

INTRODUCTION

Agriculture development in Sikkim dates back to the fifties and as a result of the planned economic development Agriculture is well established in the State. Agriculture is practiced in approximately 11 per cent of the total geographical area of the State and more than 64 per cent of the populations are dependent on agriculture for their livelihood. The geographical location of Sikkim provides optimum conditions for the cultivation of a wide range of agricultural and horticultural crops and animal farming as components of well settled, terraced, mixed farming systems.

The net cultivated area of the State is about 80,000 ha (including cardamom field) while the cropped area has been decreasing due to diversion of land for industry, road, schools, hospitals, housing, etc. The horizontal expansion of area under cultivation does seem possible. The area under assured irrigation is less than 5-per cent. All the area under rice crop has been considered as irrigated area but many rice fields cannot be irrigated even during kharif season if the rainfall is less than normal. Hence, the entire agriculture in the State is practically rainfed.

Due to the variance in the agro-climatic conditions of the state from subtropical to alpine no single crop or variety can suit all the elevation ranges. The agro-ecological conditions of the state are conducive for loss of soil and nutrients from the farming systems. The Department is exerting sincere efforts to replace the existing low yielding varieties with the improved high yielding varieties. Agriculture is dominated by high dependency on organic sources of nutrients.

Sikkim was declared as an organic state in 2003. To convert Sikkim into an organic state, emphasis has to be given on organic farming. Organic alternatives of crop nutrition and protection are being incorporated with no subsidies on chemical fertilizers and pesticides. Extension functionaries are being trained for transfer of this new technology for organic farming. A technology for the rapid compost making - EM technology has gained popularity amongst the farmers. Construction of Compost-cum-urine pits and vermi-compost pits have been carried out on a large scale to meet the demand of organic manures.

IPM technology is being practiced to control the insect pest in the farmers' fields. Predators are produced in the State IPM Laboratory and released in the fields to control the insect pest as and when required.

The Various Schemes covered under the Macro management of Agriculture (100 percent CSS) like Integrated Cereal Development Programme, Oilseeds Production Programme, National Pulses Development Programme, Accelerated Maize Development Programme, Integrated Nutrient Management Programme and National Resource Management Programme have significantly contributed to the enhancement of crop production and further helped in the transfer of scientific and improved farm technology to the grassroots level in the State.

Under the Certified Seed production Programme, the Department took positive steps for reducing dependence on certified seed from outside the state. Seed production programme was done through Registered Seed Growers and in Government Farms. There has been a good percentage of increase in the Certified Seed production in the State.

Farm mechanization is the most important component in the process of crop production system. Demonstration and trials of various improved farm implements were carried out and training was provided to the artisans in fabrication of the farm implements and tool.

ACHIEVEMENT AT A GLANCE MADE DURING 2005-06

A. Crop Production

- During the year 2004-05 the food grain production was 101.17 thousand tonnes, which increased to 106.76 thousand tonnes during 2005-06 which shows an increase of 5 %. There has been a slight increase in the oilseed production from 7.56 tonnes in 2004-05 to 7.95 tonnes in 2005-06.

B. Seeds

- The total area coverage by high yielding varieties in different cereal crops was 26.69 thousand hectare during 2004-05 which has increased to 27.069 thousand hectare in 2005-06.
- The area coverage by improved variety was 5.37 thousand hectare.
- The Certified/TL seeds distributed to the farmers from outside source were 3598.20 tonnes.
- The Certified Seed Production in the Government Farm has increased from 10.77 qtls to 84.17 qtls in rice, 10.00 qtls to 45.63 qtls in wheat and 8.00 qtls to 55.23 qtls in Maize during 2004-05 to 2005-06 There has been an increase of 22% in Certified Seed production in the Government Farm and 115 % increase in the Farmer's Field totaling to 486.31 qtls. Of Certified seed thus reducing the purchase of seeds from outside sources.
- As a component of Seed Certification Programme one modern Seed-Processing Unit of 20 tonnes capacity with cold storage facility have been commissioned at Majitar, having all the facilities required for seed processing. One Seed Processing Unit at Jorethang for South and West District is under completion.

C. Manures and Fertilizers

- The organic manure production in the farmers' field in the 100 bio-villages selected through EM Technology was about 28,000 tonnes.
- 2500 Nos. of Compost-cum-urine pits was constructed in the four districts of the State with a production of 9980 tonnes of compost.
- 1000 nos. of vermin compost pit and 2000 nos. of vermin compost production pit was constructed in the State.
- To reduce the use of chemical fertilizer the subsidy has been zeroed from April 2006.

D. Mushroom

- 10,030 bottles of spawn was produced for distribution to farmers and fresh mushroom production in farmers' field was recorded at 30.36 tonnes.

E. IPM

2.80 million bio-control agents were released in the crops during the year.

F. Farm Mechanization:

The Engineering Cell of the Department has been in continuous efforts to search better and suitable improved tools and implements from tillage to post

harvest operations with the state. During the year 2005-06, specific, programmes of popularization of Gender friendly Improved Agriculture Tools & Implements was taken up from the state plan and macro-management schemes.

- Agro-service centre and custom hiring centres have been established.
- Zero tillage equipments have been introduced.
- Iron plough and other improved gender friendly machinery have been introduced on trial basis.
- Sprinkler and drip irrigation taken up on demonstration basis.

G. Macro management of Agriculture –

The State has placed priority on, the sustainable development with the watershed approach to achieve the twin objectives of enhancing production with simultaneous conservation of the natural resources. Land development for the conservation of soil, plant nutrients and moisture with peoples' participation was taken up in compact areas and in identified villages.

- Water harvest structures for water storage through roof water harvesting and perennial water sources were constructed for irrigation during dry periods. The farmers' contribution is 75% of the total cost.
- Government farms were strengthened to meet the requirements of different trials and production of foundation and certified seeds.
- Large-scale demonstrations on package of technology involving HYVs, organic sources of nutrients and IPM were carried out in the farmers' fields.
- Farm mechanization and human resource development are the major components of the programme.

H. National Project on Organic Farming

Two Government farms have been converted into 'Centre of Excellence' for organic farming besides capacity building of extension workers and farmers.

1. Nazitam : East District
2. Melli-dara : South District

I. Review of extension reforms (ATMA) scheme for Sikkim State.

- Extension Reforms (ATMA) Scheme was launched on 7th May 2005 in the State of Sikkim. Approval of the scheme was accorded by the competent authority of the state on 9th June 2005 and Orientation workshop at the state level was conducted on 9th and 10th June 2005 with the support of MANAGE Hyderabad.

Two districts of state have been selected :

1. EAST DISTRICT

2. SOUTH DISTRICT

- Establishment of KVKs – Government of India has given approval for establishment of three KVKs in the State. KVKs have been established in three districts of the state i.e. Namthang in South district, Mangan in North district and Gyalshing in west district. This is in the process of establishment.
- KVK AND ATMA WILL WORK IN THE LINE OF CAPACITY BUILDING OF THE FIELD FUNCTIONARIES AND FARMERS.

J. This year the State participated in the North Eastern Agri- Expo held in Dimapur, Nagaland from 27th March to 31st March 2006. Officers from all the four districts of the State attended this Agri-Expo. A stall was put up by the State of Skkim which attracted large crowds and was appreciated and visited by the Hon'ble Chief Minister of Nagaland.

K. Officers of the Department even attended the India Organic Fair held in Lal Bagh, Bangalore from 4th Nov to 7th Nov 2005.

**ESTIMATES OF AREA, PRODUCTION & YIELD
OF FIELD CROPS OF SIKKIM DURING 2005-06**

SL.No.	Crop	Area in '000' Hectares	Production in '000' Tonnes	Average Yield in Kg/Ha
I	CEREALS			
1	Rice	14.74	22.69	1539.35
2	Wheat	5.74	9.20	1602.79
3	Maize	36.70	61.10	1664.85
4	Finger-Millet	4.15	3.78	910.84
5	Barley	1.23	1.59	1292.68
6	Buckwheat	2.01	1.64	815.92
	Total Cereals	64.57	100.00	1548.71
II	PULSES;			
1	Urd	3.87	2.98	770.03
2	Other Pulses	2.93	3.78	1290.10
	Total Pulses	6.80	6.76	994.12
	TOTAL FOOD GRAINS	71.37	106.76	1495.87
III	OIL SEED			
1	Rapeseed & Mustard	6.00	4.50	750.00
2	Soybean	3.89	3.40	874.04
3	Other Oilseed.	0.06	0.05	833.33
	TOTAL OIL SEED	9.95	7.95	798.99

**DISTRICT - WISE ESTIMATES OF AREA, PRODUCTION AND AVERAGE
YIELD OF FIELD CROP IN SIKKIM DURING 2005-06**

SL.No	Crop	District	Area in 000' Hectares	Production in 000' Tonnes	Yield / Hectare in Kg
I. 1	CEREALS: Rice	North	0.60	0.85	1416.67
		East	6.30	9.75	1547.62
		South	2.34	3.77	1611.11
		West	5.50	8.32	1512.73
		Total Rice	State	14.74	22.69
2	Wheat	North	0.85	0.85	1000.00
		East	1.43	2.80	1958.04
		South	1.50	2.30	1533.33
		West	1.96	3.25	1658.16
		Total Wheat	State	5.74	9.20
3	Maize	North	1.61	3.20	1987.58
		East	9.27	14.24	1536.14
		South	12.50	19.36	1548.80
		West	13.32	24.30	1824.32
		Total Maize	State	36.70	61.10
4	Finger Miller	North	0.69	0.54	782.61
		East	1.00	0.88	880.00
		South	1.01	1.01	1000.00
		West	1.45	1.35	931.03
		Total Millet	State	4.15	3.78
5	Barley	North	0.14	0.14	1000.00
		East	0.44	0.52	1181.82
		South	0.20	0.32	1600.00
		West	0.45	0.61	1355.56
		Total Barley	State	1.23	1.59
6	Buck Wheat	North	0.20	0.14	700.00
		East	0.56	0.50	892.86
		South	0.58	0.44	758.62
		West	0.67	0.56	835.82
		Total BuckWheat	State	2.01	1.64
	Cereals	North	4.09	5.72	1260.77
		East	19.00	28.69	1510.00
		South	18.13	27.20	1500.28
		West	23.35	38.39	1644.11
		Total	State	64.57	100.00

II.	PULSES				
1	Urd	North	0.02	0.01	315.00
		East	0.41	0.30	731.71
		South	1.70	1.33	782.35
		West	1.74	1.34	770.11
	Total Urd	State	3.87	2.98	769.07
2	Other Pulses	North	0.06	0.06	1000.00
		East	1.40	1.70	1214.29
		South	0.72	1.00	1388.89
		West	0.75	1.02	1360.00
	Total Other Pulses	State	2.93	3.78	1290.10
	Pulses	North	0.08	0.07	828.75
		East	1.81	2.00	1104.97
		South	2.42	2.33	962.81
		West	2.49	2.36	947.79
	Total Pulses	State	6.80	6.76	993.57
	FOOD GRAIN	North	4.17	5.79	1387.60
		East	20.81	30.69	1474.77
		South	20.55	29.53	1436.98
		West	25.84	40.75	1577.01
	TOTAL FOOD GRAIN	State	71.37	106.76	1495.81
III	OIL SEEDS	North	0.86	0.6	697.67
1	Rape & Mustard	East	1.90	1.35	710.53
		South	1.66	1.35	813.25
		West	1.58	1.20	759.49
	Total Rape & Mustard	State	6.00	4.50	750.00
2	Soybean	North	0.40	0.31	775.00
		East	0.75	0.7	933.33
		South	1.40	1.24	885.71
		West	1.34	1.15	858.21
	Total Soybean	State	3.89	3.40	874.04
	Other Oilseed	North	-	-	-
		East	-	-	-
		South	0.04	0.03	750.00
		West	0.02	0.02	1000.00
	Total Other Oilseed	State	0.06	0.05	833.33
	Oil Seed	North	1.26	0.91	722.22
		East	2.65	2.05	773.58
		South	3.10	2.62	845.16
		West	2.94	2.37	806.12
	Total Oil Seed	State	9.95	7.95	798.99

