

CATCHMENT AREA TREATMENT PLAN

(Revised)

FOR

BASPA STAGE - II HYDRO ELECTRIC PROJECT

SANGLA
DISTRICT KINNAUR (HIMACHAL PRADESH)



PLAN PERIOD: - Phase - I (1994-95 to 2005-06) Rs. 6,22,09,223
Phase - II (2006-07 to 2013-14) Rs. 22,60,63,915

TOTAL COST :- Rs. 28,82,73,138

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CAT PLAN DIVISION, NICHAR
FOREST DEPARTMENT,
GOVERNMENT OF HIMACHAL PRADESH

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BACKGROUND

River Satluj in western Himalayas, originating from lake Mansarovar in Tibet has hydroelectric potential of 9227 MW. The Baspa stage-II hydroelectric project located in Kinnuar district of Himachal Pradesh utilizes the water of River Baspa, a tributary of Satluj. The barrage is located at Kuppa village (near Sangla) on Baspa River and the powerhouse is at Karchham on National Highway No. 22, where Baspa River meets Satluj. The project envisages to harness 300 MW hydroelectric potential of Baspa river (3 units of 100 MW each). It is a run-off-the river scheme with a 67m high diversion barrage on Baspa River.

Jai Prakash Industries Ltd. (JIL) signed the Memorandum of Understanding (MoU) in November 1991 and submitted the Detailed Project Report (DPR) in May, 1992. The Project Implementation Agreement was signed in October, 1992 with Govt. of Himachal Pradesh. Central Electricity Authority has accorded technological and economic clearance to this project in April, 1994.

Ministry of Environment & Forests, Govt. of India accorded forest clearance for diversion of 44,1795 ha. forest land for the project on 8.11.1993 and environmental clearance on 17.12.1993; subject to fulfillment of certain conditions.

Accordingly, Catchment Area Treatment Plan was prepared by Forest Department, Govt. of H.P. and submitted for approval in 1992. This was prepared for the period 1994-95 to 2003-04 (10 years) with a total financial outlay of Rs.20.10 crores. The actual implementation of the CAT Plan got delayed because of delay in conclusion of Power Purchase Agreement between Govt. of H.P. and Jai Prakash Hydro Power Ltd. (JHPL) and also due to non deposition of funds by the user agencies. PPA was finally signed on 4.6.1997 and it was only after that the user agency deposited meager amount of CAT Plan funding and Forest Department then started implementing the CAT Plan from 1999-2000.

Later on it was felt that the CAT Plan, needs to be modified to suit the changed ground realities and also due to escalation in price index. With the passage of time many new location points of land slides/slips have developed or the situation at existing points has aggravated. Similarly, the problem of bank cutting in Baspa river/nallahs/khads has shown changes over the years. The necessary permission for the CAT Plan revision was accorded, both by the Govt. of H.P. and CF (Central), Northern Regional Office, Ministry of Environmental and Forests, Govt. of India, Chandigarh in 2002-03. Accordingly the CAT Plan was revised and divided in to two phases. The works already executed right from 1994-95 to 2002-03 with financial outlay of Rs.2,14,88,407 was kept in first phase. The works to be executed from 2003-04 to 2011-12 with financial outlay of Rs.17,95,48,793 were placed in second phase.

As decided in the meeting on dated 23.6.2005 which was held under the chairmanship of chief Secretary GOHP regarding deposition of funding for Baspa-II CAT Plan that further revision of the CAT Plan be done which is required due to current wage hike & increased cost of inputs etc. Keeping in view the changed ground realities and increased wage hike, the CAT Plan is revised again. In this second revision of CAT

Plan, the works are divided in to two phases. Accordingly the works already carried out up to 2004-05 and the approved works/APO for the year 2005-06 are kept in phase I with total financial outlay of Rs. 6,22,09,223/-. The remaining works are restructured keeping in view the changed ground realities and kept in phase II of the amended revised CAT Plan of Baspa-II HEP for the period 2006-07 to 2013-14 amounting to Rs. 22,60,63,915/-. The Phase II aims to complement and consolidate the gains of the works undertaken in Phase I by increasing the scope activities as also to address a host of other issues like damage to rural infrastructure, changes in drainage pattern, increased pressure on natural resources, impact on wild life, and damage to visual aesthetics of the area, which have now cropped up. Due to recent flash flood on dated 5th & 6th August, 2005 in the Baspa river and its tributaries: Rukti khad and Hurba khad; the severe damages has caused to the Forest as well as private properties of the plan area. Accordingly, the works has been designed and kept in this revised CAT Plan.

Though the various components proposed in the CAT Plan are likely to arrest further increase in the silt load factor significantly, there is no guarantee for reduction in silt load factor in future because the factors mentioned below, over which the measures proposed in the CAT Plan has no effect, may lead to an increase in the silt load in future: -

- a) Baspa River, upstream of the barrage at Kuppa is covered in the CAT Plan the conditions prevalent in the major portion of the catchment is very hostile to any vegetative growth.
- b) Various natural and man-made factors upstream of Kappa; like road construction activity, glacial erosion, flash floods, new hydro electric projects to be installed in future and other developmental activities will also lead to an increased silt generation.

However, the positive effects of the works undertaken under the CAT Plan are likely to be visible after about 6-7 years. It is hoped that this CAT PLAN will be able to address these issues so that the adverse impacts are mitigated to the extent possible.

INTRODUCTION

With the increase in population in the catchment area, pressure on forests has increased manifold. Similarly, cattle population has also increased many times and has affected the grazing grounds and forests badly. Vast forest areas are being degraded due to excessive exercise of rights by local people for meeting demands of fuelwood and timber and due to many developmental activities like road construction etc. Improper land use and water management are also the factors responsible for denudation. This is leading to breakdown of the long held natural equilibrium of the fragile mountain ecosystem.

Prior to 1962, graziers of Kinnaur with their sheep and goat used to cross over to Tibet from Kinnaur District due to existence of extensive grazing grounds in western Tibet plateau. The grazing pressure in the alpine pastures in Kinnaur District has considerably increased after the sealing of International Border with Tibet. The resulting pressure, beyond the carrying capacity of grazing grounds and lack of proper management has resulted in degradation of forests and pastures. Continuous browsing/grazing of palatable species of grasses & other fodder crops, without allowing adequate time for regeneration, suppresses their growth and encourage proliferation of undesirable weeds.

Lack of vegetal cover is the single largest factor contributing to land degradation. Lack of proper soil and water conservation measures in the catchment also results in increased silt flow in Baspa river. The increased runoff from the denuded mountain slopes with melting snow during summer, finds its way into the Baspa river through a network of gullies and streams carrying huge sediment load. The most important source of this sediment flow which entirely goes into the river is gully and stream bank erosion. The increased soil erosion lead to lower productivity of land, adversely affect the water regime, cause aridity and increase the incidence of land slips/slides.

With the coming up of hydroelectric project at Sangla, it has become essential that the catchment area be properly treated, so that silt load in Baspa River gets reduced. Like many other development activities, this project, while providing planned benefits, could also lead to a variety of adverse environmental impacts, hence it is essential to have proper management of the environment so as to maintain ecological balance in the tract. It is imperative that the stresses on natural resources remain within the carrying capacity and the project could be constructed and operated without any significant environmental degradation.

The Baspa valley is endowed with enchanting beauty in its picturesque snow clad peaks of Kinner Kailash having about 1 Km width at Sangla, thick natural forests, meandering Baspa river course through meadows, rare wild flora and fauna, clear blue sky, snow clad peaks, numerous trekking paths and rich cultural heritage of

local people. Therefore, there is great scope for the development of Community Based Eco-tourism (CBET) in Sangla Valley.

This revised Catchment Area Treatment Plan for Baspa stage-II hydroelectric project has been prepared to deal with multiple problems occurring in the area, which directly or indirectly affect the people of the area. Rather than ad hoc soil & water conservation measures; the emphasis is on integrated, inter-sectoral and participatory approach to micro watershed management.

On account of hilly terrain, dependence on forests; both of human and cattle population is abundant and therefore, greater emphasis has been laid on undertaking Afforestation, Pasture Development and Soil Conservation Works in the catchment area.

CHAPTER-I

GENERAL DESCRIPTION OF THE TRACT

1.1 NAME AND LOCATION

This report deals with the Catchment Area Treatment plan for Baspa Stage-II hydro electric Project in Sangla, District Kinnaur, H.P. Baspa Stage-II Hydro Electric Project is located between longitude $78^{\circ}-10'-0''$ to $78^{\circ}-15'-0''$ East and latitude $31^{\circ}-23'-0''$ to $31^{\circ}-30'-0''$ North. Catchment of Baspa river above the barrage site is located between longitude $78^{\circ}-15'-0''$ to $79^{\circ}-0'-35''$ East and latitude $31^{\circ}-27'-0''$ to $31^{\circ}-06'-0''$ North.

