600.00	540.00	60.00	75.60
West IWMP -I	Yuksom	4450	2010	667.50	600.75	66.75	36.05
South IWMP -II	Temi Namthang	4990	2010	748.50	673.65	74.85	40.42
South IWMP -I	Melli Namchi	4599	2010	689.85	620.865	68.985	37.25
East IWMP - III	Aritar (Dungdung)-Tintek	5200	2011	780.00	702.00	78.00	42.12
East IWMP - IV	Lingdok-Rakdong	3400	2011	510.00	459.00	51.00	27.54
South IWMP - III	Wok-Denchung	5600	2011	840.00	756.00	84.00	45.36
Total		42739Ha		6410.85	5769.77	641.085	502.79

The matching state share amounting to Rs 68.92 Lakhs was provided by the State Government from CESS fund. The scheme shall be implemented further if matching State share is provided.



ECOLOGY & ENVIRONMENT



Chapter-15

I-STATE POLLUTION CONTROL BOARD

Sikkim has been created under the provision of Section 4 of Water (Prevention & Control of Pollution) Act, 1974. During the 11th Five Year Plan the Board was reconstituted twice. The major achievements of State Pollution Control Board during the 11th Five Year Plan are as follows:-

Strengthening of State Pollution Control Board by induction of Manpower:

The State Pollution Control Board – Sikkim inducted 6 technical and scientific manpower as per the sanction accorded by the Ministry of Environment and Forests, Government of India and Government of Sikkim.

National Water Monitoring Programme:

Under the programme, the State Pollution Control Board- Sikkim enhanced the water quality monitoring stations from 9 stations to 14. The 5 new stations have been established at river Rangeet. The 9 old stations were in river Teesta.

National Air Monitoring Programme:

The State Pollution Control Board was earlier sanctioned with only two air quality monitoring stations for the capital town Gangtok. During the 11th Five Year Plan seven new stations were sanctioned making it to a total of 9 stations.

Publicity and mass awareness programme:

The State Pollution Control Board –Sikkim carried out display of hoardings, Ad films, Jhora cleaning drive, street plays and Appeals during 11th Five Year Plan.

Public Hearing:

During the 11th Five Year Plan the State Pollution Control Board-Sikkim conducted 13 public hearings for hydro electric projects.

Consent fee:

The State Pollution Control Board-Sikkim enhanced consent fees for establishment and operation of industrial units and hydro electric projects in the State of Sikkim by Government Notification.

Construction of Parivesh Bhawan:

Land measuring 110X50 ft. was allotted by State Government for construction of Parivesh Bhawan, an administration and laboratory building of State Pollution Control Board-Sikkim, during 11th Five Year Plan.

II-SIKKIM ECOLOGY FUND AND ENVIRONMENT CESS:

Summary of approved work programme under Sikkim Ecology Fund & Environment Cess for the financial year – 2011-12.

(Table-1)

Sl.No.	Divisions / Items	Amount (in lakhs)
1	Grant-In-Aid to member of SEIAA/SEC of expert appraisal committee	2.40
2	National Green Corps (NGC) Programme	25.00
3	Consolidated payment for the CESS Collector	5.41
4	Territorial Circle(Green Mission & Ten Minutes to Earth Programme)	8.00
5	Territorial South Division	3.00
6	Territorial West Division	6.00
7	Territorial North Division	14.50
8	Territorial East Division	20.23
9	Land Use & Environment, North Division	7.00
10	Land Use & Environment, East Division	14.01
11	Land Use & Environment, South Division	50.00
12	Land Use & Environment, West Division	9.00
13	Environment & Pollution Control (EPC) Division	15.00
14	Wildlife Circle (Wildlife Week Celebration, all districts)	6.20
15	Wildlife, East Division	2.50
16	Wildlife, West Division	4.75
17	Wildlife, South Division	1.75
18	Wildlife, North Division	11.75
19	Social Forestry, East Division	5.00
20	Social Forestry, North Division	5.00
21	Social Forestry, South Division	5.00
22	Social Forestry, West Division	5.00
23	Silviculture / Research Division	15.00
24	Khangchendzonga National Park / KBR Division	14.00
25	Himalayan Zoological Park	12.50
26	Environmental Information System (ENVIS CENTRE)	7.50
27	Chairman, State Land Use Board (SLUB)	10.00
28	State Medicinal Plant Board / Non Timber Forest Produce(NTFP)	1.01
29	State Pollution Control Board (SPCB)	28.22
30	Celebration of Environment Calendar Days	10.00
31	Logistic Support for Grazing Ban study team from CDF	4.00
32	Saramsa Garden	5.00
33	Biodiversity Research	2.00
34	Directorate of Sericulture	20.00
35	Watershed Management Programme (IWMP /Hariyali)	118.80
36	Parks and Gardens	1.53
37	Working Plan (Integrated Forest Management Scheme-IFMS)	32.00
38	Import of temperate exotic variety of ornamental plants for creation of aesthetic green belt in township areas, landscaping & promotion of ecotourism	177.17
	Total -	685.23