SEASONS - WISE ESTIMATES OF AREA AND PRODUCTION OF
FIELD CROPS IN SIKKIM DURING 2005-06

Area in '000' Hectares		Production in '000' Tonnes			Yield in kg/hect
Sl.No	Crop	Season	Area	Production	Yield.
1	CEREALS Rice	Kharif	14.74	22.69	1539.35
		Rabi	-	-	-
		Annual	14.74	22.69	1539.35
2	Wheat	Kharif	-	-	-
		Rabi	5.74	9.2	1602.79
		Annual	5.74	9.2	1602.79
3	Maize	Kharif	36.45	60.68	1664.75
		Rabi	0.25	0.42	1680.00
		Annual	36.70	61.10	1664.85
4	Finger Millet	Kharif	4.15	3.78	910.84
		Rabi	-	-	-
		Annual	4.15	3.78	910.84
5	Barley	Kharif	-	-	-
		Rabi	1.23	1.59	1292.68
		Annual	1.23	1.59	1292.68
6	Buck Wheat	Kharif	-	-	-
		Rabi	2.01	1.64	815.92
		Annual	2.01	1.64	815.92
	TOTAL CEREAL	Kharif	55.34	87.15	1574.81
		Rabi	9.23	12.85	1392.20
		Annual	64.57	100.00	1548.71

II	PULSES				
1	Urd	Kharif	0.06	0.12	2000.00
		Rabi	3.81	2.86	750.66
		Annual	3.87	2.98	770.03
2	Other Pulses	kharif	0.25	0.32	1280.00
		Rabi	2.68	3.46	1291.04
		Annual	2.93	3.78	1290.10
	TOTAL PULSES	Kharif	0.31	0.44	1419.35
		Rabi	6.49	6.32	973.81
		Annual	6.80	6.76	994.12
	TOTAL FOODGRAIN	Kharif	55.65	87.59	1573.94
		Rabi	15.72	19.17	1219.47
		Annual	71.37	106.76	1495.87
III	OIL SEEDS				
1	Rapeseed & Mustard	Kharif	-	-	-
		Rabi	6.00	4.50	750.00
		Annual	6.00	4.50	750.00
2	Soybean	Kharif	3.89	3.40	874.04
		Rabi	-	-	-
		Annual	3.89	3.40	874.04
3	Other oil seed	Kharif	-	-	-
		Rabi	0.06	0.05	833.33
		Annual	0.06	0.03	500.00
	TOTAL OILSEEDS	Kharif	3.89	3.40	874.04
		Rabi	6.06	4.55	750.83
		Annual	9.95	7.95	798.99

11

HIGH YIELDING VARIETIES COVERAGE IN SIKKIM
DURING -2005-2006

SL.No	Crop	District	Area in Hectares		
			Kharif	Rabi	Total
1	Rice	North	570.00	-	570.00
		East	2273.00	-	2273.00
		South	990.00	-	990.00
		West	1740.00	-	1740.00
		State	5573.00	-	5573.00
2	Wheat	North	-	840.00	840.00
		East	-	1429.00	1429.00
		South	-	1500.00	1500.00
		West	-	1790.00	1790.00
		State		5559.00	5559.00
3	Maize	North	1210.00	-	1210.00
		East	685.00	41.00	726.00
		South	5350.00	-	5350.00
		West	4810.00	70.00	4880.00
		State	12055.00	111.00	12166.00
4	Oil seeds	North	536.50		536.50
		East	1012.00		1012.00
		South	764.00		764.00
		West	859.00		859.00
		State	3171.50		3171.50
5	Pulses	North	111.00		111.00
		East	165.00		165.00
		South	162.00		162.00
		West	162.00		162.00
		State	600.00		600.00
4	H.Y.V	State	2427.50	840.00	3267.50
		East	4135.00	1470.00	5605.00
		South	7266.00	1500.00	8766.00
		West	7571.00	1860.00	9431.00

Total H.Y.V	State	21399.50	5670.00	27069.50
-------------	-------	----------	---------	----------

12

IMPROVED VARIETIES COVERAGE IN SIKKIM
DURING 2005-2006

SL. No	Crop	District	Area Coverage in Hectares		
			Kharif	Rabi	Total
1	Finger - Millet	North	16.00	-	16.00
		East	60.00	-	60.00
		South	23.00	-	23.00
		West	50.00	-	50.00
		State	149.00	-	149.00
2	Barley	North	-	4.00	4.00
		East	164.00	-	164.00
		South	-	8.00	8.00
		West	-	27.00	27.00
		State	164.00	39.00	203.00
3	Urd	North	-	-	-
		East	87.00	-	87.00
		South	-	-	-
		West	-	-	-
		State	87.00	-	87.00
4	Other Pulses (Ricebean, Mung, Field Pea, Cowpea Rajmash, etc)	North	-	2.00	2.00
		East	-	22.00	22.00
		South	20.00	-	20.00
		West	-	-	0.00
		State	20.00	24.00	44.00
5	Rape & Mustard	North	-	530.00	530.00
		East	-	771.00	771.00
		South	-	1430.00	1430.00
		West	-	1427.00	1427.00
		State	-	4158.00	4158.00
6	Soybean	North	45.00	-	45.00
		East	157.00	-	157.00
		South	180.00	-	180.00

		West	327.00	-	327.00
	Total Soybean	State	709.00	-	709.00

13

7	Other Oilseed. (Sesamum, Safflower Sunflower, Niger, etc.	North	-	-	-
		East	-	-	-
		South	-	-	-
		West	-	-	-
	Total Other oilseed	State	-	-	-
8	Other (Sweet - Corn, Pop-Coen Buck Wheat ,Etc)	North	-	-	-
		East	18.00	-	18.00
		South	-	-	-
		West	-	-	-
	Total Other Pulses	State	18.00	-	18.00
	Improved Varities	North	61.00	536.00	597.00
		East	486.00	793.00	1279.00
		South	223.00	1438.00	1661.00
		West	377.00	1454.00	1831.00
	Total Improved Varities	State	1147.00	4221.00	5368.00

14

GOVERNMENT FARM SEED PRODUCTION IN SIKKIM
DURING 2005-2006

SL NO	CROP	VARIETY	North	East	South	West	Total
1	Paddy	PD-10/Sugandha 1/2 VL-61/62	-	12.80	-	71.37	84.17
						-	-
2	Wheat	Sonali/ Sonalika	-	17.00	-	28.63	45.63
3	Maize	Palmira / Swan-Composite / Prabha	-	34.93	-	20.30	55.23
4	Finger Millet	PES-95 / local	-	-	-	-	-

5	Barley	VLB-1/DWR-28	-	-	-	-	-
6	Buck Wheat	Meethe/Local V.L. Ugal - 7	-	1.36	-	-	1.36
	TOTAL CEREALS			66.09	0.00	120.30	186.39

7	Ricebean	Sikkim Busty Type	-	-	-	-	
8	Rajmah	VL-63 Jwala	-	0.53	-	-	0.53
9	Rape & Mustard	Pusa Jaikishan Pusa Bold MS-21	-	2.11	-	0.42	2.53
10	Soyabean	PK-472 /1024/2042		6.23	-	7.40	13.63
	Total Oil Seed			8.87	0.00	7.82	16.69
	Grand Total			74.96	0.00	128.12	203.08

15

DISTRIBUTION OF CERTIFIED / TL SEED OF
OUTSIDE SOURCE IN SIKKIM DURING 2005-2006

Sl. No.	CROP	VARIETY	NORTH (In Qtls)	EAST	SOUTH	WEST	STATE
1	Paddy	Sugandha 2/3					217.1
		Total Paddy					217.10
2	Wheat	HD 2180		7.6		120.0	127.60
		UP 262		115.6	72.0	98.0	285.60
		Sonalika	180.00	626	450.00	526.80	1782.80
		HD2643/2189	-	40.00	30.00	30.00	100.00
		Total Wheat					2296.00
3	Maize	Laxmi Shaktiman					30.00 40.00

		Deoki					30.00
		Dhawal					40.00
		Hybrid C 1415	6.00	18.00	18.00	18.00	60.00
		Hybrid C 1837	7.00	21.00	21.00	21.00	70.00
		Baby Corn					5.00
		Pop corn					5.00
		Navjot					30.00
		NLD White	4.00	12.00	12.00	12.00	40.00
		Total Maize					350.00
	Total Cereals						2863.10
4	Field Pea	Aparna	10.00	18.00	16.00	16.00	60.00
5	Cow Pea	152	3.20	20.00	15.00	18.00	56.20
6	Rape	Pusa Bold	31.89	14.10	45.90	33.01	124.90
	& Mustard	Amulya	6	12	13	14	45.00
7	Yellow Sarson	B-9	6.00	15.00	12.00	12.00	45.00
8	Soyabean		86.40	58.80	146.00	112.80	404.00
	TOTAL OIL SEED.		130.29	99.90	216.90	171.81	618.90
	GRAND TOTAL.						3598.20

16

YEARLY PROGRESS REPORT ON SEED TESTING

DATE 1.4.2005 to 31.3.2006

- 1 a) Name of the State seed testing Lab : State Seed Testing Lab.
b) Postal Address : State Seed Testing laboratory
Department of Food Security & Agriculture Development
Marchak, ranipool 737135, East Sikkim
c) Lab. Code :
- 2 Status of the Laboratory whether notified
(under section 4 of seed act 1966) (Y/N) : Y
- 3 Detail of staff :
a) Notified seed analyst under
section 12 of Seed Act, 1966 : One
b) Un-Notified seed analyst under
section 12 of Seed Act, 1966 : NIL
c) Other Staff : Seven

- Total (a+b+c) : Eight
- 4 Capacity of the laboratory in the previous year : 5000 nos.
- 5 Existing capacity of the lab. : 5000 nos.
- 6 Details of the seed samples tested during the period :

Type of samples	Total samples tested including seed health	SAMPLE REJECTED DUE TO						
		Genetic	Physical Purity	Germination	Moisture	Seed Health	Total	Rejected
Certified	105	-	-	11	-	-	105	11
Service	4899	-	-	72	-	-	4899	72
Seed Law Enf.								
TOTAL =	5004	-		83			5004	83

**CERTIFIED SEEDS PRODUCTION PROGRAMME
FARMERS FIELD 2005-06**

CROP	TARGET		ACHIEVEMENT	
	Area (Ha.)	Production. (Qtl)	Area Ha.)	Production. (Qtl)
Paddy	13	200	14.82	230.4
Soybean	11	91	0.45	3.74
Maize	21	315	3.10	45.38
Wheat	3.4	50	-	-
Rajmas	7.6	40	0.20	1.10
Y.Sarson	-	-	0.37	2.61

TOTAL PRODUCTION OF SEEDS- 2005-06 = 283.23 QTL.