1.2 SITUATION

The total geographical area of District Kinnaur is 6,40,100 hectare. Catchment area of Baspa Stage-II hydroelectric project is 96,814 hectare out of which 15,043 hectare is agricultural land and demarcated forest area is 2,731 hectare. Remaining area is barren/rocky/pastures or snow covered peaks. The important villages coming in the catchment area are Kamru, Sangla, Batseri, Rakchham and Chhitkul etc. District Kinnaur has been divided into 23 Sub-catchments as per status report prepared by HP Krishi Vishva Vidyalaya, Palampur and Baspa Catchment area falls in two sub-catchments Sl. No.7 & 8 (Map-I). Rakchham-Chhitkul sanctuary is also located in the catchment area.

1.3 BOUNDARIES

The boundaries of Baspa catchment area is as under:-

West:- The boundary starts nearby the origin of Baturi Khad at the high point of 4715 mts. from where it moves on along the ridge of Burang Ghatti and ends at the Nalgan Ghatti.

South:- The boundary goes along with the ridge as above, starting from Nalgan Ghatti, then joining Sangla Ghatti. From here the boundary moves along the State boundary of Uttaranchal and H.P.

East:- The boundary starts along the glacier which is on the H.P.-Uttaranchal border and is the origin of Jorya Garang. The boundary moves along the Jorya Garang further down to Baspa River.

North:- The boundary goes along the ridge starting from high point of 5810 mts. It further goes along the ridge of Charang Ghatti and finally ending upto the inner boundary of Wadang forest to join the Baspa River at the point of confluence of Baturi Khad and Baspa River.

1.4 TOPOGRAPHY AND DRAINAGE

The terrain of the project area is mainly mountainous. The slopes are moderate to steep to precipitous. The whole area drains into the Baspa river which is joined by several nallahs/khads on the way. Baspa river originates from a glacier of Great Himalayan ranges at 5800 mtrs. elevation (at the north eastern direction of the outer Dhauladhar) and flows in North-Westerly direction and covers a distance of about 66 kms. before finally merging with Satluj river at Karchham. It is bounded on the South-West by the Dhauladhar and on North-East by the Raldang peak of the Great Himalayas.

1.5 GEOLOGY, ROCK AND SOIL

The known geological formation in the Baspa Valley is as follows:-

- i) Pre Cambrian --- schists, gneisses, granites, quartzites (vaikrita system)
- ii) Late Pre-Cambrian --- Haimanta System, phyllites, quartzite, conglomerates, shales and slates.
- iii) Silurian --- coral limestone, quartzites.
- iv) Carboniferous & Triassic --- quartzites, slates, dolomite limes.

The crystalline rocks of Wangtoo-Kilba-Urni area are probably the oldest rocks. These include auger and porphyroblastic gneisses and are intruded by a later phase of granite. Similar rocks occur in large area in Baspa Valley i.e from Kharogla to Dunti-Rani Kanda stretch. Rocks of Jutogh group are best exposed along Karchham-Sangla Road. Metamorphic rocks are overlaid by a thick sequence of gray slate and quartzite; green slate, light coloured quartzite succeeded by a purple coloured shale and sand stone of Haimanta group.

Soil is sandy to sandy loam with fragile strata, therefore, problem of slips and erosion is rather serious particularly where the land is not properly terraced. Generally speaking, on ridges, spurs, precipitous slopes and southern slopes the soil is shallow.

1.6 CLIMATE

The climate of CAT Plan area is characterized by the absence of monsoon rains during summer and resembles arid Tibetan type of climate for most part of catchment and is sub-humid in lower part of Baspa Valley and semi-arid to arid, further up. The average annual rainfall and snowfall in the Baspa catchment is about 76 cm and 113 cm respectively. Mean annual temperature in this region is 10° C to 15° C. The summer is mild. With the onset of monsoon, there is gradual fall in temperature. After receding of monsoons, there is a gradual decline in temperature which is rapid in winter. The period from 15th November to March is coldest in this region. The minimum temperature falls to -20° C. While Baspa Valley remains under snow during

winter months, areas above 5600 mtrs. remain snow bound throughout the year and hence working season is only for 6-7 months.

1.7 WATER SUPPLY

A large number of nallahs/khads and springs exist throughout the tract. On the left side, the important tributaries are Zapki, Thatang, Bering, Hurba, Rukti etc. and on the right side Suthi, Gangarang etc. The flow of water is very strong during summer months and reduces to a trickle during winter. The effect of melting of the snow is reflected in the behavior of Baspa river. The rapid melting of snow causes erosion of river bank, avalanches and glaciers etc. The river begins to rise steadily in early April and attains the highest water level during July-August (80 cusecs). By the end of August, the water level starts receding and continues to recede till January (10 cusecs). Baspa river is also fairly turbulent and frequently changes its course causing extensive damage to the cultivated fields on its banks. Because of loose sandy soil there is no *in situ* moisture in the soil. Agricultural lands are dependent on irrigation facilities in the shape of water channels and kuhls. There are no irrigated forest plantations. However, forest nurseries are located at places, where water is available.

1.8 LAND USE PATTERN

No specific land use pattern survey has been conducted in the CAT Plan area. The two departments, which maintain records, are Forests and Revenue. The land use pattern of District Kinnaur and Baspa Catchment is tabulated below: -

Name of area	Forest DPFs (Hac.)	Net cropped land (Hac.)	Alpine pastures (Hac.)	Fallow land & grass land (Hac.)	Culturable waste land (Hac.)	Misc. land Barren/Rocky/Snow covered watercourses (Hac.)	Total geographical area in (Hac.)
District Kinnaur	22259	7871	254389	3753	98003	253825	640100
Baspa Catchment	2731	1543	32274	5615	436	54214	96814
Percentage Land in Catchment Area	2.8	1.6	33.3	5.8	0.5	56.0	15.0

Thus, about 90 % of the area is covered by miscellaneous land (barren, rocky, glacier, snow covered, water course etc.) and alpine pastures. The upper part of the catchment (about 1/2 of its total length) and up-to village Chhitkul (3475 m) constitute of barren ranges, covered by snow all the year round. In this upper part around the river course are alpine pastures. In rest of the valley, near the river course are villages and horticultural & agricultural fields, followed by forests, alpine pasture and miscellaneous land with increase in elevation.

1.9 LIVE STOCK POPULATION

According to 1992 census, Sangla Tehsil has a live stock population of 13506 as detailed below: -

Cattle	Sheep	Goat	Others	Total
4,909	6,528	1,718	351	13,506 (Migratory sheeps not included)

1.10 HUMAN POUPLATION

According to 1981 Census, total population of Tehsil Sangla was 9,454 and density of population is 9 per square Km. There are 1,612 families in the valley with 4,628 males and 4,826 females. This low density of population can be attributed to difficult hilly terrain and severe climatic condition in the area. Agriculture, horticulture and sheep/goat rearing is the chief source of livelihood of people of Baspa Valley. Studies carried out by Himachal Pradesh Krishi Vishwa Vidyalaya shows that 51.1% of total household income was earned from farm resources in which agriculture, horticulture and animal husbandry contributed 26.7 %, 12.7%, 11.7 % respectively. Occupation of more than 80% people in the area is cultivation. Apple is cultivated upto Batseri village. The other major agricultural product is potato and peas/cereals. But, the productivity of the arable lands is very low owing to the prevalence of age old less remunerative and less intensive cropping system, with an over all poor level of management. The altitude in the inhabited region is between 2400-3500m.

1.11 RAINFALL

The following table summarizes average annual rainfall based on the 9 years (1981-1992) for different stations:-

Station	1981	1983	1986	1987	1988	1989	1990	1991	1992
Nichar	528.4	773.0	78.3	42.8	96.2	68.0	1095.7	770.8	37.2
Kalpa	228.4	199.8	35.7	37.1	29.11	31.9	492.5	320.8	2.3
Sangla	357.4	266.4	27.1	35.3	41.3	35.3	256.5	212.9	12.9
Kilba		710.2	69.2	49.5	67.0	45.8	691.8	478.0	31.6

CHAPTER-II

PRESENT POSITION

2.1 FOREST AND FORESTRY IN THE CATCHMENT AREA

Forests, apart from being an important source of timber, have other, equally perhaps more important function to perform viz:

- i) Maintenance of ecological balance.
- ii) Maintaining the capacity of multi-purpose river valley projects and reservoirs leading to high electricity generation and increasing the life of the project.
- iii) Production of fodder for the livestock.
- iv) Production of fuelwood for the use of local people.
- v) Improvement of water retention capacity leading to more water for drinking and irrigation during dry months.
- vi) Reduction of soil loss due to various types of erosion.
- vii) Indirect reduction of crop losses in down-stream areas due to flooding and silting.

According to the National Forest Policy, 60 % area in the hills should be covered under forests, but in catchment area the forest cover is hardly 5 %. Keeping the above objects in view, large scale plantations of coniferous and broad leaved species has been proposed.