(Rupees- Six crores eighty-five lakhs and twenty- three thousand) only.

III - ENVIRONMENTAL INFORMATION SYSTEM (ENVIS)

ENVIS is an acronym for Environmental Information System. ENVIS is a 100% CSS of MoEF, Government of India with the main objective of data and information collection, collation and dissemination on the subject area „On Status of Environment & its Related Issues“.

The main activities of ENVIS Centre during 2011-12:

- Website development and hosting for e-governance support.
- Development of ISBEID (Indian State-level Basic Environmental Information Database)
- National Environment Awareness Campaign 2011-12 on the theme „Forests for Sustainable Livelihood“ at 111 different locations throughout the State.
- State Green School Programme at 182 Sr. Sec and Secondary level schools with green teacher’s training and GSP coordination for effective implementation.
- Constitution of Chief Minister’s Green School Rolling Trophy –cum- State Green School Awards to five meritorious schools of the state.
- Paryavaran Mitra programme at school eco-clubs for action based environment awareness and education.
- Launching of FM media based environment awareness programme „Let’s Talk Environment“
- Online query response services.
- Newsletter Publication – PANDA Vol. IV
- E-Media hosting of journals, department reports and other publications.

The physical and financial achievement of ENVIS under 100% CSS supported by MoEF, GoI during 2011-12:

(Table-2)

SN	Sanctioned Object Head	Phy.	Fin. (in Rs.)
1	Staff Salary	4 persons	6,04,044/-
2	Data Collection & Database Development (ISBEID)	17 modules	46,216/-
3	Stationeries, Consumables & Contingency, Maintenance & Printing	LS	50,000/-
4	Travelling and Training	LS	20,000/-
5	Internet connectivity and AMC	LS	30,000/-
Total			7,50,260

The physical and financial achievement of NEAC (National Environment Awareness Campaign) under 100% CSS supported by MoEF, GoI during 2011-12:

Regional Resource Agency (RRA): ENVIS CENTRE SIKKIM (Environmental Information System)
NEAC 2011-2012 "Forests for Sustainable Livelihood"
SUMMARY REPORT - DISTRICT-WISE DETAILS OF SANCTION

(Table-3)

Name of District	No. of Proposals Received				No. of Proposals Recommended by RRA & RC				Fund Sanctioned by Regional Committee (Rs)		
	NGOs	Edn. Inst./ Govt. Inst.	Govt. Dept.	Total	NGOs	Edn. Inst./ Govt. Inst.	Govt. Dept.	Total	Awareness Activities	Action Activities	Total in Rs
North	1	3	0	4	1	3	0	4	17000	16000	33000
South	4	26	0	30	3	26	0	29	100000	93000	193000
East	16	42	3	61	14	42	3	59	255000	217000	472000
West	6	15	0	21	4	15	0	19	83000	71000	154000
Total	27	86	3	116	22	86	3	111	455000	397000	852000

Total Proposal Received : 116

Total Proposals Sanctioned by Regional Committee: 111 5 REJECTED

Total Financial Assistance Recommended by Regional Committee: Rs. 8,52,000/-

The physical and financial achievement of various ENVIS work components supported under Sikkim Ecology Fund during 2011-12:

Budget provision for Environmental Information Support: Rs. 7.50 lakhs

(Table-4)

SN	Sanctioned Object Head	Phy	Fin. (in Rs.)
1	Publication of PANDA newsletter	1000 copies	2,05,438/-
2	Website Security audit and hosting	1 domain	95,980/-
3	Publicity and Awareness through FM media	25 episodes	50,000/-
4	Travelling and Training support (NEAC)	2 persons	30,970/-
5	Stationeries, Consumables & Contingency Internet connectivity and AMC	LS	49,567/-
Total			4,31,955/-