SEED TESTING : 2005-06

<u>Types of sample</u>	<u>Target</u>	<u>Achievement</u>	<u>Rejected</u>
Certified	5000 nos	105	11
Service	-do-	4899	72
Seed law Enforcement	-do-	-	-
TOTAL	5000 nos.	5004	83

**CERTIFIED /TL/ QS PRODUCTION PROGRAMME
GOVERNMENT FARMS**

2005-06

SL.NO.	CROP	PPRODN.(QTL.)
1.	Paddy	84.17
2.	Maize	55.23
3.	Wheat	45.63
4.	Mustard	2.20
5.	Yellow Sarson	0.33
6.	Soybean	13.63
7.	Buck wheat	1.36
8.	Rajmas	0.53

TOTAL PRODUCTION OF SEEDS = 203.08 QTL

TOTAL PRODUCTION OF SEEDS 2005-06:

Govt. Farms + Farmers field = 486.31 qtl (Approx valuation Rs 8.00 lakhs at par with NSC & USTDC)

TOTAL NOS. OF FARMERS REGISTERED

2004-2005	2005-06	Increase in %	Response
27	82	200+	Positive

OVERALL INCREASE IN SEED PRODUCTION

SEEDS	2004-05 (Qtl.)	2005-06 (Qtl.)	Increase in %
Govt. Farms	167.00	203.08	22
Farmer's .Field	130.00	280.52	115

VARIETAL TRIAL

CROP	VARIETY	REMARKS
Soybean	MACX-450 NRC-37	Both the varieties are new and brought from Jaipur & provided to all Govt. farms & ICAR for trial. Results expected.
Rajmash	Hill Queen Chakrota Harsi/Pahari Imphal Sup. Jammu	All the varieties were brought from Uttaranchal & organically grown, provided to all Govt.farms & ICAR for trial. Result expected.
Wheat	HD-2643	New variety provided to all district. Result expected.
Wheat	VL-875 VL-832 HS-365 HS-473	All are new hill varieties obtained from VPKAS, Almora. Provided to Marchak Govt.farm for trial. Result expected.
Maize	C-1415 C-1835	Both the varieties are early mature hybrid and new. Provided to all districts for trial in organic condition preferably in paddy field. Result awaited.
Wheat	12 + 9 = total 21 varieties.	All India coordinated wheat Varietal trial on rain fed condition (timely sown & early sown) conducted by Marchak Govt.farm.Result awaited.
Yellow Sarson (B.S.)	B-9	Breeder seed obtained from Oilseed research station ,W.B. Provided to all govt. farm for multiplication. Result awaited except Gyalshing farm.

VARIETAL TRIALS OBSERVATION (ICAR)

CROP	VARIETY	OBSERVATION
Rajmas	Hill Queen Chakrota Harsi/Pahari Imphal Super Jammu	The trial on Rajmas was conducted at ICAR farm at an altitude of 1300 mt. during khari 2005. Poor germination was recorded (<5%) Hence, no growth or yield data could be recorded.

**ORGANIC MANURE RESPONSE TRIAL IN COLLABORATION WITH
MULTIPLEX**

Crop	Paddy
Variety	Sugandha-2 & PD-10
Date of nursery sowing	16.6.05
Date of transplanting	26.7.05
Seed rate	35 kg./ha
Plot size	2 x 2 mt.
Design	RBD
Replication	3
Altitude	2927 FT.
Soil ph	5.8
Soil type	Clay loam
Previous crop	Maize
Average temp.	20-24 ⁰ C

Treatment (T-1)

(1) During the preparation of nursery bed Annapurna & Nisarga has been applied @10 kg & 0.5 kg/acre respectively.

(2) Prior to transplantation Annapurna & FYM has been applied @90 & 100 kg./ac. followed by Mahafal after 25 days @ 2ml./lit of water

which was sprayed in both the surface of leaves. Same spray was repeated 3 times at the interval of 30 days

(3) Again Samras @200ml./100lit. Of water was sprayed in both the surface of leaves.

(4) Treatment(T-2) Control.

(5) Data Summary Sugandha-2

Treatment	Rep-1	Rep-2	Rep-3	Avg.yield/Ha
T-1	810 Gms	790 Gms	760 Gms	1965 kg.
T-2	430 Gms	460 Gms	480 Gms	1140 kg.

PD-10

T-1	830	850	790	2057 kg.
T-2	440	475	485	1165 kg

Requirement of Organic manure/Ha.

FYM-	250 kg. @ Rs.0.50/kg.	= Rs. 125.00
Annapurna-	250 kg. @ Rs.30/kg.	= Rs. 7,500.00
Nisarga-	1.5 kg. @ Rs.162/kg.	= Rs. 243.00
Mahafal-	15 ml. @ Rs.450/lit.	= Rs. 6.75
	Total	= Rs. 7,874.75

ORGANIC MANURE RESPONSE TRIAL ON PADDY
Observation (NAZITAM FARM)

<u>Treatments</u>	<u>Doses</u>	<u>Rate/Ha.</u>	<u>Yield (Qtl./Ha.)</u>
Vermi-compost	20 qtl./ha.	@ 1300/= 26,000/=	31.25
EM Compost	40 qtl./ha.	@ 1600/= 16,000/=	30.00
EM Compost +EM Bokasi	40 & 3 qtl./ha.	@ 1600/= 16,000/= @ 800/= 2,400/=	32.00
Cowdung+ Neem cake	50 & 1 qtl./ha.	@ 50/= 2,500/= @ 1300/= 1,300/=	34.25
Cowdung	50 qtl./ha.	@ 50/= 2,500/=	26.00

PROGRESS REPORT ON ORGANIC FARMING 2005-06

Demonstration on Integrated Nutrient Management (organic source of nutrients) on
Wheat/Mustard crop during Rabi season 2005-06.

Districts	Area Coverage (Hac.)	Neem-cake provided (Tonnes)	Vermicompost provided (Tonnes)	Biofertilizer (Qtls)
North	50.	10.00	10.00	4.00
East	200.	17.50	17.50	7.00
South	200.	15.00	15.00	6.00
West	150.	17.50	17.50	7.00
Total	600.	60.00	60.00	24.00

Demonstration on Integrated Nutrient Management
(organic source of nutrients) on Maize crop during kharif-2005-06.

Districts	Area Coverage (Hac.)	Neem-cake provided (Tonnes)	Vermi-compost provided (Tonnes)	Biofertilizer (Qtls)
North	50.	10.00	10.00	4.00
East	200.	17.50	17.50	7.00
South	200.	15.00	15.00	6.00
West	150.	17.50	17.50	7.00
Total	600.	60.00	60.00	24.00

Integrated Nutrient Management Demonstration on use of Bio-fertilizer along with Organic manure in Maize crop during 2005-06.

Sl.No.	Particulars	Unit	North	East	South	West	Total
1.	Area coverage	Ha.	50	150	150	150	500
2.	Vermicompost	Tons	6.00	18.00	18.00	18.00	60.00
3.	Nisarga	Qtls	0.50	2.00	2.00	1.50	6.00
4.	Sparsha	Qtls	0.50	2.00	2.00	1.50	6.00
5.	Navajeevan	Qtls	2.50	7.50	7.50	7.50	25.00
6.	Nalpak	Qtls	5.00	15.00	15.00	15.00	50.00

Demonstration on use of Bio-fertilizer in Rabi crops under Macro-management during the year 2005-06.

Sl.No.	District	Area to be covered (Hac.)	Qty. of Azotobacter (Azab) in Qtl.	Qty. of PSB (Durga) in Qtl.
1.	North	100	2.00	2.00
2.	East	300	6.00	6.00
3.	South	300	6.00	6.00
4.	West	300	6.00	6.00
	Total	1000	20.00	20.00

Demonstration on the use of Bio-fertilizers in Maize crop during 2005-06 under Macro-management in Agriculture.

Sl.No.	Districts	Area to be covered (ha)	Quant of Azotobacter (Azab) (Qtls)	Quantity of PSB (Durga) in Qtls
1.	North	300	6.00	6.00
2.	East	400	8.00	8.00
3.	South	400	8.00	8.00
4.	West	400	8.00	8.00
	Total	1500	30.00	30.00

Rural compost/ Phospho composting cum Urine pit programme

District	Nos. of compost pits	Cement @ 6 bags / pit	GCI sheet (8'x30') @ 6 nos	HDP with Tap (10'x2.5) @ 1nos.	Qty.of Polyculture @ 3Kg /Pit in (qtls)	Watering can in Nos.	Production capacity (compost) in tonnes
North	280	1380	1380	230	6.90	96	920
East	770	4620	4620	770	23.10	234	3080
South	750	4500	4500	750	22.50	234	3000
West	700	4500	4500	750	22.50	234	3000
Total	2500	15000	15000	2500	75.00	798	9980

Vermi-composting Programme in Farmers' Field Through Earthworm Eco-technology

Sl. No.	District	No. of Vermi-compost pit	Vermi-compost production/pit
1.	North	100	200
2.	East	300	600
3.	South	300	600
4.	West	300	600
	Total	1000	2000

Demonstration on the use of Nalpak (Bio-fertilizer) in Maize crop during 2005-06 (under State plan programme).

District	Area coverage (Acres)	Qty.(Nalpaka) (Qtls)	Remarks
North	150	7.50	
East	250	12.50	
South	250	12.50	
West	250	12.50	
Total	900	45.00	

Demonstration Trial on the use of EM (Effective Micro-organism) - compost prepared locally at Hee-Bermiok, West District, in the ensuing Maize crop.

Sl.No.	Particulars	Recommended rate / acre (Tons)	Area cover in (Acres)	Total compost given (Tons)	Remarks
1.	EM-Compost	4.00	5	20.00	
2.	Bokashi	0.40	5	2.00	

Saturation of Bio-village

Sl.no.	Districts	Nos. of Bio-villages	Area covered by 70 % target in (acres)	Qty. of EM stock solution @ 2 lts / acre	Total compost prepared in tonnes
1.	North	15.nos.	1050	2100.nos.	4200
2.	East	35.nos.	2450	4900.nos.	9800
3.	South	24.nos.	1680	3360.nos.	6720

4.	West	26.nos.	1820	3640.nos.	7280
	Total	100.nos.	7000	14000.nos.	28000

Vermi-compost Production Unit (50 MT) Capacity:

Government Farm a) Daramdin (West District)
 b) Nazitam (East District)

NGO Topakhani (East District)

“Centre of Excellence” under National Project on Organic Farming

Two Government Farms have been converted to Centre of Excellence for Organic farming.
 Farms are as follows:

Nazitam East District
 Melli-dara South District

I. PROGRESS REPORT OF SOIL TESTING LABORATORY DURING 2005 -06 (APRIL 2005 –MARCH 2006)

Soil testing laboratories	Static	Mobile	Total
No. of soil testing laboratories	01	Nil	01
Annual analyzing capacity	5000	-	5000
No. of sample analyzed	5075	-	5075

II. Source of samples:

Source	No. of samples
Direct by farmers	2050
Government farms	2075
Any other	50

III. Soil fertility status of total samples analyzed during the period:

Sl.no.		Low	Medium	High	Total
1.	Organic carbon (%)	761	1015	3299	5075
2.	Available Nitrogen	508	3045	1522	5075
3.	Available Phosphorous	1520	1524	2031	5075
4.	Available Potassium	2030	1527	1518	5075
5.	pH range 4.3-6.5 Average 5.8				

MEAN VALUE OF pH, ORGANIC MATTER, NITROGEN, PHOSPHOROUS AND POTASSIUM IN DIFFERENT DISTRICT

DISTRICT	No. of Sample	pH Mean Value	Organic Mean value(%)	Nitrogen Mean value (Kg/acre)	Phosphorous Mean Value (kg/acre)	Potassium Mean value (kg/acre)
East	1421	5.8	4.18	140	35.52	155
West	1324	5.5	4.20	154	25.60	145
North	1040	5.2	4.40	212	34.20	105
South	1290	5.8	3.08	198	32.06	139

IV. Micro –Nutrient status of soil samples analyzed during the period: Nil since there are no facility available at present.