2.2 FOREST TYPES

With the variation in altitude and aspect; composition and condition of the forest varies a great deal giving rise to various forest types. The forests of Baspa fall in one climatic zone only i.e dry zone.

It has been classified into different vegetation types by H.S.Champion and S.K.Seth as under:-

Group-12:-

- | | |
|---------|---|
| C-1(a) | Ban oak forest (<i>Quercus glauca</i>) |
| C-1(c) | Moist deodar Forest |
| C-2 | Upper west Himalayan temperate forest |
| C-2(s)1 | Low level blue pine forest (<i>Pinus wallichiana</i>) |

Group-13:-

- | | |
|---------|--|
| C-1 | Dry broad leaved and coniferous forest |
| C-2 (a) | Neozoa pine forest (<i>Pinus gerardiana</i>) |
| C-2 (b) | Dry deodar forest (<i>Cedrus deodara</i>) |
| C-4 | West Himalayan high level dry blue pine forest |

Group-15

- | | |
|-----|---------------------|
| C-1 | Betula/Scrub forest |
| C-3 | Alpine pasture |

Group-16

- | | |
|-----|------------------|
| C.1 | Dry alpine scrub |
|-----|------------------|

Blue pine and Bhojpatra (*Betula utilis*) forests are found at higher elevation in Baspa valley. The alpine pastures (4000-5500m) lie between tree and snowline and form about one third of the total area in the catchment. During summer months after snowmelt, graziers utilize these areas. Many of these pastures suffer from various soil erosion problems and nutrient depletion problem. Also, the continuous grazing has suppressed the growth & regeneration of palatable grass species. Pastures located at lower elevations, which are frequented by a large number of animals are more degraded than those located at higher elevations.

2.3 FLORA & FAUNA

I- FLORA

Forests comprise of Kail (*Pinus wallichiana*), Deodar (*Cedrus deodara*), Fir (*Abies pindrow*), Spruce (*Picea smithiana*), Ban Oak (*Quercus glauca*), Kharsu Oak (*Quercus semecarpifolia*), *Aesculus indica*, *Juglans regia*, *Populus ciliata*, *Salix* spp., *Pyrus pashia*, *Acer* spp., *Rhododendron* spp., *Alnus* spp., Bird cherry, etc. The forests lie between 2000-3900m MSL.

Undergrowth comprises of *Viola* spp., *Indigofera* spp., *Desmodium* spp., *Rubus* spp., *Deutzia* spp., *Sarcococcos saligna*, *Viburnum* spp., *Plectranthus* spp., *Hippophae* spp. etc.

II- FAUNA

Herbivores – Musk deer (*Moschus moschiferus*), Goral (*Nemorhaedus goral*), Serow or Eru (*Nemorhaedus bubalicus*), Himalayan thar (*Hemitragus jemlahicus*), Bharal (*Ovis nabhura*)

Carnivores – Snow leopard (*Uncia uncia*), Leopard (*Panthera pardus*)

Omnivores – Himalayan black bear (*Ursus torquatus*), Brown bear (*Ursus arctus*)

Pheasants – Western tragopan (*Tragopan melanocephala*), Monal (*Lophophorus impejanus*), Koklash (*Cerionis maculophus*), Cheer (*Catreus wallichii*), White crested Kaley (*Gennacus albieristatus*)

2.4 MEDICINAL PLANTS

A large number of medicinal plants are found scattered all over Kinnaur. Important medicinal plants found or which can be cultivated in Baspa valley are:-

Patish (*Aconitum heterophyllum*), Meetha Patish (*Aconitum violaceum*), Salampanja (*Dactylorhiza hatagirea*), Dhoop (*Jurinea macrocephala*), Karu (*Picrorhiza kurroa*), Kirki (*Gentiana kurroo*), Bankakri (*Podophyllum hexandrum*), Singli-Mingli (*Dioscorea deltoidea*), Banafsha (*Viola odorata*), Muskbala (*Valeriana wallichii*), Kalazira (*Carum bulbocastanum*), Chirata (*Swertia chirata*), Buir or Senski (*Artemisia maritima*), Khanta or Somlata (*Ephedra Gerardiana*), Khurasani Ajwain

(*Hyoscyamus niger*), Ban Ajwain (*Thymus serpyllum*), Rewanchini (*Rheum emodi*), Mamiri (*Thalictrum foliolosum*), Kesar (*Crocus sativa*), Kuth (*Saussurea lappa*), etc.

2.5 RAKCHIAM-CHHITKUL SANCTUARY

This high altitude sanctuary is a very good habitat for the endangered musk deer and pheasants. It covers an area of 304 sq. km. and has been finally notified in September, 2001. It is situated between 31°-14'-28" and 31°-26'-53" North latitude and 78°-18'-44" and 78°-20'-19" East longitude. It has vast stretches (about 40% of the Sanctuary) of alpine pastures, which are a store of many medicinal plants species and rare & endangered species of flora & fauna. These are frequented by both migratory graziers and local people, who have right to graze their domestic animals. H.P. Govt. notification dated 7.9.2001 allowed the exercise of rights as enjoyed by them; as per the Forest Settlement Report.

2.6 RIGHTS OF THE PEOPLE

I- GRAZING

In almost all the forests, rights exist for each demarcated and undemarcated forests. The Forest Settlement Report provides for free grazing to all animals of the right holder in their own *Chaks* and no ceiling has been fixed on the number of cattle that might be grazed. The graziers who avail summer grazing facilities in alpine pasture are not allowed to graze their animal outside their *Chaks* unless allowed at special concession or on paying grazing fee. Unlimited numbers of animals are being grazed in these forests, which cause great damage to the vegetation as well as to the plantations. This right of grazing also comes in the way of taking up more closures for raising plantations of different species as the consent of the local people has to be obtained before plantation work is under taken.

II- COLLECTION OF FUELWOOD

People have the right to collect dry and fallen wood for their domestic use as per Forest Settlement Report. In the catchment area, people depend largely upon fuelwood for their day to day use.

III- TIMBER

People have the right to get timber at nominal rates for the construction/repair/maintenance of their house. The concessional rates were fixed at the time of Forest Settlement. No limit on the number of trees to be sanctioned was fixed in the FSR. Because of a very nominal fee charged from the right holders/Bartandars; they are extremely wasteful in the use of timber. A stage has now reached that not even a single tree is available on silvicultural basis in most of the forests for right holders.

IV- CUTTING OF GRASS AND LOPPING OF TREES

People have the right to cut grass and lop trees for fodder purposes. Cutting of grass is done everywhere in the forests without paying any fee to the department.

2.7 GENERAL CONDITION AND DENSITY

The composition and condition of the forests is not so good and varies considerably with altitude and aspect. DPFs and UPFs, which are in the interior and away from habitations, are fairly well stocked. In some of the forests, there is hardly any tree growth and the forests, where there are trees, these are being given to right holders under Timber Distribution scheme and time is not far away when such forests will also be depleted. The status of regeneration in these forests is very poor because of heavy incidence of biotic pressure. The present condition is the cumulative result of heavy grazing, lopping and T.D marking etc.

CHAPTER-III

PROBLEM ANALYSIS AND APPROACH

3.1 PROBLEM ANALYSIS

The terrain and geology of the area is very susceptible to high incidence of land slides/slips/glaciers and water erosion. In Baspa Catchment, a major portion of precipitation is in the form of snow or low intensity storm. Bulk of soil erosion is due to scouring action of water running off the surface during snow melt. The run off water first form localized channels, then forms bigger gullies leading to serious soil erosion problem in the area. In brief, the catchment area suffers from two major problems i.e. natural ecological and climatologically calamities such as heavy snowfall, avalanches, glaciers, landslides etc. and problems created & accelerated by human & livestock pressure. Every snowmelt causes glaciers and avalanches which in turn gives rise to road side erosion by way of slips and slides. Soil erosion is thus the major factor that contributes to heavy silt flow in Baspa river. Following forms of soil erosion are prevalent in the area:-

I) SHEET EROSION

The whole region, especially cold desert region suffers from sheet erosion during snow melt. The cultivated land on steep to very steep slopes especially the *Kanda* lands are prone to sheet erosion in the form of splash & laminar erosion. The pastures also suffer from moderate to severe soil erosion due to raindrop and laminar erosion. In these regions loose, shallow top soil overlies the compact soil. Due to sheet erosion, uniform layer of soil gets removed. Melting snow accelerates the pressure. This region must be given an effective cover so as to minimize splash and run off on sloping lands.

II) RILL EROSION

Rill erosion removes the soil in localized small washes in defined channels with dimensions of few centimeters and depth not exceeding 15-25 cms. This further leads to gully formation.

III) GULLY EROSION

Accelerated rill erosion lead to formation of gullies by the process of combining of unattended rills. Gully erosion is responsible for heavy sediment flow in streams and rivers as the eroded soil goes immediately and wholly into the streams owing to turbulence on steep gradients.