Budget provision for National Green Corps Programme: Rs. 25.0 lakhs

(Table-5)

SN	Sanctioned Object Head	Phy	Fin.(in Rs.)
1	Green School Teachers Training – 4 days, two batches	123 teachers	5,33,871/-
2	State Green School Cash Awards 2010-11 (remaining/enhanced cash award)	5 schools	7,50,000/-
3	Baseline Study for Environment Consciousness	25 episodes	2,53,000/-
4	Video documentary on Green School Programme	15 schools	3,80,000/-
5	Environment kits to 197 JHS eco-clubs	197 schools	5,83,073/-
Total			24,99,944/-

Monthly Activity Highlights of ENVIS Centre during 2011-12 (1st April, 2011 to 31st March 2012)

(Table-6)

SN	Particulars	Month
1.	<ul style="list-style-type: none"> ➤ Web site security audit by IBM in support of NIC, New Delhi (URL: www.sikenvis.nic.in) ➤ Web site maintenance and error checks done. ➤ Collection/ Compilation of time series data, annual reports related to Environment. 	April ,,11
2.	<ul style="list-style-type: none"> ➤ Launching of National Environment Awareness Campaign 2010 on the theme –Climate Change. ➤ Workshop: Attended national ENVIS workshop on Website Restructuring with CMS technology on 4-5 May 2011 at New Delhi. ➤ Workshop: Attended national ENVIS-ISBEID user workshop on 12-12 May 2011 at New Delhi. ➤ Constituted State-level Chief Minister’s Green School Rolling Trophy cum Green School State Awards to acknowledge the efforts of best five school eco-clubs. 	May ,,11
3.	<ul style="list-style-type: none"> ➤ Event: World Environment Day (5th June) observed at Chintan Bhawan Gangtok on the theme „Forest- Nature at your Service“. ENVIS Centre actively participated. ENVIS Sikkim hosted the government publication „Biodiversity of Sikkim“ on its website. ➤ Event: ENVIS centre actively participated in the GO GREEN Campaign. ➤ Event: FM media based show –„Let’s Talk Environment“ launched by ENVIS centre. 	June ,,11
4.	<ul style="list-style-type: none"> ➤ Launched the Green School Programme 2011. ➤ Launched National Environment Awareness Campaign 2011-12 on the theme „Forest for Sustainable Livelihood“. 	July ,,11
5.	<ul style="list-style-type: none"> ➤ ISBEID data entry on revised module initiated. ➤ Training-cum-Workshop: ENVIS conducted two days back to back Green Teacher’s Training on 1-2 & 4-5 Aug at Forest Conference Hall in collaboration with CSE, New Delhi. ➤ Workshop: Attended national workshop on NEAC implementation by RRAs 30 Aug at New Delhi. 	Aug ,,11
6.	<ul style="list-style-type: none"> ➤ ISBEID Database programme strengthened by appointment of Data Entry Operator to ENVIS. ➤ Database collection on the revised module initiated in connection to 17. ➤ Forest Fire Statistics database updated. 	Sep ,,11
7.	<ul style="list-style-type: none"> ➤ Compilation of comprehensive proposal for NEAC 2011-12. ➤ Workshop: Participated in the North-East Regional Meeting to discuss the proposals for the national environment awareness campaign 2011-12. 	Oct ,,11
8.	<ul style="list-style-type: none"> ➤ Development of database system for online monitoring of environmental schemes under the Government of Sikkim with the support from the Chief Minister’s Office. ➤ ENVIS appointed as Nodal Agency for information coordination with the Chief Minister’s Office. ➤ Assessment of the Green School Reports and physical monitoring of the activities. ➤ Green School Video Documentary programme initiated. ➤ Baseline Study to assess the Environment Consciousness in Sikkim Citizen initiated. 	Nov ,,11
9.	<ul style="list-style-type: none"> ➤ Coordinated the Paryavaran Mitra National event at Goa. ENVIS Centre selected four students and a teacher for the participation. ➤ Attending training of nodal agencies for online monitoring of various environmental schemes conducted by the Chief Minister’s Office at Secretariat, Gangtok. ➤ Attended training programme on e-governance at Gangtok 	Dec ,,11
10.	<ul style="list-style-type: none"> ➤ ISBEID data entry. ➤ Online State CAMPA database development training. 	Jan ,,12
11.	<ul style="list-style-type: none"> ➤ ENVIS prepared nomination files for the national level Green Globe Foundation Awards ➤ Newsletter compilation initiated. 	Feb ,,12
12.	<ul style="list-style-type: none"> ➤ PANDA Vol. IV bilingual newsletter published. ➤ ISBEID data collection and entry. 	Mar ,,12

Note: Besides the activities stated above, ENVIS Centre has been regularly collecting, compiling and updating in suitable formats for storage and dissemination of acquired information in the website www.sikenvis.nic.in. Centre has also been providing an effective query services.