V. No. of water sample analyzed: Nil

Total No. of Soil Health Card Distributed – 4035

REPORT ON ONE DAY TRAINING PROGRAMME ON SOIL ANALYSIS PROCEDURE AND THE METHODOLOGY OF SOIL SAMPLING AND ITS IMPORTANCE

One day training program was organized on soil testing, its procedure and the methodology of soil sampling to all field functionaries like VLWs, field Assistants and progressive farmers from each Gram Panchayat Unit and sub- divisions of all four districts.

Sl.No.	Date	District	Place of Training	Total No. of Trainees
01.	09.11.2005	North (Mangan)	Community Hall	60
02.	11.11.2005	East (Gangtok)	Conference Hall	65
03.	14.11.2005	West (Gyalsing)	Training Centre	80
04.	18.11.2005	East (Pakyong)	NRC	70
05.	28.11.2005	South (Namchi)	Community Hall	90
			Total	365

The main objective of the training is to bring awareness about the importance of soil analysis which gives idea of availability of plant nutrient like Nitrogen, Phosphorous, Potassium, Calcium, Magnesium and other micro nutrients and soil pH. This gives an idea about the actual nutrients requirement to be supplemented through different sources like bio- fertilizers, organic manures and farm yard manure etc. The training was organized by Dy, Director (Soil Testing Lab).

PROGRESS REPORT ON IPM -2005-06

Sl. No	Programme / Component	TARGET		ACHIEVEMENT		Remarks
		Physical	Financial	Physical	Financial	
1	Farmer's Field School i. Training	45	2.25	5 units-North	0.25	Location covered by IPM officials: 1. Mangabalbari 2. Mangshila 3. Takuthang 4. Tingchim 5. Pacheykhani 6. Rorathang 7. Namthang 8. Turung 9. Radong 10. Marchak
				10 units-East	0.50	
10 units-South	0.50					
10 units-West	0.50					
10 units-IPM Lab	0.54					
Total 45 units	2.29					
	ii. Distribution of Pheromone traps with lures as IPM kits	1575	1.26	1300	1.205	
	iii. Distribution of Knapsack Sprayers		2.70	174	2.688	

	iv. Visit of Experts / IPM officials including Surveillance Programmes	180	0.76 0.68	-	0.126 0.68	
	Total of FFS		7.65		6.99	
2.	Production of Bio-agents	-	-	3.48 million produced out of which 2.80 million released		
3.	Promotion of Bio & Bot. pesticides		2.50			
	GRAND TOTAL		10.15			

METROLOGICAL REPORT STATION: GANGTOK

Sl.No.	Month	Temperature		Total Rainfall (mm)
		Minimum	Maximum	
1.	January – 2005	05.1	11.7	028.2
2.	February – 2005	07.9	14.7	062.2
3.	March – 2005	12.5	18.1	141.3
4.	April – 2005	12.5	18.1	387.5
5.	May – 2005	14.0	20.2	583.0
6.	June – 2005	17.0	22.0	727.1
7.	July – 2005	17.7	21.5	836.0
8.	August – 2005	18.0	22.1	651.7

9.	September – 2005	24.0	32.5	341.3
10.	October – 2005	19.0	34.0	030.9
11.	November – 2005	09.6	16.4	025.3
12.	December – 2005	7.15	15.0	001.0
13.	January – 2006	06.7	13.8	003.3
14.	February – 2006	10.3	16.84	031.6
15.	March - 2006	10.5	18.8	070.3

**MUSHROOM DEVELOPMENT PROGRAMME IN SIKKIM
YEAR:-2005-2006**

Sl.no	PROGRAMME	Unit	Physical Target	Achievement
1.	SPAWN PRODUCTION			
a.	Pleurotus sajor-caju	Bottles	6800	6830
b.	Pleurotus florida	Bottles	1000	2200
c.	Agaricus bisporous	Bottles	1600	1000
d.	Others	Bottles	600	-
		Total	10,000	10,030
2.	DEMONSTRATION			
a.	Pleurotus spp.	Blocks	56	60
b.	Agaricus spp.	Blocks	14	70
		Total	70	130
3.	ADAPTIVE TRIAL	Nos.	7	7
4.	CULTIVATION TRAINING	Nos.	70	In Lab. 390 In Field 205 595
5.	FRESH MUSHROOM PRODUCTION			
a.	LABORATORY			
i.	Pleurotus spp.	kg	-	42.25

ii.	Agaricus spp.	kg	-	60.50
b.	FARMERS FIELD			
i.	Pleurotus spp	kg	-	29,346
ii.	Agaricus spp	kg	-	1020
6.	REVENUE (DEMO+CASH)			
a.	SPAWN	Rs.	-	20,600
b.	PLEUROTUS MUSHROOM	Rs.	-	3,380
c.	AGARICUS MUSHROOM	Rs.	-	4840
d.	AGARICUS BLOCKS	Rs.	-	8500
		TOTAL		37,320

(Rupees thirty-seven thousand three hundred twenty)only

ACTIVITIES UNDERTAKEN IN THE LABORATORY YEAR 2005-2006

1. SPAWN PRODUCTION:-

The total number of spawn produced this year is 10,030 nos. (ten thousand thirty only) which is more than the target. This year the laboratory faced some problem with the culture as the fresh culture could not be procured from the NRC-Mushroom Solan (HP) as the centre was under renovation. The spawn produced at the Laboratory is distributed to farmers at the time of training both in campus and out campus training. Out of 10030 nos of spawn the section has distributed 1500 nos of spawn free of cost during the training at Pangthang (SAP Camp), Exhibition at Hee Gaon, exhibition at Dalapchen, training at Fachey and Phangla Block through area MLA of Khabi tingda.

2. DEMONSTRATION:-

During the year sixty blocks of Oyster Mushroom and seventy blocks of button mushroom was distributed under the demonstration programme.

3. ADAPTIVE TRIAL:-

During the year the laboratory conducted seven number of trial on different strains of button mushroom which was brought from NRC- Mushroom Solan (HP). The trial was conducted for its adaptability and the strain used were:-

a. SM171:- used as a check strain. The strain have quick flushes and good yield (white colour).

- b. SM271:-** the strain was comparable with quick flushes but the veil / annulus tear opened early than the check.
- c. EH580:-** the strain was sensitive and poor yield was obtained under our laboratory condition.
- d. SH211:-** it was a hybrid, the yield was good , fruit body was small with quick flushes.
- e. EB590:-** the fruit body was brown colour, much tasty as compared to white one. The fruit size is big and similar to silvan.
- f. EH560:-** this strain yielded poor in our laboratory condition.
- g. U3:-** the yield and other parameters couldn't be taken as the strain mycelium did not colonize the compost.

4. CULTIVATION TRAINING:-

A total of 700 farmers were provided with training by the laboratory, Marchak, Ranipool out of which 390 farmers from four districts were trained at the campus and 310 farmers under out campus training. The feedback of the training was that there is a huge demand of spawn from all places.

- I.** The out campus training was conducted at Pangthang (S.A.P) camp, Fachay Block and Phangla block, Hee-gaon Bermoik, Ravangla, Dalapchen, Namchi.
- II.** An off-campus specialized training was also conducted at the laboratory organized by the mushroom section of the department of FS&AD in collaboration with scientist from NRC-mushroom, Solan HP.
- III.** A five days exposure visit to NRC-mushroom Solan was conducted by mushroom section for mushroom growers during the year 2005-2006.
- IV.** A two days training was also conducted for the student of Ranipool Senior Secondary school for their vocational subject.
All the beneficiaries list are also enclosed.

5. FRESH MUSHROOM PRODUCTION:-

The production of fresh mushroom during the year was 42.25 kg oyster mushroom and 60.50 kg button mushroom however the mushroom production at farmers field is around 29,346 kg oyster and 1,020 kg button. The mushroom section had also prepared eight tons of button compost. Spawned cased compost was distributed/ sold to the growers at the rate of Rs.25/10Kg bag.

6. REVENUE:-

The activity of the laboratory is promotional and not a commercial unit even though this year the revenue generated from sale of spawn, fresh mushroom and button blocks is Rs.34,820 (rupees thirty -four thousand eight hundred and twenty) only.

The bank receipts are also enclosed and a copy of it has been submitted to the account section of FS &AD department.

AGRICULTURAL ENGINEERING YEAR 2005-2006

I. FARM MECHANIZATION:

Farm Mechanization ensures timeliness of operation and proper utilization of inputs resulting in considerable increase in productivity from limited cultivable and water resources available on sustainable basis. It reduces manual labour and drudgery and help to make farming more attractive and sustainable. The Engineering Cell of the Department has been in continuous efforts to search better and suitable improved tools and implements from tillage to post harvest operations with the state. During the year 2005-06, specific, programmes of popularization of Gender friendly Improved Agriculture Tools & Implements was taken up from the state plan and macro-management schemes. Under the approved state plan, traditional Tools and implements some have been fabricated in the departmental workshop and distributed to government farms for trials and demonstration purpose. Details of the tools and Implements manufactured at the Agri-Engineering workshop at Marchak is shown at Annexure-I.

Limited Man Power and budgetary provision were the major constraints to boost up the day to day activities of the workshop. During the last financial year various tools and implements were fabricated at the Marchak workshop. The tools & implements fabricated at the Engg. Workshop were distributed to various farms and sold through the sale counter at Marchak. All the staff/worker of the workshop were also engaged for various jobs such as installation of machines of Agro-Service centers provided to beneficiaries in different locations of the state. Details of the utilization of the raw materials used for the manufacturing of agricultural tools & implements is annexed at Annexure-II.

Efforts has also been to procure & popularize the improved tools & implements developed by renowned institutions in the country. The tools & implements that's has been developed and being used in the plains need to be tried and tested and necessary modifications done, prior to popularization in the state. Hence, last year, a few sets of improved tools & implements were procured, and these tools & implements are now being tried & tested in the field for finding out

their usability, efficiency over the traditional equipments etc. The Trials will continue till a definitive result is reached and necessary modifications

incorporated. Once their usefulness is ascertained, then only these implements will be procured in mass and distributed to the farmers.

Besides these some tried and tested machineries like Grain Mills, Dhall Mill etc. have also been procured which need not be tested for local conditions and can be directly demonstrated in the fields. The working of these machines are now being demonstrated all over the state to educate the farmers about their usefulness. Two nos. of demonstration per constituency is being taken up these year, excluding Gangtok & Sangha Constituency.

The list of equipments being tried out in the field and those being demonstrated is placed at ANNEXURE-III

II. WATER MANAGEMENT:

Skkim, though abundant in rainfall, its distribution is not uniform over time and area. Hence we have many drought prone areas and dry spells at places. Hence, the true agricultural potential of the state has not been realized. Also, Skkim, being a hilly state with varying degree of slopes, constructing big irrigation canals running across the length & breadth of the State is also not feasible and entails a very high capital cost & maintenance cost, and since the majority of farmers are marginal farmers, they have not been able to provide irrigation to the crops by means of canals.

Hence, keeping this in view, a pilot project, "Pipe water irrigation system" was taken up. Under this, sets of alkathene pipe and a sprinkler head was procured and distributed to the farmers. The field/ kitchen gardens are irrigated by means of sprinkler connected to a water source through the alkathene pipes. The details of the constituency wise distribution of the Sprinkler & pipe set is placed at Annexure-IV.