IV) STREAM AND RIVER BANK EROSION

A large number of rivulets and streams in this catchment bring large quantities of sediment into the river with frequent under cutting and resulting in slope failures. This phenomenon occurs all along the Baspa river. The problem is very acute in the area having loose strata. Many streams cascading down the hill sides, with uncontrolled fury during the

peak months of snow melt cut away large chunks of land. A total of 26 flood prone Nallahs/streams have been identified.

VI) ROAD CONSTRUCTION EROSION

Roads are the only means of communication and form an important development activity in the region. In most of the cases, the roads are built along the river/stream courses, the natural openings to different valleys. Road construction in the mountainous terrain requires a lot of blasting and construction in a zig-zag fashion leading to large scale devastating effect and siltation in the rivers. About 35.5 Kms. of road length, which requires to be stabilized, has been identified.

VII) LAND SLIDE EROSION

The region is quite prone to land slides/slips that take a heavy toll on valuable lands, property and life besides aggravating the problem of siltation in the rivers. The overall geological formation in the region is unstable, very loose & fragile. Thin beds of clayey limestones, shales, highly jointed sedimentary beds and schist varieties in the region with deformities like steep dips, folds and faults are all pointers to the land slide problems. The area of such slides/slips has been estimated to be about 80 ha.

VIII) GLACIAL EROSION

Glacial erosion is quite predominant in the area. A large number of peaks are under perennial snow or remain under snow for most of the time during winter months. Whenever there is a movement of large mass of ice down the slopes, it brings along with it huge debris causing a lot of soil erosion. Glacial action is characterized by furrowing, cutting, ploughing and scouring action on the landmass. The flash flood due to enormous snow melt transports the debris down to the river system after having inflicted a lot of damage to the bed and to the sides of gullies. Against the enormous force of glaciers, the protective measures including the encouragement of vegetation have virtually little effect. However Nallahs to be treated have been identified.

VIII) WIND EROSION

In addition to erosion by water, wind erosion is also common in the area particularly in the denuded area, the wind erosion is severe.

IX) MAN MADE FACTORS

Certain problem of the region are either wholly due to human action or influenced to a large extent by his actions and upcoming economic activities in the region. The socio-economic pattern is also fast changing and transforming into modern society. Human being is disturbing the nature due to fast changing day to day life by way of his aspiration for construction activities and other related action which are causing the detrimental effects.

3.2 PROBLEMS AFFECTING THE CATCHMENT AREA

i) *Lack of vegetal cover* is a contributing factor for accelerated soil erosion in the tract as also for environmental degradation. While ideally, dense tree cover would have been the best insurance against soil loss and environmental degradation, the conditions in the tract are otherwise. Large areas are either blank or bear very thin tree crop. The topmost portions either support alpine pastures or are under snow for most part of the year and tree growth is not possible in these areas. Thus these natural conditions are a limiting factor in addressing the problems of soil erosion and environmental degradation. Nevertheless remedial measures can be taken to minimize their impacts to some extent.

ii) *Flash flood & cloud bursts* cause landslips and bank cutting.

iii) *Drought* (April-June and October- November) causes death of seedlings (both natural & artificially regenerated) on warm aspects and where there is insufficient canopy density.

iv) *Heavy snowfall & avalanches*- clear strips of tree growth and land on their down ward movement.

v) *Human Population* of Sangla valley is 9,454 (as per 1981 Census) and it depends on the existing forests and pastures for its fuel, fodder and timber requirements. The pressure on forests for fuelwood and timber is also high which adversely affects the density of the crop. The excessive livestock population is a great pressure on such lands, which is often beyond the carrying capacity with the result that neither the animals get sufficient fodder nor the lands are fully protected against the onslaught of rains on account of over grazing. This results in deterioration of the environment.

vi) *The age old Forests Settlement*, which recognised several rights of the people has also become irrelevant in the present context. Any attempt to modify the rights and concessions, are met with stiff resistance from the people individually, collectively and even at other levels. The rights and concessions meant for meeting the legitimate needs of the individuals are often misused for obtaining more timber, grazing areas for cattle and collection of medicinal herbs etc.

vii) *Illegal encroachment* on forestland is also common in the valley. The problem is serious in areas, where agricultural fields adjoin the forests. Land for agriculture in Kinnaur is only 1.4% of the total. Small farmers finding their holdings not viable to earn livelihood start making encroachments on lands otherwise not suitable for cultivation on the long term basis. The farmers in Kinnaur are entitled to have 20 bighas of land.

viii) *Land use and Farm practices* being adopted by the people are most of the times incompatible with the physical conditions of the site. Steep gradient of terrain and friable nature of soil, calls for improved farm practices on scientific lines to reduce the danger of soil loss as also to improve the

productivity. But the farm practices and land use prevalent in the tract are obsolete.

3.3 ACTIVITIES OF LOCAL POPULATION HARMFUL TO ENVIRONMENT

The trees in the forests near habitations and villages are lopped ruthlessly for fuelwood & fodder. Under various schemes the Revenue Department also grant Nautor to landless people as "NAUTOR" in Undemarcated Protected Forests, which not only reduces the forest area but also contribute in soil erosion. Some of these allottees have also encroached upon forest lands adjoining to their allotted lands and the local people girdle the trees and many times cut them illicitly from Government forests adjoining their land.

The forests are reeling under immense grazing pressure. The animals roam about freely in the forest. They not only eat and trample young seedlings but also reduce the permeability of soil due to its compaction, causing increased soil erosion and runoff, thereby disturbing the water regime.

The above listed various factors have resulted in depletion and degradation of forest cover with the following consequences:-

- i) Progressive denudation of vegetation means that the land is less and less capable of sustaining human life.
- ii) Fuelwood and fodder from tree lopping is becoming increasingly scarce.
- iii) There is extensive loss of soil and the mountains are becoming barren.
- iv) There is water scarcity in the area both in the springs and streams during dry season.
- iv) There are frequent landslides and floods due to snow melting and rain etc.

3.4 STRATEGY AND APPROACH

The two key issues which need to be addressed by this CAT Plan are:-

- a) Silt load in the river Satluj
- b) Environmental degradation in the catchment and project area

The two issues apparently, look different but in essence, they are intricately linked and have their genesis in the common problems. Some of these problems owe their existence to the natural/physical factors existing in the tract like topography, geology, climate, soil etc, while the other problems are either man-made or aggravated by human actions. Very little can be done to change natural factors except to limit their adverse impacts. But problems due to human actions can be reduced to a large extent by taking suitable preventive as well as remedial measures.

It is clear from the analysis of the problems that traditional approach of afforestation or soil and water conservation undertaken in isolation, will not be

enough as they concentrate on the symptoms of ecological deterioration rather than on socio economic causes.

The immediate task is to check soil erosion in the area so that regular and sediment free water yields in the river system, which has direct bearing on successful running of the hydroelectric project. To achieve this, massive afforestation along with soil conservation measures, are to be done in the catchment area, which will help in soil and water conservation along with meeting the demands of fuel, fodder, timber etc. of local people.

Intensive, Soil and Water conservation measures are proposed to be taken in the catchment area, ensuring sediment free yield of water in the Baspa river. Intensive pasture management will be done in catchment area, as these areas beside giving high quality pasturage will help significantly in the proper hydrological functioning of the hill eco-system.

3.5 PEOPLE'S PARTICIPATION

The emphasis of the revised CAT Plan is on enabling local people to prevent, arrest and reverse degradation of life support systems, particularly land and water, so as to produce biomass in a sustainable manner. Importance of microplanning on watershed basis with community participation will be operationalized during implementation of the CAT Plan. Suitable institutional arrangements like Village Forest Development Societies (VFDS) representing various sections of the community will be formed.

Further, to ensure sustainability of the interventions, cost sharing by stakeholders will be encouraged, to the extent possible. This establishes the responsibility of various stakeholders in the management of resources.

Self Help Groups/ Women Saving & Credit Groups will be formed from the identified IRDP/BPL families so as to help the people who are most directly dependent on the natural resources. Unless the "survival biomass" needs of rural poor; fuel, fodder & small timber are satisfied, the forests and pastures developed by the plan would remain vulnerable and unsustainable.

CHAPTER – IV

WILDLIFE MANAGEMENT

4.1 ABOUT THE RAKCHHAM CHHITKUL SANCTUARY

It covers an area of 304 sq. km, and has been finally notified in September, 2001. It is situated between 31°-14'-28" and 31°-26'-53" North latitude and 78°-18'-44" and 78°-20'-19" East longitude. It has vast stretches (about 40% of the Sanctuary) of alpine pastures, which are a store of many medicinal plants species and rare & endangered species of flora & fauna. These are frequented by both migratory graziers and local people, who have right to graze their domestic animals. H.P. Govt. notification dated 7.9.2001 allowed the exercise of rights as enjoyed by them; as per the Forest Settlement Report. This high altitude sanctuary is a very good habitat for the endangered musk deer and pheasants. The forests were brought under selection system by Hamilton and remained so till it was declared as wildlife sanctuary. First Management Plan was written in 1990 for a period of ten years.