Green Activities in Different Schools



Vermi Composting at Deorali

Waste segregation at Dentam



Voluntary tending at Rong

Organic farming at Yuksom



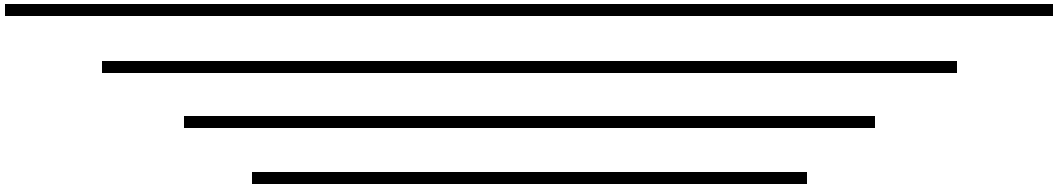
Awards scheme to top 5 Greenest Schools of the State with HCM's Rolling trophy + Rs. 9 lakhs cash awards annually on 5th June.



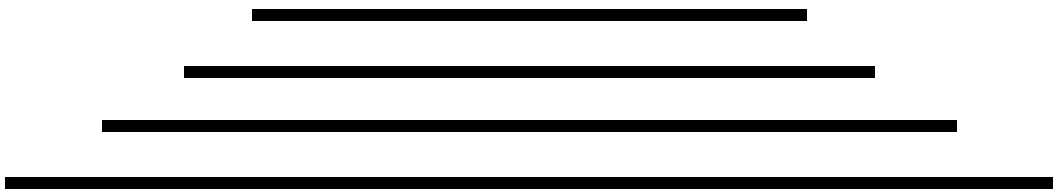
HCM presenting the CM Rolling Trophy to the Greenest School in 2011



H.E. The Governor presenting the C.M. Rolling Trophy to the Greenest School in 2012



SERICULTURE



Chapter-16

SERICULTURE

Sericulture Directorate was created in 1998-99. During the past years, number of sericulture stakeholders in the state has enormously increased. Art of Mulberry, Eri and Mug culture in the form of new technology has expanded popularizing it in every nook and corner of the state.

The state has moved further on adopting all new means of providing appropriate technological support in both forward and backward linkages like the establishment of rational cocoon, marketing centre, organizing more seed centre called grainages, maintenance of germplasm banks in both mulberry and silkworms, establishment of Silk reeling and spinning centre and finally the silk weaving and designing centre in the state.

Table 1: Information on Physical & Financial Target and Achievement of Catalytic Development Programme (CDP) w.e.f. 2003-04 to 2011-12 under Sericulture Directorate

Year	Augmentation of silkworm food plants /acreaage / Family			Construction of Rearing House & Start up tools			Fund allocated		Remarks
	Mulberry	Muga	ERI	Mulberry	Muga	ERI	CSB	State Share	
2003-04	39	-	-	20	-	-	16.43	26.00	Rearing house under construction by stakeholders
2004-05	30	15	50	20	-	50	43.27	16.00	
2005-06	30	15	60	10	-	60	25.50	20.00	
2006-07	30	-	-	30	-	-	32.51	20.00	
2007-08	25	25	25	25	-	25	48.04	20.00	
2008-09	20	10	51	20	-	06	32.28	20.00	
2009-10	50	25	50	25	-	50	67.08	21.96	
2010-11	70	30	40	70	-	40	124.192	16.37	
2011-12	70	30	40	70	-	40	187.00	24.00	
Total	364	150	316	290	-	271	576.302	184.33	

Table 2: Statement of Grainage (Seed Multiplication) & Infrastructure

Sl. No.	Name of Grainage	Year of establishment	No. Of buildings	Status	Available plantation in acres	Status of plantation	Seed production capacity per year.
1	ERI Grainage	2005-06	01	Working	1	Castor	5000 Dfls.
2	Muga Grainage	2005-06	01	Working	1	Kawlo and Kutmero	5000 Dfls.