III. PROMOTION & STRENGTHENING OF AGRICULTURAL MECHANISATION THROUGH TRAINING, TESTING & DEMONSTRATION.

Training & Demonstration form an important part of any extension activity. The Engineering Cell has over the years been involved continuously in providing training & demonstration to the farmers in the use of modern tools in Agriculture. Presently, 60 nos. of demonstration all over the state at the rate of 2 demonstrations per constituency is being conducted to popularize different post harvest and value addition machineries like Dhall Mill, Multipurpose Grinders, Turmeric grinders etc. In addition, a new type of Large Cardamom Dryer has been installed at three places and its demonstration going on. After the demonstrations, judging the reaction of the farmers, these equipments will be distributed to the public on subsidy.

IV. ORGANIC FARMING:

Application of Chemical Fertilizer continuously is a problem to the Soil and its fertility including Environmental and Health Hazards to the users. With this view the concept of Organic Farming is being encouraged by the State Government. Sikkim has been declared as organic state and use of chemical Fertilizer will be gradually reduced to zero. To overcome the nutrient deficiencies, new and innovative methods of producing Compost is being tried out in the State. These year, three Vermi Composting sheds(RUDRA) with a capacity of 50MT each per year was constructed. Out of these three, two units were established at Daramdin Agri Farm & Nazitam Agri Farm. The third is being established at Topa-Khani, Sngtam by an NGO, and the work is under progress. The designing & technical supervision was rendered by the Engineering Section.

In addition, low cost Vermi Composting (Rudra) shed of 2 tons capacity, that can be constructed with locally available materials has been designed for mass demonstration to local farmers.

Also, two nos of "Centre of Excellence" were established at Melli-Dara Agri farm & Nazitam Agri Farm. These center of excellence are to work as Model and Training center for Organic farming. Here, different types of Composting sheds has been

constructed for imparting training to farmers. In addition, water harvesting tanks, Training halls, Agro-service centers for post harvest processing etc. has been provided.

V. PROCESSIONG & STORAGE:

One more modern Seed processing unit with a cold storage facility has been established at Jorethang, South Sikkim. The Seed Processing Unit at Majhitar has been unable to cater to all the seed inputs and a new one has been established at Jorthang to cater to South & West district. Facility of Pre-cleaning, Grading, Drying and Safe storage in Cold Store with controlled humidity has been provided. A Generator has been provided as a contingency against power failure. The processes involved here are, Pre-cleaning & Grading, Drying to the required moisture percentage and Storage in a controlled Temperature & Relative humidity. This confirms to any other Modern Seed Processing Plant. The Unit is now ready and formal inauguration will take place shortly.

This programme has been tied up with the Certified Seed Production Programme of the Department and the Unit will be Handed Over to the Seed Section after inauguration.

The details of the Seed Processing Unit is at Annexure-V.

VI. POST HARVEST MANAGEMENT:

Under macro management, 50% assistances was given to farmers for setting up of Agro –Service centers in rural areas by the GOI. Out of a project cost of Rs.2.5 lakhs, the farmers contribution worth Rs.1.25 Lakh is to be provided in terms of infrastructure development like construction of Sheds, approach road and providing of 3-phase Power Line and installation of the machines etc. The sets of Agro Service machineries includes; (i)Rice Hauller (ii) Wheat Grinder & (iii)Oil Expeller. The setting up of Agro-service centers in rural areas has have very good results, with farmers being able to supplement their income substantially. In the year 2005-06, six sets of Agro-service machineries were procured. Two sets has been installed in the “Centre of Excellence” at Nazitam & Melli-Dara for Training & Demonstration purpose. The other four are for public distribution on 50% subsidy basis.

VII. REPORT ON INFRASTRUCTURE DEVELOPMENT CAPITAL OUTLAYS AND REPARATION/MAINTENANCE UNDER MINOR WORKS (PLAN & NON PLAN) FOR THE YEAR 2005-2006

(i) Agricultural Farms (Minor works):

Various repair, renovation works of the department in consultation with the Officer-in-Charge of the District were taken up and executed as per the availability of fund during last financial year. Most of the works were Repair works of VLW offices and a few of Fencing, Water Supply etc. The details of the minor works is at Annexure-VI.

(ii) Storage & ware housing (Capital):

The work of Construction of Seed Store-cum-Guest House at Jorethang, South Sikkim, has been started at an estimated cost of Rs.14.50 lakhs. During the last Financial Year, work value totaling to Rs.4.20 lakhs was completed and the work is progressing well and is expected to be completed by December 2006.

(iii) WORKS UNDER CAPITAL OUTLAYS:

Construction of Seed Store-cum VLW Office was started at an estimated cost of Rs.9.50 lakhs at Lower Samdong. The work to the value of Rs.2.00 lakhs was completed last year and the work is progressing well and is expected to be completed by November 2006.

(iv) WORKS UNDER BADP PROGRAMME.

The work of Construction of a Guest House at Lachen VLW center is being executed under BADP Programme at an estimated cost of Rs.18.00 lakhs. During the last financial year work to the tune of Rs.9.55 lakhs was completed. The work is under progress and expected to be completed by October'06

The list of different construction/Repair works undertaken during 2005-06 is placed at Annexure-VII.

VIII. MACRO MANAGEMENT:

(i) Infrastructure for Seed: One new Seed Processing Unit has been established at Jorethang, South Sikkim. This unit is meant for the Processing of the Certified Seeds grown in West and South District. Provision for generator and other essential accessories have been included and the whole project was taken up on turn key agreement, in phased manner. The Unit is ready now and formal inauguration is awaited.

(iii) Popularization of Gender Friendly Improved tools and Implements : Due to hilly terrain and other topographical constrains, identification of suitable Improved Tools and Implements suitable for local conditions is a topmost priority. the Popularization of Gender Friendly tools and Implements programme, testing of the Improved Tools and Implements as shown in annexure II are being done. These trials & testings in the field will continue till a definitive result is reached.

(v) Popularization of Seed Bins and other Storage: This Programme has been found effective for storing up various farm produces. For popularization among the progressive farmers the distribution of the Seed Bins of 50 kgs. Capacity. (300 Nos.) were taken up at 25% subsidy basis. The district wise allotment of these seed bins are as under :

- (a) East District : 110 nos.
- (b) West District : 110 nos.
- (c) South District : 110 nos.
- (d) North District: 70 nos.

(vi) Compost Pits & Vermi-compost: Construction of 3 nos of Rudra Compost making Unit of 50 MT capacity each was taken up at Nazitam Agri farm & Daramdin Agri Farm.. In addition, technical guidance along with design & estimate was provided to an NGO for construction of Rudra Compost Unit of 50 MT capacity at Topakhani, East Sikkim. The Engineering section also helped out in designing & framing of estimates for construction of low cost Rudra Compost shed, for mass popularization to farmers.

The details of works under Macro management is placed at Annexure-VIII

LIST OF COMMITTED WORKS TO BE CARRIED OVER TO 2006-07

S. no.	Name of Work	Total Estimated Cost (Rs. in lakhs)	Expenditure incurred till March'05 (Rs. In Lakhs)	Spillover carried over to 2006-07. (Rs. In Lakhs)	Head of accounts.
1	Construction of Seed Store cum VLW office at Lower Samdong, East Sikkim.	Rs.9.50	Rs.2.00	Rs.7.50	Building & Farm Structure (P).
2.	Construction of Seed Store cum Guest House at Joprethang, South Sikkim.	Rs.14.80	Rs.4.20	Rs.10.60	Storage & Warehousing
3.	Constructiuon of Guest House at Lachen, North	Rs.18.80	Rs.9.55	Rs.9.25	BADP

ANNEXURE-II

Details of the Utilization of Raw Materials for the manufacturing of Agricultural Tools & Implements at Engineering Workshop

S.No.	Raw Materials	Qty. Procured	Qty. Utilized	Balance in Stock
1	PGI sheet (24 gauge)	100 Nos.	67 nos.	33 nos.
2	PGI sheet (20 gauge)	100 Nos.	59 nos.	41 nos.
3	Angle Iron (3"x 3"x 6mm)	100 Kgs	65 kgs	35 kgs
4	Angle Iron (1" x 1" x 6mm)	100 Kgs	75 kgs	25 kgs
5	MS Pipe(1")	100 Ft.	60 ft	40 ft
6	MS sheet (1.6mm)	100 Kgs	40 kgs	60 kgs
7	MS flat(2" x 8mm)	100 Kgs	80 kgs	20 kgs
8	MS flat(3" x 6mm)	100 Kgs	65 kgs	35 kgs
9	Plain Rod (12mm)	100 Kgs	45 kgs	55 kgs
10	Ring Rod (6mm)	50 Kgs	35 kgs	15 kgs
11	GI wire(no:8)	100 Kgs	70 kgs	30 kgs
12	Coal	100 Bags	70 bags	30 bags

13	Transformer Oil	60 ltr	60 ltrs	-
14	Welding Rod (No:10)	20 Pkt.	14 pkt	6 pkt

ANNEXURE-III1. Tools & Implements for Trial & Testing

- (i) Hand Winnower
- (ii) Paddy Thresher
- (iii) Manual Rice Planter
- (iv) Animal Drawn Seed Drills
- (v) Lugged Wheel Puddler
- (vi) Animal Drawn Potato Digger
- (vii) Rotary Dibbler
- (viii) Naveen Dibbler
- (ix) Wheel Hoe
- (x) Manual Seed cum Fertilizer Drill.

2. Machineries for Demonstration.

- (i) Multi purpose grain Mill
- (ii) Dhall Mill
- (iii) Cardamom Dryer
- (iv) Turmeric/ Ginger Processor
- (v) Vegetable Dryer
- (vi) Improved Horticultural Tool Set
- (vii) Seed Dryer
- (viii) Seed Cleaner cum Grader
- (ix) Power Operated Wheat Thresher

(x) Power Operated Potato Grader

(xi) maize sheller

Annexure-IV

Constituency Wise distribution of Pipe Water Irrigation with Sprinkler system.

Sl.No.	Name of Constituency	District	Alkathene Pipes (Coils.)	(Sprinkler Head (nos.))
1	Lachen Mangshila	North	55 coils	15 nos.
2	Kabi Tingda	North	55 coils	15 nos
3	Dzongu	North	55 coils	15 nos
4	Ranka	East	55 coils	15 nos
5	Rakdong Tintek	East	55 coils	15 nos
6	Sang-Martam	East	55 coils	15 nos
7	Rumtek	East	55 coils	15 nos
8	Central-Pandam	East	55 coils	15 nos
9	Bara Pathing	East	55 coils	15 nos
10	Regu	East	55 coils	15 nos
11	Lossing Pacheykhani	East	55 coils	15 nos
12	Khamdong	East	55 coils	15 nos
13	Assam Linzey	East	55 coils	15 nos
14	Rhenock	East	55 coils	15 nos
15	Melli	South	55 coils	15 nos
16	Rateypani	South	55 coils	15 nos
17	Damthang	South	55 coils	15 nos
18	Ralang	South	55 coils	15 nos
19	Wok	South	55 coils	15 nos
20	Jorethang	South	55 coils	15 nos
21	Temi-Tarku	South	55 coils	15 nos
22	Yuksom	West	55 coils	15 nos
23	Tashiding	West	55 coils	15 nos
24	Gayzing	West	55 coils	15 nos
25	Hee-Bermiok	West	55 coils	15 nos
26	Dentam	West	55 coils	15 nos
27	Rinchenpong	West	55 coils	15 nos
28	Soreng	West	55 coils	15 nos
29	Chyakung	West	55 coils	15 nos
30	Daramdin	West	55 coils	15 nos

ANNEXURE-V

SEED PROCESSING UNIT AT JORETHANG.

Seeds are precious and primary inputs for cultivation. So full care is necessary for production, handling, processing, analysis and storage. As such for certified/ foundation seeds production programme to succeed, establishment of seed processing/storage unit is a must.