4.2 CENSUS

No systematic survey of the fauna has been conducted so far. The census figure for the year 2001 (as per the revised Baspa II CAT Plan report submitted by DFO WL Sarahan are as under:-

Name of Species	Male	Female	Young	Total
1. Musk deer	4 No.	3 No.	2 No.	9 No.
2. Blue sheep	4 No.	8 No.	9 No.	21 No.
3. Black Bear (Foot Prints (2No.))	—	—	—	—
Total	8 No.	11 No.	11 No.	30 No.

BIRDS CENSUS

S.No.	Name of Spp	Male	Female	Young	Under age	Total
1.	Snow Cock	6	6	11	—	23 No.
2.	Monal	17	18	3	—	38 No.
3.	Kabutor	—	—	—	60 No.	60 No. (seen flying)
4.	Chockor	—	—	—	12 No.	12 No. (seen flying)

4.3 PROBLEMS IN WILDLIFE MANAGEMENT

The following problems are present in the sanctuary area:-

4.3.1 SOIL EROSION

The terrain and geology of the wildlife sanctuary is very susceptible to high incidence of landslides, slips, glaciers, avalanches and river bank erosion. In the area, a major portion of the precipitation is in the form of snow or low intensity storms. Bulk of the soil erosion is due to scouring action of water running on the surface causing degradation of pasture land, during snow melt.

4.3.2 GRAZING

This sanctuary has vast tracts under high altitude pastures. Discussions with the local people revealed that these pastures have badly degraded over a period of time. At many places weeds like *Rumex* Spp. have encroached upon these grasslands. The palatable grasses are no more than a few inches tall and the other related pasture species have also started showing signs of stress. This apparently degraded status of these pastures seems to be due to very heavy grazing pressure in the area. Apart from the livestock owned by the local people, more than 10,000 sheep belonging to migratory graziers was reported to be grazing in the sanctuary during the month of June to September every year. The result is that neither the animal gets sufficient fodder nor the land is protected from the subsequent onslaught of the rains on account of over grazing.

4.3.3 INADEQUATE SCIENTIFIC INFORMATION

The sanctuary by virtue of its location is considered to be very rich in biodiversity. However, systematic scientific studies to support management activities are not available and whatever information is available has been taken from secondary sources. Inventory of the flora and fauna of the sanctuary is yet to be prepared. The status of important habitat types and that of the threatened flora and fauna is not known. No information is available in regarding the carrying capacity of the forest and alpine meadows in and around the sanctuary area. Therefore in the absence of reliable primary data on various aspects only general type of strategy and approach are being implemented.

4.3.4 LACK OF TRAINED STAFF

The un-trained staff of the H.P. Forest department is managing the wildlife sanctuary. They lack in basic training in Wildlife Management specifically habitat improvement, assessment and monitoring of biodiversity & eco development.

4.3.5 LACK OF APPROPRIATE INFRASTRUCTURAL SUPPORT

The sanctuary is facing a lack of basic minimum infrastructure support in the field of housing, office equipment i.e. computer, fax, photo copier machine, video camera, T.V. and camping equipment i.e. Tents, Rucksack, sleeping bags, carry mat etc. and communication network by way of wireless system etc. In the absence of these infrastructural supports, the management interventions are meagre and erratic.

4.3.6 LIMITED EMPLOYMENT AND INCOME GENERATION ACTIVITIES

The area, bereft of any road link till very recently, has been dependent only upon the subsistence economy. Most of the agriculture has been for internal consumption and no cash crops have been available in Rakchham and Chhitkul villages. The only cash crop has been the M.F.P. collected from the forests and sold in raw form to traders for money not sufficient even to compensate the labour cost going into the collection of these forest produces. Another cash income has been by way of selling peas, potato, wool and woollen products. Growing of cash crops i.e. horticulture has not been encouraging due to adverse climatic factor. The area being very interior, there are very few income generation opportunities for the local people.

4.3.7 ECO-TOURISM POTENTIAL

Sangla valley has over the years come to be recognised as one of the potential area from tourism point of view. The valley provides many trekking routes, which are now in dilapidated condition. Last leg of Kinner Kailash Parikrama also passes through the sanctuary. The concept of community based eco-tourism as enshrined in the H.P. Eco-tourism policy 2001 seems to have good applicability in the sanctuary area, particularly at Chhitkul village; the last habitation near the sanctuary. The policy shall be implemented through various eco-tourism societies. The local people are not aware of the vast tourism potential of the area. They need to be trained and educated about the eco-tourism vis - a vis wild life conservation. Eco-tourism will bring sustainable income to the local people and raise their standard of living. It is one of the most important alternative income generation opportunities besides N.T.F.P.'s, to the local people of the area.

4.3.8 REPAIR OF BUILDINGS, PATHS & BRIDGES

The existing building and path/bridges are almost depleted conditions. The four bridges on Baspa river at Batseri, Rakchham, Chhitkul and Rani Kanda were constructed by Forest Department many years back. Out of these two bridges are now in highly damaged condition. These bridges are now unsafe and need immediate replacement. This will facilitate movement of field functionaries and will help local people as well as tourists.

4.3.9 AREA, BOUNDARY, DEMARCATION

Boundries of the finally notified, Rakchham-Chhitkul Sanctuary have been based on the relevant survey sheet. However these boundaries along with boundaries of forests constituting this sanctuary are yet to be marked on the ground as required by W.L. protection Act, 1972 for the benefit of the local people and from management point of view.

4.4 STRATEGY AND APPROACH

The strategy and approach will be similar to the issues mentioned at 3.4 & 3.5. The activities undertaken will also be similar except the additional interventions at following two levels:-

A. Intensive management of Wildlife Sanctuary- which would include fire protection, Habitat Improvement, antipoaching activities, reward & incentive to informer, Census operation, Demarcation of boundaries & Construction of Boundary pillars.

B. Eco-Development activities- which would include Distribution of GI pipes(both in Wildlife and Kinnaur) Divisions, Ecotourism Development & Income Generation Activities.

CHAPTER - V

OBJECTIVES AND CATCHMENT PROPOSALS

5.1 CAT PLAN OBJECTIVES

The objectives of the CAT Plan are summarized as under:-

- i) To achieve *ecological rehabilitation* of the project area leading to all round economic development on a sustainable basis.
- ii) To increase the vegetation cover in the area by *Afforestation* of areas/forests threatened with erosion, with due consideration for fodder/fuelwood and timber demand of local people.
- iii) *Combating erosion* in all forms on slopes, wherever possible.
- iv) To promote *in situ moisture conservation*, ground water recharge and to increase the productivity of all types of land.
- v) To carry out *soil conservation measures* in watershed of Baspa river to ensure the longevity of the reservoir of Baspa-II hydroelectric project.
- vi) To *improve the carrying capacity of pasture* by augmenting grass and fodder availability and to solve the problems of migratory graziers.
- vii) To *strengthen productive & protective functions* of existing forests.
- viii) To *provide employment* to the local people by engaging them on afforestation and soil conservation works.
- ix) To *improve rural infrastructure* in the project area.
- x) To *increase productivity of all types of land* and sustained use of natural resources.
- xi) To *promote community participation* by motivation/awareness and training in adopting environmentally sustainable practices and to upgrade their skills in natural resource management.
- xii) To conduct *research/studies* for developing appropriate site specific technological packages with focus on resolving PLAN implementation problems.
- xiii) To *mitigate the project impacts on wildlife* by initiating ameliorating measures and to strengthen wildlife management in the tract.