Table 3: Statement of Government Rearing Houses

Sl. No.	Name of Farm	No. Of Rearing Houses	Production Capacity
1	Rorathang Sericulture Farm	02	300 Dfls each
2	Mamring Sericulture Farm	02	300 Dfls
3	Sericulture Extension Centre, Nagdhara	01	50 Dfls

Table 4: Year-wise activities of Sericulture, area and production of cocoons

Year	Area taken up for sericulture Dev. (area in acre)			Management of existing Farm & nurseries (area in ha)			No. Of extension & awareness camps organised			Production of cocoons Mulberry & ERI (in kg) and Muga (in nos.)		
	Mul	Muga	ERI	Mul	Muga	ERI	Mul	Muga	ERI	Mul	Muga	ERI
2008-09	20	10	51	3	3	3	3	3	3	1840	13757	1497
2009-10	50	25	50	3	3	3	3	3	3	2016	19641	1928
2010-11	70	30	40	3	3	3	3	3	3	2161	25600	2374
2011-12	70	30	40	3	3	3	3	3	3	2560	29530	3120
Total	210	95	181	12	12	12	12	12	12	8577	88528	8919

Chapter-17

RIGHT TO INFORMATION ACT, 2005.

Right to Information Act, 2005 is extended to the whole of India except the State of Jammu & Kashmir in the year 2005 after the assent of the President of India on 15th June, 2005, similarly this act was extended to the State of Sikkim vide Government Notification No.1/LD/RC/2005 dated 26/7/2005.

Under the various provision of the act, this was also enforced in the Department of Forest, Environment & Wildlife Management, Government of Sikkim. Under Section 5(1) (a) a number of State Public Information Officers (SPIOs) & Assistant State Public Information Officers (ASPIOs) were appointed in Circles, Division & District levels so that the citizens may submit their application seeking information. From that day the SPIOs & ASPIOs are receiving RTI application from applicants on the basis of which monthly & yearly reports are being prepared & submitted to the office of the State Information Commissioner, Gangtok.(copies of reports are enclosed as annexure-I).

The designated SPIOs are also attending the court of Appellate Authority as and when notices are issued by the office of State Information Commissioner.

According to the provision of the section 4 (1) & 5(5) of the act every employee of the Department is sensitized during the training period to keep their records dealt by him/her updated to prepare reply to applicants within prescribed time limit of 30 days. Also the SPIOs & ASPIOs are being sent to training of RTI whenever organised in the State or District levels.

The SPIO stationed at HQ (Forest Secretariat, Gangtok) has been designated as SPIO (HQ) in order to run the RTI Cell of the Department who will keep liaison with various SPIOs / ASPIOs of the Department and of other Department besides the office of State Information Commissioner.

**CONSOLIDATED STATEMENT ON THE APPLICATIONS RECEIVED AND DISPOSED OF
UNDER THE RTI ACT 2005.
PERIOD January, 2005 to March, 2012.**

NAME OF THE DEPARTMENT:
FOREST, ENVIRONMENT & WILDLIFE MANAGEMENT.

(Table-1)

Sl. No.	Name of the month	Total No. of PIOs in each Districts & Regional / Zonal & HOD	Total No. of applications received pending as on the last month	Total No. of applications received during the month	Total (Cols. 4+5)	Total No. of applications disposed during the month	Total No. of applications pending (Col. 6-7)	Out of cases disposed shown in Col. 7 information furnished	Out of cases disposed shown in Col. 7 deemed refusals u/s 7(2)/18(1)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	January,2005 to March, 2006	36	NIL	06	06	06	NIL	06	NIL
2	April,2006 to March, 2007	36	NIL	16	16	16	NIL	16	NIL
3	July,2008 to December, 2008	36	NIL	16	16	16	NIL	16	NIL
4	April,2009 to November, 2009	36	NIL	25	25	24	01	24	NIL
5	December, 2009 to March, 2010	38	10	28	38	07	09	01	NIL
6	April, 2010 to June, 2010	38	12	15	27	27	NIL	27	NIL
7	July, 2010 to March, 2011	38	NIL	51	51	51	NIL	51	NIL
8	April, 2011 to March, 2012	38	NIL	33	33	33	NIL	33	NIL