One modern Seed processing unit with a cold storage facility of 40 MT capacity has been established at Jorethang, South Sikkim. This programme has been tied up with the certified Seed production Programme of the Department. Facility of Pre-cleaning, Grading, Drying and Safe storage in Cold Store with controlled humidity has been provided. This unit conforms to any other established modern Seed Processing Plant in India. The Unit consists of the following :

1. COLD STORE WITH DEHUMIDIFIERS The cold storage with dehumidifiers is necessary to maintain the germination %age and viability of seeds over a long period of time. The temperature in the seed store is to be maintained at the range of 15°C to 20°C at all times. The Storage unit is so designed as to store the seeds in optimum Temperature and Relative Humidity. The relative humidity of Sikkim is very high (above 80% always), so the store is equipped with dehumidifiers so as to tackle the problems of high humidity in the region.. The cooling system and the dehumidifiers are fully automatic with auto cut facilities.

2. Seed Dryer : Being a high rainfall area with high RH. the seeds brought to the processing unit normally has a very high moisture percentage (usually above 20%), hence drying to a safe storage moisture content is very important. The drier provided in the unit has a capacity of 500Kgs per batch.

3. Screen Grader - The seeds brought from the farmers have high percentage of impurities. They need to be pre-cleaned and graded for uniformity in quality, size etc. The Grader provided at the Seed Processing Unit at Mazitar has a capacity of 1MT per hour (based on wheat).

4. Generator : The temperature at the Cold Store need to be maintained low at all times with controlled humidity of around 45%. Hence to meet any eventuality arising out of power failure, a 63-KVA generator set of Kirloskar make has been provided for power back up.

ANNEXURE-VIMINOR WORKS (2005 – 06)

S.No.	Name of Work	Location	Amount
{A} EAST DISTRICT			
1	Repair of 4 unit IV the Class quarter	Marchak, East Sikkim	Rs.1,08,963.00
2	Providing Water Supply & internal sanitation at Central Pendam VLW centre	Central Pendam, East Sikkim	Rs.43,182.00
3	Repair of IPM lab.	ICAR complex, Tadong	Rs.54,000.00
4	Remodification of Seed Processing Unit, mazitar	Mazitar, East Sikkim	Rs.63,171.00
5	Clearing of Sewarage blockage at Krishi Bhavan	Krishi Bhavan, Tadong	Rs.11,956.00
6	Construction of Rolling Shutter at Central Store	ICAR complex, Tadong.	Rs.28,227.00
{B} SOUTH DISTRICT			
1	Repair of Seed Store at Bermiok,	Bermiok, South Sikkim	Rs.55,334.00
2	Construction of Chain Link Fencing at Ravangla	Ravangla, South Sikkim	Rs.1,57,988.00
3	Repair of VLW store cum quarter at Lingee	Lingee, South Sikkim	Rs.43,119.00
{C} WEST DISTRICT			
1	Repair of Seed cum Fertilizer Store at Tashiding	Tashiding, West Sikkim	Rs.75,579.00
2	Repair of 2-unit labour quarter at Daramdin	Daramdin, West Sikkim	Rs.74,988.00
{D} NORTH DISTRICT			
1	Repair of VLW quarter cum store at Phodong	Phodong, North Sikkim	Rs.84,430.00
2	Repair of VLW quarter cum store at Lingdong	Lingdong, North Sikkim	Rs.84,420.00
3	Repair of VLW quarter cum store at Toong-Naga	Toong-Naga, North Sikkim	Rs.91,789.00

4	Repair of Agro-Service centre at Mangan	Mangan, North Sikkim	Rs.41,727.00
---	---	----------------------	--------------

OTHER WORKS

ANNEXURE VII

S. No.	Name of Work	Amount	Head of Accounts	Remarks
{A} EAST DISTRICT				
1	Setting up Centre of Excellence, Nazitam	Rs.3,94,766	National Project on Organic Farming	Completed
2	Construction of Rudra Compost, Footpath & Store Repair at NAzitam	Rs.10,53,000	Macro-management	Completed
3	Construction of Seed Store cum VLW office at Lower Samdong	Rs.2,00,153	Building & Farm Structure (P).	Work under progress and likely to be completed by November'06.
4	Renovation/ painting of Office room of Chairman, Farmer's Welfare Board i/c furnishing at Krishi Bhavan	Rs.56,000		Completed
5	Construction of Shelves at the office of Jt.. Director(Census), at ICAR Complex.	Rs.28,000		Completed
{B} SOUTH SIKKIM				
1	Setting up Seed Processing Unit, Jorethang		Macro-management	Completed.
2	Setting up Centre of Excellence, Melli Dara	Rs.4,05,000	National Project on Organic Farming	Completed
3	Construction of Seeds Store cum Guest House at Jorethang,	Rs.4,20,000	Storage & Warehousing	Work under progress and likely to be completed by December'06.
{C} WEST DISTRICT				
1	Construction of Model Rudra Compost Unit, footpath & store repair at Daramdin	Rs.9,52,951	Macro-management	Completed
{D} NORTH DISTRICT				

1	Construction of Guest House at Lachen	Rs.9,55,0000	BADP	Work under progress likely to be completed by October'06.
---	---------------------------------------	--------------	------	---

**PHYSICAL & FINANCIAL ACHEVEMENT UNDER
NATURAL RESOURCE MANAGEMENT
UNDER MACRO-MANAGEMENT IN AGRICUL TURE
2005-06**

Rs. in lakhs,

Sl.No.	Programme	Unit	Physical		Financial	
			Target	Achievement	Target	Achievement
1.	Natural Resource Management					
1.	a. NWDPRA	Ha	3712	3156.00	203.52	203.35
	b. Biological conservation measures	Ha	618	600.93	30.00	30.00
2.	Farmer's Training	No.	10000	10000.00	5.00	4.99
3.	Reclamation of Acidic soil	Ha.	1600	1447.00	40.00	40.00
4.	Water Harvesting from surface run	No.	300	300.00	30.00	30.00
5.	Bench Terracing under Land Development	Ha	1466	1459.00	110.00	110.04
6.	External Auditing of NWDPRA 2002-2003 to 2004-2005	No.	32	32	6.00	5.99
	TOTAL				424.52	424.37

SOIL & WATER CONSERVATION

MACRO-MANAGEMENT OF AGRICULTURE

(100% CSS)

A. NATURAL RESOURCE MANAGEMENT

1. National Watershed Development Project for Rainfed Areas (NWDPRRA).

The National Watershed Development Project for Rainfed Areas(NWDPRRA) IS a major CSS programme being implemented by the Department. It is an ongoing scheme with the objective for developing sustainable agriculture through integrated farming system emphasizing in people's active participation.

The programme encompasses divergent activities under management and development component, training, community organization and buildings are the major activities. Under development component, natural resource management, farm production system (for land owning families) and livelihood support system (for landless families) are the major component. Under natural resource management, land development, plantation of fast growing tree species , dry land horticulture, bamboo plantation and drainage line treatment are the activities . Under farm production system, establishment of nurseries, crop production- cum- demonstration, cash crop plantation, testing and demonstration of new technology, adoption of proven technology, etc are the activities.

Under livelihood support system, service sector such as carpentry, black smithy, basket making, broom binding, mushroom cultivation, etc. are the activities taken up. Besides this, poultry, piggery, bee keeping, goatery, etc. have also been taken up under livestock management.

The objectives of this programme are:

1. Insitu moisture conservation, development and sustainable management of natural and social resources including their use.
2. Enhancement of Agriculture productivity and production in a sustainable manner.

-
3. Restoration of ecological balance in the degraded and fragile rainfed eco-system by greening these areas through appropriate mix of trees, shrubs and grasses.
 4. Reduction in regional disparity between irrigated and rainfed areas.
 5. Creation of sustained farming system and generation of employment opportunities for the rural community including the landless.
 6. Equity for resource poor and empowerment of women.

During the financial year 2005-2006, the physical target for 32 Nos. Micro-Watershed was 3712 Ha and the achievement was 3156 Ha. The total expenditure incurred was Rs. 203.35 lakhs as against the target of Rs.203.52 lakhs.

2 Bench Terracing under land development programme in Agricultural Land.

This is one of the mechanical measures adopted in the state. The construction of bench terraces helps to prevent run-off with high velocity, soil loss and retention of moisture, resources, manures, fertilizers and facilitates the application of irrigation, if available.

The bench terraces are constructed in the state up-to the slope of 50%. This programme helps to bring additional area under cultivation which under proper agronomic practices is expected to contribute towards crop production and productivity of the area.

The department has implemented land development programme in a compact area in the villages. In this programme farmers are provided with government subsidy of 25% i.e approximately Rs.7500.00 / - per hectare. During the financial year 2005-2006, the physical target was 1466 Ha. and the achievement was 1459 Ha. The total expenditure incurred as a subsidy amount was Rs. 110.04 lakhs as against the target of Rs. 110.00 Lakhs. The impact of this programme been very satisfactory as the land for cultivation has increased and culture able fallow land has also been turned into an arable land.

3. Water Harvesting from surface run-off, perennial water source including roof water by collecting in tanks.

The objective of this programme is to conserve water through surface run-off/ roof rain water | perennial sources, for life saving irrigation and drinking water for human being and livestock during lean periods.

Under this programme, the department has constructed 300 Nos. of Water Harvesting Structures of 10000 Itrs. Storage capacity all over the state benefiting 300 nos of farming community. A total expenditure of Rs. 30.00 Lakhs was incurred as a 25% subsidy amount (Le @ Rs. 10000.00 per beneficiary). The tanks were constructed with the farmer's participation community oriented basis.

The construction of Water Harvesting tanks was to provide irrigation to vegetable and fruit crops in a limited area so . that the production of crops increases thereby raising the income of the farming community. The programme was found to be useful and beneficial to the rural areas.

4. Biological Conservation.

The area which are demanded and open having more than 50% slopes are adopted for biological conservation through vegetative measures. The objective of the scheme is to check soil erosion and restoration of natural resources. The programme was carried out in the farmer's field. The multi-purpose trees, timber trees, fodder trees, grasses on contour! terrace risers! drainage line were treated with plantation work. During the year 2005-2006! the physical target was 618 Ha. and the achievement was 601 Ha. The total expenditure incurred as a subsidy (25%) amount was Rs. 30.00 lakhs as against the target of Rs. 30.00 lakhs. The scheme provides the additional income through sale of fuel wood! fodder to livestock! control of Soil & Water Conservation | control of frequent occurrence of land slides and contribution for maintaining the fragile Himalayan eco-system.

5. Training Programme

a. Field functionaries :

The state level training programme were organized jointly by Food Security & Agri. Dev. Deptt, Govt. of Sikkim and North

Eastern Regional Institute of Land and Water Management , Assam on technical, social and management aspect to the officers of Soil & Water Conservation section at Gangtok. The total numbers of participants were 158 during five days programme. The Watershed level training programmes were also conducted by DNAs, PIA's & WDO's under NWDPPRA programmes.

b. Farmers

The objectives of the programme is to disseminate the latest technology to the farmers in the remotest part of the state. Training were conducted at different blocks/village on various aspect of production and conservation technology under Natural Resource Management. One day training programmes were organized by participating 50 farmer including women. The farmers were provided full knowledge of the programme / subject matter and its impact for their maximum benefit. 105 numbers of training were imparted by the concerned WDO's, Deputy Director (S&WC) and Joint Director(S&WC) district benefiting 5250 number of farmers.