5.2 PLAN PERIOD

The CAT Plan Phase-I has been implemented from 1994-95 to 2004-05 and 2005-06 which is being implemented as per approved works/APO. Therefore, in phase-I the works implemented w.e.f. 1994-95 to 2005-06 has been kept. The accelerated and time bound implementation will be carried out in phase-II from 2006-07 to 2013-14 (i.e. Total of 16 years with most of the activities

confined to the initial six years of the phase-II followed by maintenance for five years)

5.3 PLAN COMPONENTS

The CAT Plan has been designed to develop the catchment area in an integrated manner by improving vegetative cover over the degraded and blank areas and to treat the flood-prone nallahs, stabilize the Baspa river bank and road side slopes by providing suitable bio-engineering structures and various soil conservation measures. The project will have the following components: -

1. Forest Establishment & Improvement
 - a) Afforestation of Degraded Forest Lands
 - b) Assisted Natural Regeneration
 - c) Raising of NTFP Plantation
 - d) Treatment of Culturable Wasteland
 - e) Raising of Nurseries
2. Improvement of Alpine Pastures
3. Soil & Moisture Conservation Works
 - a) Treatment of land slips/slides
 - b) Treatment of Nallah
 - c) River bank stabilization
 - d) Road side stabilization
4. Rural Infrastructure Development
 - a) Village pond/tank
 - b) Soil & Water Conservation Structures
 - c) Repair of spring, bawries & other water sources
 - d) Repair of village road & path
 - e) Construction of foot bridges
5. Forest Infrastructure Development
 - a) Construction/Repair of operational buildings
 - b) Construction/Repair of Inspection path/bridle paths and roads.
 - c) Construction of bridges
6. Avenue plantation & landscaping
7. Treatment of Private Lands
8. Distribution of seedlings to people
9. Wildlife Management
 - A. Intensive management of Wildlife Sanctuary

- i. Fire Protection
- ii. Habitat Improvement
- iii. Antipoaching activities
- iv. Reward & incentive to informer
- v. Census operation
- vi. Demarcation of boundaries & Construction of boundary pillars
- vii. Slogan & Sign Board

B. Eco-Development activities

- i. Vaccination of Domestic cattle
- ii. Purchase of Equipments and Medicines
- iii. Income Generation Activities
- iv. Provision for compensation against WL depredation.
- v. Distribution of GI Pipe for installation of religious flags.
- vi. Construction of Crematoria
- vii. Construction of Tracker Hut
- viii. Installation of street solar lights.
- ix. Sulabh Shochalya

10. Training, Awareness, Extension & Publicity

11. Research & Studies

12. Operational Support

- a) Establishment Cost
- b) Office Expenses
- c) Traveling Allowance
- d) Office Equipment
- e) Motor Vehicle & POL
- f) Amenities to staff & labour

13. Agricultural & Horticultural support

14. Animal Husbandry support

15. Revenue of State

16. Contingencies

The detail of each component is as under:-

1. FOREST ESTABLISHMENT & IMPROVEMENT

A well-stocked forest is the best insurance against soil loss as well as for ecological rehabilitation. It is, therefore, proposed to increase the vegetation

cover in the tract. For this, hitherto barren areas which are devoid of tree growth or the degraded forestland with scanty vegetation shall be brought under afforestation.

The locality factors prevalent in the area are very adverse to the establishment of plantations. The areas identified for plantations are quite refractory. Soil conditions are poor. Rainfall is inadequate and erratic. Winter is harsh and wind velocity is quite high. Added to this is the problem of excessive human and cattle interference in these areas. Thus special and intensive efforts are needed to ensure the success of afforestation work. Owing to the above-enumerated factors, the plantations will require higher levels of maintenance also. The existing financial norms for raising plantations as prevalent in the Forest Department will not be adequate to ensure quick and successful establishment of these plantations. Hence, detailed cost analysis for each plantation scheme has been done; keeping with the site conditions and objectives of the Plan and the norms so calculated will be applicable for works to be executed under this CAT PLAN. Thrust will also be laid on improving quality of nursery stock in the existing departmental nurseries so that sturdy nursery plants are available which can withstand the rigorous site conditions. Total Funds allotted under this head is **Rs. 1,98,37,900** (8.78%)

The afforestation activities will be carried out under five different schemes as detailed below to make them specific to the needs of the areas being treated.

a) Afforestation of Degraded Forest Lands

Under this scheme blank areas devoid of tree growth, or degraded forest areas shall be taken up for planting. While the choice of species will be mainly governed by the site, efforts will be made to raise a mixture of conifer and broad leaved species so far as practical. The main species to be raised under this scheme are Deodar, Kail, Silver fir, Robinia, *Fraxinus xanthoxyloides* (Ash), Ailanthus, Walnut, Aesculus, Maple, Bird cherry, *Leucaena*, Poplar, Ritha, Drek, Willow, Chulli etc. The preference of local communities as regards the choice of species will be ascertained and given due weightage. 1100 plants per hectare will be planted under this scheme. Besides planting, some moisture retention works will also be required to be undertaken in these areas to increase the moisture regime in the plantation areas. The plantation will be maintained for subsequent five years. In areas with high grazing pressure stone fence wall up-to 1 mtr. height, and Barbed wire in 4 strands on stone fence wall in wooden fence posts is provided. In other areas only barbed wire fence in 4 strands has been provided. A total of **397ha** area has been identified as available for tackling under this scheme. Out of this total **267 Ha.** have been identified in Kinnaur and **130 ha.** in Wildlife Division. **147 Ha.** in Kinnaur Division and **33 Ha.** in Wildlife Division has already been achieved up to 2005-06 and kept in Phase I. The remaining **120 Ha.** in Kinnaur and **97 Ha.** of Wildlife Division have been identified and proposed to be treated under Phase II. The detail area identified is given in indicative list as Annexure XI. However availability of these identified areas is highly dynamic in view of changing locality factors, consent of local population and need to leave sufficient areas for local cattle grazing. The detail of works required to be

done under the scheme along with cost structure as per prevalent wage rate is given in Annexure-I, & II lump-sum cost of fence post has been provided in the cost module. Cost per hectare including maintenance for five years works out to Rs.44,500 for plantations with barbed wire fencing only. During phase-I Rs. 41,23,000/- has been spent under this component. The total outlay for this component in phase-II will be Rs. 1,07,96,500 (4.78%).

Table No. 5.1

Expenditure for Afforestation of Degraded Forest Lands:-

1. Cost of raising plantations over 217 ha. @ Rs.30,600=	Rs.66,40,200
2. Maintenance cost for 5 years	
1 st year maintenance over 260 ha. @ Rs. 4,300=	Rs.11,18,000
2 nd year maintenance over 295ha. @ Rs.3,700=	Rs.10,91,500
3 rd year maintenance over 300 ha. @ Rs.2,500=	Rs. 7,50,000
4 th year maintenance over 337 ha. @ Rs.1,700=	Rs. 5,72,900
5 th year maintenance over 367 ha. @ Rs.1,700	Rs. 6,23,900
G.Total:-	Rs. 1,07,96,500

b) Assisted Natural Regeneration

In some forest areas, conditions are conducive to natural regeneration provided some sort of assistance is provided. Such areas shall be taken up under this component. The areas shall be closed to exclude biotic interference. Forest floor will be cleared of slash, debris and felling refuse to afford a clean seed bed to the falling seed. At certain places some soil raking may also have to be done to facilitate germination of seeds. Where natural regeneration is found deficient, it will be supplemented by artificial planting. Patch sowing in suitable areas may also be done. Up to 500 plants or patches per hectare will be planted/ sown to hasten the process of regenerating the area uniformly.

The plantation areas will be fenced with barbed wire fence in 4 strands on wooden fence posts. A total of 115ha. area has been identified as available for tackling under this scheme. Out of this total **45 Ha.** have been identified in Kinnaur and **70 ha.** in Wildlife Division. **20 Ha.** in Kinnaur Division and **25 Ha.** in Wildlife Division has already been achieved up to 2005-06 and kept in Phase I. The remaining **25 Ha.** in Kinnaur and **45 Ha.** of Wildlife Division have been identified and proposed to be treated under Phase II. The detail area identified is given in indicative list as Annexure XII. As per cost norms given in Annexure III & IV lump-sum cost of fence post has been provided in the cost module, cost per hectare comes to Rs.22,100 including maintenance for 5 years. During phase-I Rs. 4,67,750/- has been spent under this component. Total cost of this component during phase-II works out to Rs. 16,16,000 (0.71%).

Table No. 5.2
Expenditure for Assisted Natural Regeneration:-

1. Cost of raising plantations over 70 ha. @ Rs.17,000	Rs.11,90,000
2. Maintenance cost for 5 years	
1 st year maintenance over 80 ha. @ Rs. 1,900	Rs. 1,52,000
2 nd year maintenance over 80 ha. @ Rs.1,100	Rs. 88,000
3 rd year maintenance over 80ha. @ Rs. 900	Rs. 72,000
4 th year maintenance over 95 ha. @ Rs. 600	Rs. 57,000
5 th year maintenance over 95 ha. @ Rs. 600	Rs. 57,000
Total:-	Rs. 16,16,000

c) Raising of NTFP Plantation

One of the major factors impacting on the effective conservation of forests is the dependence of rural communities on the forest biomass resources for meeting their fuel, fodder, small timber and other livelihood needs. While schemes to augment availability of fuel wood, fodder, small timber have attracted much attention, the need to address the livelihood issue by encouraging forest based enterprise has not received the desired attention. Propagation of Medicinal Plants is an innovative land use strategy to address the livelihood issues of local people on sustainable basis as it provides alternative income generation activity. Moreover, this will help in *ex-situ* conservation of Medicinal Plants.

With this purpose, medicinal herbs like Karoo, Dhoop, Chora, Salam Panja, Dioscorea, Patish, Bankakri, Ratanjot, Nihani, Muskwala etc. will be propagated under this component. 5000 plants per hectare in 1000 patches will be raised in the selected areas. The plants can also be raised as intercrop in the other plantation areas taken for tree plantations. A total of 94ha. area has been identified as available for tackling under this scheme. Out of this total **34 Ha.** have been identified in Kinnaur and **60 ha.** in Wildlife Division. **Zero Ha.** in Kinnaur Division and **15 Ha.** in Wildlife Division has already been achieved up to 2005-06 and kept in Phase I. The remaining **34 Ha.** in Kinnaur and **45 Ha.** of Wildlife Division have been identified and proposed to be treated under Phase II. The detail area identified is given in indicative list as Annexure XIII. During phase-I Rs. 7,31,500/- has been spent under this component. Total outlay for this component during phase-II will be of Rs. 41,15,900(1.82 %). The per ha cost modal is given at Annexure V & VI lump-sum cost of fence post has been provided in the cost module, and the cost comes out to Rs.49,850 per hac. including maintenance for 3 years. The plantation areas will be fenced with barbed wire fence in 4 strands on wooden fence posts. Operation of fencing will be carried out only when an area is closed exclusively for NTFP Plantation. If NTFP plants are grown in already fenced area the saving thereof will be utilized in additional areas.

Table No. 5.3

Expenditure for Raising of NTFP Plantation:-

1. Cost of raising plantations over 79 ha. @ Rs.38,000	Rs.30,02,000
2. Maintenance cost for 3 years	
1 st year maintenance over 94 ha. @ Rs. 7,950	Rs. 7,47,300
2 nd year maintenance over 94 ha. @ Rs. 2,600	Rs. 2,44,400
3 rd year maintenance over 94 ha. @ Rs. 1,300	Rs. 1,22,200
Total:-	Rs. 41,15,900

d) Treatment of Culturable Wasteland

The cultural waste lands are proposed to be treated through a silvo-pastoral mixture and shall be improved by undertaking the following measures:-

- (i) Eradicate unwanted bushes, shrubs and grasses.
- (ii) Planting of Broad leaved species which yield fodder/fuelwood.
- (ii) Sowing of locally suitable good palatable grasses.

Planting & grass sowing along contour is required. All the area to be fenced with wooden fence posts and four strand barbed wire. A total of **90ha.** area has been identified as available for tackling under this scheme. Out of this total **40 Ha.** have been identified in Kinnaur and **50 ha.** in Wildlife Division. **10 Ha.** in Kinnaur Division and **10 Ha.** in Wildlife Division has already been achieved up to 2005-06 and kept in Phase I. The remaining **30 Ha.** in Kinnaur and **40 Ha.** of Wildlife Division have been identified and proposed to be treated under Phase II. The detail area identified is given in indicative list as Annexure XIV. Under this scheme shrubby and blank areas devoid of tree growth, or degraded forest areas near villages/habitations shall be taken up for planting. While the choice of species will be mainly governed by the site, efforts will be made to raise broad leaved species like Robinia, Ailanthus, Walnut, Aesculus, Maple, Birdcherry, Leucaena, Poplar, Ritha, Drek, Willow and Chulli. The preference of local communities as regards the choice of species will be ascertained and given due weight age.

1100 plants per hectare will be planted under this scheme. Besides tree planting, sowing of locally suitable good palatable grasses in strips of 100x30x5cm will also be carried out. 300 such strips will be prepared per hac. The detail of works required to be done under the scheme along with cost structure is given in the annexure-VII & VIII lump-sum cost of fence post has been provided in the cost module. The plantation areas will be fenced with barbed wire fence in 4 strands on wooden fence posts. Cost per hectare including maintenance for five years works out to Rs.44,950. During phase-I Rs. 4,72,000/- has been spent under this component. The total outlay for this component during phase-II will be Rs. 33,09,500 (1.46%).

Table No. 5.4
Expenditure for Treatment of Culturable Wasteland:-

1. Cost of raising plantations over 70 ha. @ Rs.28,650	Rs.20,05,500
2. Maintenance cost for 5 years	
1 st year maintenance over 70 ha. @ Rs. 4,500	Rs.3,15,000
2 nd year maintenance over 84ha. @ Rs.3,900	Rs.3,12,000
3 rd year maintenance over 80 ha. @ Rs. 3,400	Rs. 2,72,000
4 th year maintenance over 90 ha.@ Rs. 2,250	Rs. 2,02,500
5 th year maintenance over 90@ Rs. 2,250	Rs.2,02,500
Total:-	Rs. 33,09,500

e) RAISING OF NURSARIES

To raise successful plantations it is necessary to have a good planting stock. It was purposed to establish new nurseries at Sangla - II (Limsanthang), Kharogla and Rackcham in the previous plan. Further two departmental nurseries at Seranigche and at FRH at Sangla was to be maintained. Nurseries have been raised in the first phase of the project and will be further maintained till the completion of the CAT Plan works. Rupees 14,60,127/- has been spent on raising of nurseries during phase I.

2. IMPROVEMENT OF ALPINE PASTURES:-

The alpine pastures have their own significance in the geophysical, environmental and socio-economic conditions of the tract. They are spread on the natural slopes and form considerable portion of the catchment being dealt in this plan. They are the main source of herbage/ roughage for the cattle, sheep and goats. These areas have been subjected to severe human interference where continuous and uncontrolled grazing has led to elimination of palatable grasses/ legumes and dominance of unpalatable and undesirable grasses and bushes. These pastures are extensively grazed during summers. As a result of continuous and heavy pressure of grazing, barren patches have developed over vast areas and soil erosion is rampant in these alpine pastures. The herbage species found in these lands represent third or fourth stage of degradation. The present level of production of most of these pastures is about one-fourth of their actual potential.

The major impediment in taking up these lands for treatment is the reluctance of local people for allowing the closure as that will deprive their cattle of grazing land, notwithstanding their poor condition. In such circumstances any plan to rehabilitate such lands must have the willing support of local people otherwise the effort is doomed to fail. The closure of such areas has necessarily to be for as short a period as possible.

Grazing management of these pastures consists of wise and skilful manipulation of two basic biological systems, the herbage available for grazing and the grazing animal. Owing to traditional rights of the graziers, it is

difficult to restrict the number of animals grazing there. Thus the only alternative left is to increase the productivity of these pastures to cope with the grazing pressure. The treatment of these areas will consist of eradication of obnoxious weeds, application of fertilizers and strip sowing of improved variety of grasses. 800 strips of 100x30x5cm will be prepared per hac. for grass sowing. No barbed wire fencing is feasible in these areas due to their remoteness and the area will be protected with the help of thorny bushes available in the vicinity. Since only grass is to be sown, maintenance of only one year is proposed. Out of total 32,274 hectares pasture area available in the catchment, it is proposed to treat **540 hectares** badly depleted area. Out of this total **115 Ha.** have been identified in Kinnaur and **425 ha.** in Wildlife Division. **45 Ha.** in Kinnaur Division and **Zero Ha.** in Wildlife Division has already been achieved up to 2005-06 and kept in Phase I. The remaining **70 Ha.** in Kinnaur and **425 Ha.** of Wildlife Division have been identified and proposed to be treated under Phase II. The detail area identified is given in indicative list as Annexure XV. Cost model is given at Annexure-IX & X. As per cost model, per ha cost works out to Rs 12,250 including maintenance for two year. During phase-I Rs. 3,87,400/- has been spent under this component. The total cost of the component during phase-II comes to **Rs.60,75,750 (2.69%)**.

Table No. 5.3

Expenditure for Improvement of Alpine Pastures:-

1. Cost of raising plantations over 495 ha. @ Rs. 10,550	Rs.52,22,250
2. Maintenance cost for 2 years	
1 st year maintenance over 495 @ Rs. 1100	Rs. 5,44,500
2 nd year maintenance over 495 @ Rs. 600	Rs. 3,09,000

Total:-	Rs. 60,75,750

3. SOIL & MOISTURE CONSERVATION WORKS

a) Treatment of Land slips/slides

80 hectares of area has been identified as seriously eroded in the catchment area which needs to be stabilized. The details of land slide/slip areas are given in Annexure XVI.

Stabilization measure like check walls, protection walls in create wire will be under taken in such areas. Beside these engineering measures, where ever required, grasses and shrub will also be planted. Vegetative shrub barriers, brush wood check dams etc. shall also be erected as per site requirement. The provision for each side has been made in lump-sum on the bases of rough preliminary estimation in the field. However, detailed estimates will be prepared at the time of execution of actual works as per requirement of each site. **Rupees 90,98,906** have been spent during phase I and a total amount of **Rs. 3,23,60,000(14.31%)** has been provided for this component during phase II. Out of this amount **Rs. 1,69,60,000/-** is proposed to be spent in Kinnaur

Div. and Rs. 1,54,00,000/- in Wildlife Division. Indicative list for treatment of such land slides/slips have also been given after detailed discussion/ survey in the field in Annexure XVI.

b) Nallah Stabilization

About 26 nallahs with a length of about 52 Kms are required to be treated in the catchment area. Details of nallahs with length in Kms are given in Annexure XVII.