6. Reclamation of Acidic Soil.

The scheme plays a vital role in newly terraced land for optimum Crop Production. The state has acidic to very acidic soil with pH ranging from 4.5 to 5.5. Such soils are injurious to plant growth and adversely affects the soil microbial activities resulting poor yield. Under this programme, acidic soil were reclaimed with Dolomite, Rock Phosphate and Green Manuring (Dhaincha) and Leguminous Crops (Cluster bean and Cowpea) . The impact of this programme was found to be very useful in acidic Soil in respect of physical, chemical and biological properties as a state is declared as organic. There is improvement in neutralizing the Soil acidity resulting more Soil productive.

7. External Auditing of NWDPPRA-

As per the guideline of W ARASA - JAN SAHABHAGIT A, a major part Of the fund are provided to the Watershed Committee

and external auditing once in a year was mandatory so that maintenance of all the account could be suitably under taken. The auditing of accounts under NWDPRRA for the year 2002-2003, 2003-2004, and 2004-2005 for 32 Nos. of Micro-Watershed have been completed by N. Marda & Associates Chartered Accountant, Gangtok as per the panel list forwarded by Finance, Revenue and Expenditure Department and approval of the Government.

A. STATE PLAN

8. State Nursery (Soil Conservation)

The Department of Soil & Water Conservation has a total of 6 (six) numbers of state nurseries in the state. These nurseries are producing large number of fodder grasses, fodder trees, fuel and timber trees, tea etc. saplings needed for implementation of biological conservation measures in areas having more than 50% slope and landside / land slip areas. During the year 2005-2006 the seedling produced from different nurseries have been distributed to the farmers under biological conservation programmes for control of soil erosion and restoration of natural resources.

NATIONAL WATERSHED DEVELOPMENT PROJECT FOR RAINFED AREAS

(N.W.D.P.R.A) 2005-2006

SL. NO.	DISTRICT	WATERSHED	PHYSICAL(HA)		FINANCIAL(LAKH)	
			TARGET	ACHIEVEMENT	TARGET	ACHIEVEMENT
1	East	11	1276	1084.87	69.96	69.90
2	West	10	1160	986.25	63.60	63.55
3	South	8	928	789.00	50.88	50.84
4	North	3	348	295.88	19.08	19.06
	TOTAL	32	3712	3156.00	203.52	203.35

**TOTAL EXPENDITURE OF NWD PRA FOR THE YEAR
2005-2006**

SL. NO.	Organization	COMPONENT	EAST (11 W/S)	WEST (10 W//S)	NORTH (3 W/S)	SOUTH (8 W/ S)	HEAD QUARTER	TOTAL 32 NOS.W//S
1	Watershed Committee	a. Development Component = Rs. 4.05 per Watershed	44.55	40.50	12.15	32.40		129.60
		b.Management Component =z Rs. 0.24lakhs per Watershed.	2.64	2.40	0.72	1.92		7.68
		c.Corpus fund = RS.0.25lakhs per Watershed.	2.75	2.50	0.75	2.00		8.00
2	P.I.A	Management Component Rs. 25,5001- per Watershed.	2.805	2.55	0.765	2.04		8.16
3	D.N.A	Management Component	0.957	0.87	0.261	0.696		2.784
4	State Head Quarter	Management Component					46.424	
	TOTAL		53.705	48.82	14.655	39.746	46.424	203.35

DISTRICT: WEST

SI.No.	Constituency	Block/Village	PHYSICAL (Hectare)		FINANCIAL (Rs.in Lakhs)		No. of Beneficiaries
			Target	Achievement	Target	Achievement	Nos.
1	Daramdin	1. Ringyang	24.00	23.99	1,80,000	1,79,906	75
		2. Upper Salangdang	24.00	23.96	1,80,000	1,79,719	
	Soreng	1. Lower Soreng (Ward No.4 & 5)	24.00	23.99	1,80,000	1,79,903	63
		2. Thingling	24.00	23.94	1,80,000	1,79,559	102
3	Chakung	1. Lower Chakung	24.00	24.00	1,80,000	1,79,998	69
		2. 8hasmey, Simkhana	24.00	23.99	1,80,000	1,79,978	56
4		1. Lower Tadong	24.00	23.99	1,80,000	1,79,961	36
		2. Lower Samdong	24.00	23.98	1,80,000	1,79,895	76
5	Hee-Bermiok	1. Hee-Tamabong	25.00	24.90	1,87,000	1,86,813	54.
		2. Hee-Patal	26.00	25.88	1,95,000	1,94,148	85
6	Geyzing	1. Hingdam-Daragaon	22.00	21.99	1,65,000	1,64,994	55
		2. Chunjung	23.00	23.02	1,73,000	1,72,664	61
.7	Yoksum	1. Chozo-Khecheperi	24.00	23.92	1,80,000	1,79,420	91
		2. Ramgeythang	24.00	23.99	1,80,000	1,79,963	40
8	Dentam	1. 8ulung	24.00	23.89	1,80,000	1,79,994	87
		2. Middle Khandu	24.00	23.89	1,80,000	1,79,222	58
9	Tashiding	1. Kongri	26.00	25.99	1,95,000	1,94,994	89
		2. Arithang	26.00	25.98	1,95,000	1,94,918	74
	TOTAL		436.00	435.29	32.70	32,66,049	1243

DISTRICT: NORTH

Sl.No.	Constituency	Block/Village	PHYSICAL (Hectare)		FINANCIAL (Rs. in Lakhs)		No. of Beneficiaries
			Target	Achievement	Target	Achievement	Nos.
1	Kabi - Tingda	1.Kabi	24.00	23.90	1.80	1,79,989	55
		2.Tingda	24.50	24.60	1.85	1,84,991	48
2	Lachen - Mangshila	1.Lachung	48.00	48.70	3.66	3,65,9000	100
3	Dzongu	1. Lingthem	24.50	24.60	1.85	1,85,000	37
		2.Lingdem	24.00	24.00	1.80	1,80,000	22
	TOTAL		145.00	145.80	10.96	10,95,880	262
GRAND TOTAL - EAST, WEST, SOUTH ,NORTH			1466.00	1,459.01	1,10,00,000	1,09,51,766	3,306

Sl.No	Constituency	PHYSICAL (Nos)			FINANCIAL (Rs. in Lakhs)		No. of Beneficiaries
		Block/Nilage	Target	Achievement	Target	Achievement	
1	Reghu	1. Reghu	3	3	0.30	0.30	3
		2. Bungling	4	4	0.40	0.40	4
2	Rhenock	1.Salghari	4	4	0.40	0.40	4
		2.Bering	3	3	0.30	0.30	3
3	Pathing	1.Rolep	4	1	0.40	0.10	1
		2.Amba-Kaizalay	4	1	0.40	0.10	1
		3.Loosing Machong	-	1	-	0.10	1
		4.Daragaon Machong	-	1	0.10	-	1
		5.Riwa Busty	-	3	-	0.30	3
		6.Takshang	-	1	-	0.10	1
4	Loosing Pacheykhani	1.Loosing	4	1	0.40	0.10	1
		2.Basilakha	4	1	0.40	0.10	1
		3.Chota Singtam	-	1	-	0.10	1
		4.Raigaon	-	1	-	0.10	1
		5. Kartok	-	1	-	0.10	1
		6.Aho	-	1	-	0.10	1
		7.Ajit Busty	-	1	-	0.10	1
		8.Basnet Gaon	-	1	-	0.10	1
5	Assam-Linzey	1.Assam-Linzey	4		0.40		
		2.Syari	4	3	0.40	0.30	3
		3. L. Tathangchen	-	1	-	0.10	1
		4.Naitam	-	1	-	0.10	1
		5.Saurani	-	1	-	0.10	1
		6.Nandok	-	2	-	0.20	2

DISTRICT: WEST

Sl.No.	Constituency	Block/Nillage	PHYSICAL (Nos)		FINANCIAL (Rs.in Lakhs)		No. of Beneficiaries
			Target	Achievement	Target	Achievement	Nos.
1	Daramdin	1.Siktam	3	3	0.30	0.30	3
		2.Tikpur	4	4			4
		3.Salangdang	3	3	0.30	0.30	3
2	Soreng	1. Karthok Bojek	5	5	0.50	0.50	5
		2.Donak	5	5	0.50	0.50	5
3	Chakung	1.Khanisirbung	5	5	0.50	0.50	5
		2.Suntaley	5	5	0.50	0.50	5
4	Rinchenpong	1.Pareng gaon	3	3	0.30	0.30	3
		2.Dethang	4	4			4
		3. Upper Sribadam	3	3	0.30	0.30	3
5	Dentam	1.Radhu	4	4			4
		2.Khandu	3	3	0.30	0.30	3
		3.Mukrang	3	3	0.30	0.30	3
6	Geyzing	1.Middle Gayzing	5	5	0.50	0.50	5
		2.Toyang	5	5	0.50	0.50	5
7	Tashiding	1.Arithang	3	3	0.30	0.30	3
		2.Chongrang	3	3	0.30	0.30	3
		3.Lasso	4	4			4
8	Yoksum	1.Thingling	4	4			4
		2.Darap	3	3	0.30	0.30	3
		3.Dubdi	3	3	0.30	0.30	3
9	Hee-Bermiok	1.Hee-Kyunbari	5	5	0.50	0.50	5
		2.Pecherek	5	5	0.50	0.50	5
	TOTAL		90	90	9.00	9.00	90

DISTRICT: WEST

DISTRICT: NORTH

Sl.No	Constituency	Block/Nillage	PHYSICAL (Nos.)		FINANCIAL (Rs.in Lakhs)		No. of Beneficiaries
			Target	Achievement	Target	Achievement	Nos.
1	Kabi-Tangda	1. Tingda	4	4	0.40	0.40	4
		Lower Lingchom	3	3	0.30	0.30	3
2	Lachen-Mangshila	1.Tingchim	4	4	0.40	0.40	4
		2.Jushing	4	4	0.40	0.40	4
		3.Faka	3	3	0.30	0.30	3
3	Dzongu	1.Lingdem	4	4	0.40	0.40	4
		2.Lingthem	3	3	0.30	0.30	3
	TOTAL		25	25	2.50	2.50	25
GRAND TOTAL- EAST,SOUTH,WEST,NORTH			300	300	30.00	30.00	300

BIOLOGICAL CONSERVATION PROGRAMME, 2005-2006
DISTRICT EAST

Sl. No.	Constituency	Block/Village	Activity	PHYSICAL (Hectare)		FINANCIAL (In Rs.)		No. of Beneficiaries
				Target	Achievement	Target	Achievements	
1	Barapathing	Changey Shenti	1.Fodder Trees	1.00	6.00	4400.00	26400.00	15
			2.Multi purrpose	5.00		22000.00		
2	"	U.Mamring	1.Multi purpose	6.00	5.94	26400.00	26136.00	22
3	Loosing Pacheykhani	Kit Golai	1. Fodder Grass	8.00	8.00	42240.00	41822.00	22
4	"	U.Basilakha	1. Fodder Grass	10.00	10.00	52800.00	52800.00	25
5	Assam Lingzev	Rongek	1.Fodder Trees	1.00	1.00	4400.00	4400.00	04
			2.Multi purrpose	5.00	5.00	22000.00	22000.00	16
6	"	Bhusuk	1.Fodder Trees	1.00	1.00	4400.00	4400.00	05
			2.Multi purrpose	5.00	5.00	22000.00	22000.00	16
7	Ranka	Raigaon	1. Fodder Grass	5.00	5.00	26400.00	26400.00	13
			1. Fodder Grass	5.00	5.00	26400.00	26400.00	14
8	"	Luing	2.Fodder Trees	1.00	1.00	4400.00	4400.00	04
			1. Fodder Grass	5.00	5.00	26400.00	26400.00	26
9	Regu	Bimbirey	1. Fodder Grass	5.00	5.00	26400.00	26400.00	26
10	"	Dokchen	1. Fodder Grass	5.00	5.00	26400.00	26400.00	15
			1. Fodder Grass	5.00	5.00	26400.00	26400.00	15
11	"	Premlakha	1. Fodder Grass	5.00	5.00	26400.00	26400.00	15
			2.Fodder Trees	1.00	1.00	4400.00	4400.00	05

12	"	Sishney Ghari Gaon	1. Fodder Grass	5.00	5.00	26400.00	26400.00	15
12	Rhenock	Sudunglakha	1.Fodder Grass 2. Fodder Trees 3.Multi purrpose	5.00 5.00 5.00	5.00 5.00 5.00	26400.00 22000.00 22000.00	26400.00 22000.00 22000.00	20 15 15
13	"	Aankuchen	1. Fodder Grass 2.Multi purrpose	5.00 5.00	4.84 5.00	26400.00 22000.00	25564.00 22000.00	22 10
14	Rumtek	Sama Simik	1. Fodder Grass	5.00	5.00	26400.00	26400.00	30
15	"	Samlik Marchak	1. Fodder Grass	5.00	5.00	26400.00	26400.00	30
16	Sang	Tintek Chisopani	1. Fodder Grass 2.Fodder Trees	2.00 5.00	2.00 5.00	10560.00 22000.00	10560.00 22000.00	10 20
17	"	Dochum	1. Fodder Grass	5.00	5.00	26400	26400	20
18	Central Pandam	Kamarey	1. Fodder Grass 2.Multi purrpose	5.00 5.00	5.00 5.00	26400.00 22000.00	26400.00 22000.00	30 30
19	"	Padamchey	1. Fodder Grass	5.00	5.00	26400.00	26400.00	30
20	Rakdong Tintek	Patuk Chendey	1. Fodder Trees	5.00	4.16	22000.00	21965.00	22
21	"	Tumin	1.Multi purrpose	5.00	5.00	22000.00	22000.00	20
22	Khamdong	Thasa	1. Fodder Trees	5.00	5.00	22000.00	22000.00	30
23	"	Thangsing	1. Fodder Grass	5.00	5.00	26400.00	26400.00	20
24	West Pandam	Ralang-Mamgey	1. Fodder Grass	5.00	5.00	26400	26400	25

25	Kabi Tingda	Sotak	1. Fodder Grass	5.00	5.00	26400.00	26400.00	25
----	-------------	-------	-----------------	------	------	----------	----------	----

DISTRICT: SOUTH

Sl.No.	Constituency Block / Village	Activity	PHYSICAL (Hectare)		FINANCIAL (IN (Rs.))		No. of Beneficiaries	
			Target	Achievement	Target	Achievement		
1	Damthanq	Pelum Sinqtam	1.Fodder Grass	9.00	9.00	47520.00	47520.00	18
			2.Fodder Trees	10.00	10.00	44000.00	44000.00	20
			3.Multipurpose	6.00	6.00	26400.00	26400.00	12
2	Jorethanq	Sorok Manpur	1.Fodder Grass	5.00	5.00	26400.00	26400.00	10
			2.Fodder Trees	10.00	10.00	44000.00	44000.00	20
			3.Multipurpose	7.00	7.00	30800.00	30800.00	14
3	Wok	Dew Daraqaon	1.Fodder Grass	6.00	6.00	31680.00	31680.00	12
			2.Fodder Trees	10.00	10.00	44000.00	44000.00	20
			3.Multipurpose	8.00	8.00	35200.00	35200.00	16
4	Melli	Sadam Suntalev	1.Fodder Grass	8.00	8.00	42240.00	42240.00	16
			2.Fodder Trees	9.00	9.00	39600.00	39600.00	18
			3.Multipurpose	5.00	5.00	22000.00	22000.00	10
5	Temi - Tarku	Gvanchunq	1.Fodder Grass	6.00	6.00	31680.00	31680.00	12
			2.Fodder Trees	9.00	9.00	39600.00	39600.00	18
			3. Multipurpose	7.00	7.00	30800.00	30800.00	14
6	Ralonq	Namlunq	1.Fodder Grass	8.00	8.00	42240.00	42240.00	08
			2.Fodder Trees	9.00	9.00	39600.00	39600.00	09
			3.Multipurpose	5.00	5.00	22000.00	22000.00	05
7	Ratevpani	Ratevpani	1.Fodder Grass	6.00	6.00	31680.00	31680.00	12
			2.Fodder Trees	10.00	10.00	44000.00	44000.00	20
			3.Multipurpose	5.00	5.00	22000.00	22000.00	10
			1.Fodder Grass	5.00	5.00	26400.00	26400.00	10
			2.Fodder Trees	6.00	6.00	26400.00	26400.00	12

8	Khamdong	Satam	3.Multipurpose	4.00	4.00	17600.00	17600.00	08
TOTAL								
				173.00	173.00	8,07,840	8,07,840	324

DISTRICT: WEST

Sl.No	Constituency	Block/Village	Activity	PHYSICAL (Hectare)		FINANCIAL (In Rs.)		No. of Beneficiaries
				Target	Achievement	Target	Achievement	
1	Gevzing	Guruthang / Kyongsa Arithang	1.Fodder Grass	4.00	4.00	21120.00	21120.00	20
			2.Fodder Trees	20.00		88000.00		
			3.others	5.00	23.00	22000.00	101200.00	115
2	Hee-Bermiok	T atopani/Mavong	1.Fodder Trees	20.00	23.00	88000.00	101200.00	75
			2.others	5.00		22000.00		
3	Rinchenpong	Sanga Dorjee/ Hatidhunga	2.Fodder Trees	2.00	2.00	8800.00	8800.00	40
			3.others	2.00	-	8800.00	-	
4	Chakuna	Tinzer	1.Fodder Grass 2.Fodder Trees	15.00	03.00	79200.00 13200.00	79200.00 13200.00	15
5	Tashidina	Nesa	1.Fodder Trees	20.00		88000.00		
			2.others	5.00	23.00	22000.00	101200.00	55
6	Yuksum	Thinqlina	2.Fodder Trees	-	01.00		4400.00	20
			3.others	3.00	-	13200.00	-	
7	Soreng	Doduk & Karthok	2.Fodder Trees	3.00		13200.00		
			3.others	5.00	6.00	22000.00 52800.00	26400.00 52800.00	30
			1.Fodder Grass	10.00	10.00	66000.00	66000.00	

8	Daramdin	Salangdang/Tikpur	2.Fodder Trees	15.00	15.00			150
		Rumbuk	2.Fodder Trees	-	03.00		13200.00	150
9	Dentam	Mangmoo	3.Others	5.00	-	22000.00	-	30
	TOTAL			183.00	167.00	8,65,040	794640.00	937

DISTRICT: NORTH

Sl.No	Constituency	Block/ Village	Activity	PHYSICAL (Hectare)		FINANCIAL (In Rs.)		No. of Beneficiaries
				Target	Achievement	Target	Achievement	
1	Kabi Tingda	Phamtam	1. Fodder Grass	10.00	10.00	52800.00	52800.00	30
2	"	Phodong	1. Fodder Grass	10.00	10.00	52800	52800	20
3	"	Tincghim	1. Fodder Grass	10.00	9.99	52800.00	52800.00	28
			2. Multipurpose	1.00	1.00	4400.00	4400.00	03
4	Lachen-Mangshila	Ramthang	1. Fodder Grass	10.00	10.00	52800.00	52800.00	20
			2. Multipurpose	1.00	1.00	4400.00	4400.00	04
5	"	Tangyak	1. Fodder Grass	10.00	10.00	52800.00	52800.00	20
6	"	Phemphu	1. Fodder Grass	10.00	10.00	52800.00	52800.00	30
			2. Multipurpose	1.00	1.00	4400.00	4400.00	04
7	Dzongu	Dzongu	1. Fodder Grass	31.00	31.00	1,63680.00	1,63680.00	45
			2. Multipurpose	2.00	2.00	8800.00	8800.00	08

	TOTAL			96.00	95.99	5,02,480	5,02,480	212
GRAND TOTAL (EAST,SOUTH,WEST,NORTH) =				618.00	600.93	29,93,760.00	2921807.00	2129

**WORK PLAN ON MACRO MANAGEMENT SCHEME
PHYSICAL & FINANCIAL PROGRESS
2005-06**

SL. NO.		Unit	Target		Achievement	
			Physical Target	Financial Outlay (Rs. In Lakhs)	Physical	Financial (Rs. In Lakhs)
I	NATURAL RESOURCE MANAGEMENT					
1	Natural Watershed Development Project for Rain fed Areas (NWDPRA)	Ha	3712	233.52	3712	233.35
2	Water harvest Structure(soil)	No.	300	30.00	300	30.00
3	Pipe Water conveyer(Agri.)	No.	2250	49.50	2400	58.44
4	Information support & computerization (Agri.)			6.20	-	6.03
5	External Auditing of NWDPRA			6.00	-	5.99
6	Farmer's Training @ Rs. 50/- head per ha	Ha	1000	5.00	-	4.99

7	Reclamation of Acid Soil on demonstration basis	Ha	2200	40.00		40.00
8	RVP	Ha	1178	100.00	1178	100.00
9	Land Development Bench Terracing of Agriculture land	Ha.	7500	110.00	7500	110.04
II	Cereal Development Programme			91.00		93.41
1		Qtls	8000	16.00	8000	18.08
2	Full Crop Pack Demonstration	Ha.	1500	75.00	1500	75.33
III	Plant Protection			10.15		10.15
a	IMP Demonstration, Farmers' Field	Nos	45	7.65	45	7.76
b	Plant protection measure and use of Bio-agent/sprayer	Ha.	500	2.50	500	2.39
IV	Balanced and Integrated use Fertilizers			466.13		385.00
1	Distribution of Portable Soil Testing	Nos	87	8.00	87	6.55

2	Phospo-Compositing Demonstration / Rural Composting	Nos	22	1.00	22	1.04
4	Integrated Nutrient Management Demonstration	Ha.	2560	54.00	2560	53.83
5	Effective Micro- Organism	Nos	7000	30.00	7000	29.45
6	Vermi Culture (Mother Culture/Vermi Compost Unit)	Nos	1275	142.20	1275	82.54
7	Bio-fertilizer Distribution	Nos	70	10.93	80	11.09
V	Concurrent Evaluation			8.00	-	8.00
VI	AGRI ENGINEERING			50.00		49.69
i	Promotion of Gender Friendly tools & Equipments	-	-	12.54	-	12.23
ii	Testing & Demonstration of new Innovation			10.00		10.00
				3.30		3.30
VII	Innovation Schemes			216.50		208.73

1	Accelerated Production Programme (A.M.D.P.)			50.00	-	49.63
2	Oilseeds Production Programme (O.P.P.)			80.00	-	80.54
3	National Pulse Development Programme (\ N.P.D.P.)			30.00		30.04
4	Soy flour Plant/ Soy fortified biscuit/ Soy paneer Plant	Nos	4	6.50	-	6.80
5	Intensified Extension and Training					
a	Farmer's Training/ Farm Women	Nos	200	20.00	-	16.20
b	Farmers Visit	Nos		5.00	-	5.00
c	Field Officer Training	Nos		5.00	-	3.26
d	Field Days/ Fair	Nos		10.00	-	8.35
e	Hiring of Vehicles/ Travel expense for Field Officers	Nos	4	10.00	-	9.65
	Total=			1422.00	1343.84	

Unspent Balance

78.16 lakhs