The basic purpose of treatment of these nallah will be to check the velocity of run off, detention of silt & prevention of cutting of banks. A total of 26 main nallah & some minor nallah have been purposed for treatment. An indicative list of nallahs is also given in the plan as Annexure XVII. The treatment will include bio- engineering measures like check dams, protection walls, silt detention dams, vegetative shrub barriers, brush wood check dam etc. The planting of grasses, shrub and trees will also be done on the banks wherever feasible. Provision for treatment of each nallah has been done on the basis of rough estimation but the actual work will be done after preparing detailed estimates as per spot requirement. Rupees 1,66,24,925 have been spent during phase I and a total amount of Rs. 4,94,00,000 (21.85%) has been provided for this component during phase II. Out of this amount Rs. 2,13,00,000/- is proposed to be spent in Kinnaur Div. and Rs. 2,81,00,000/- in Wildlife Division. Indicative list for treatment of such nallah have also been given after detailed discussion/ survey in the field in Annexure XVII.

c) River Bank Stabilization

35.9 Kms. of river cutting by Baspa river has been identified for stabilization. Details of river bank cutting area in the length is given in Annexure XVIII. Due to recent flash flood in river Baspa, severe damage has been caused and accordingly some RCC works are also to be carried out for stabilization of River Bank. The basic purpose of these measures will be to check the erosion of river side & to stream line the flow of river. The treatment will include bio-engineering measures & by way of constructing appropriate engineering structures. Beside this planting of grasses, shrub, trees will also be done on the banks where ever feasible. Provision for treatment of each such river have been made on the basis of rough estimation but actual work will be done after preparing detailed estimate as per spot requirement. Rupees 1,08,15,625 have been spent during phase I and a total amount of Rs. 3,59,00,000 (15.88%) has been provided for this component during phase II. Out of this amount Rs. 1,96,00,000/- is proposed to be spent in Kinnaur Div. and Rs. 1,63,00,000/- in Wildlife Division. Indicative list for treatment of River Bank Stabilization have also been given after detailed discussion/ survey in the field in Annexure XVIII.

d) Road Stabilization

The road in Baspa valley is generally along the bank of the river and poses threat of siltation as the sides of the roads are vulnerable because of loose strata. Total length of 42 Kms. of road exists from Karchham to Chhitkul.

Out of which 35.5 Kms. length of road passes through weak soil strata, which need to be stabilized. A detail of length of road is given in Annexure XIX.

Some of the roads constructed in the tract are the potential source of erosion/land slip. The loose excavated material dumped along the road also needs to be stabilized to prevent its flow to the river with run off. Such road will be stabilized by appropriate engineering structures as also bio-engineering measures where necessary and feasible. Rough estimate for requirement of funds for each such stretch of road has been calculated & total amount of Rs.35,50,000 (1.58%) is proposed to be spent on this component. Works will be carried out as per detailed estimate to be prepared at the time of actual work. Out of this amount Rs. 14,50,000/- is proposed to be spent in Kinnaur Div. and Rs. 21,00,000/- in Wildlife Division.

4. RURAL INFRASTRUCTURE DEVELOPMENT

The construction phase of the Project has resulted in disruption/ damage to the rural infrastructure like village paths, springs, traditional water sources, bridges, minor irrigation channels etc. It is, therefore, imperative that CAT Plan supports the restoration/ up gradation of such infrastructure in the Project area. While such measures will mitigate the hardship of the local population, it will also motivate to lend their support and participation other eco up gradation works. The following area of intervention has been identified under this component. The rough estimate of amount required for each such work has been made and amount provided accordingly. However, detailed estimates as per site conditions will be prepared at the time of actual execution of the work and fund utilized accordingly. The quantity of each work to be carried out has been given in the year wise work schedule. The total amount of Rs.1,05,00,000(4.64%) is for this activities.

a) Village ponds/ tanks:-

The sites have been selected for construction/ repair of village ponds/ tanks for the benefits of local human populations as well as cattle. An amount of Rs. 14,00,000 (0.62%) have been provided for this component. Out of this total Rs. 8,00,000/- has been yearmarked for Kinnaur Forest Division and Rs. 6,00,000/- for Wildlife Division. The sites identified for construction of Village ponds/tanks is given in Annexure XX.

b) Soil and water conservation structure:-

Soil and water conservation structure will be constructed in the Project area to conserve and optimize the use of available surface flow. An amount of Rs. 18,00,000 (0.80%) have provided for this purpose. Out of this total Rs. 11,25,000/- has been yearmarked for Kinnaur Forest Division and Rs. 6,75,000/- for Wildlife Division. The sites identified for construction of Soil and water conservation structure is given in Annexure XX.

c) Repair of Springs, bawaries and other water sources:-

The supply of potable water is available in most of the villages in the Project area but the supply of uninterrupted good quality water is rather erratic. The

problem becomes more acute when drought conditions are experienced when water sources are dried up. Drinking water for cattle is another problem which needs attention. Traditional water sources like springs, bawries etc. are of immense help in such condition. However most of such sources are in dilapidated condition due to lack of maintenance/ repair. It is proposed to repair such water sources to augment the potable water supply in the tract. The number bawries/ springs have been identified in the Project areas which need repair/ renovation as detailed in the year wise work schedule. Sum of Rs.20,00,000 (0.88%) is proposed to be utilized on this account. Out of this total Rs. 9,50,000/- has been earmarked for Kinnaur Forest Division and Rs. 10,50,000/- for Wildlife Division. The sites identified for repair of springs, bawries and other water sources is given in Annexure XX.

d) Repair of Village road and paths:-

Restoration work of Village roads/ paths will be undertaken in the Project area. Only existing rural, block, panchayat roads/ paths will be taken up for improvement which will essentially consist of soling, paving, providing crop drainage, retaining wall, side drain etc. The number of such roads/ paths have been identified for improvement at a total cost of Rs.18,00,000(0.80%). Out of this total Rs. 9,50,000/- has been earmarked for Kinnaur Forest Division and Rs. 8,50,000/- for Wildlife Division. The sites identified for construction of Village road and path is given in Annexure XX.

e) Construction of foot bridges

The identified bridges/ foot bridges given in the year-wise working schedule at a total cost of Rs. 35,00,000(1.54%) will be constructed/ repaired to improve the village communication network. Out of this total Rs. 15,00,000/- has been earmarked for Kinnaur Forest Division and Rs. 20,00,000/- for Wildlife Division. During phase-I Rs. 6,00,000/- has been spent under this component. The sites identified for construction of Construction of Foot Bridge during phase-II is given in Annexure XX.

5. FOREST INFRASTRUCTURE DEVELOPMENT

For optimum management of the forest resources of attract, it is essential that the field infrastructure of forest department is adequately developed. The forest road and path in the region are the important lines of communications in this difficult terrain and to keep them in serviceable conditions is highly desirable. But due to paucity of funds, many of these roads/paths are in a state of neglect and needs repairs to facilitate efficient forest management. Similarly in the case of forest buildings which are in dilapidated conditions will also be repaired. Besides this a provision for construction of infrastructure at Reckong Peo has also been made in the plan. A total amount of Rs.79,79,000(3.53%) has been proposed under this activity during phase-II.

a) Construction and maintenance of buildings

For proper management, protection, maintenance and sustainability of the CAT Plan assets, it is essential that the CAT Plan staff is housed near the work

site. Also keeping in view harsh living conditions prevalent in the project area, all the buildings works will be completed in the first two years of the plan and will be further maintained till the completion of the plan works. During phase-II the expenditure on the cost of buildings and maintenance works out to Rs.55,79,000/- (2.47%). During phase-I Rs. 62,49,777/- has been spent for construction of infrastructure at Recong Peo and repair of other buildings.

b) Construction and maintenance of bridle paths / inspection paths/village paths-roads etc

The old existing bridle paths, inspection paths are to be maintained to facilitate execution of the project works/job and its inspection. Such paths have been identified and will be maintained in this Project. Rs. 7,11,000/- has been spent under this component during phase-I. During phase-II an outlay of Rs. 9,00,000 (0.40%) have been provided for this component. Out of this total Rs. 4,50,000/- will be spent in Kinnaur Forest Division and Rs. 4,50,000/- in Wildlife Sarahan.

c) Construction of Bridges

For proper management, protection and maintenance of the project assets, it is essential to construct the identified bridges as given in the yearwise working schedule of the project.

The total expenditure involved on this activity in lump-sum is Rs.15,00,000 (0.66%). Out of this total Rs. 7,00,000/- will be spent during phase-II in Kinnaur Forest Division and Rs. 8,00,000/- in Wildlife Sarahan.

6. AVENUE PLANTATION AND LANDSCAPING

Works will be carried out under this component to improve visual aesthetic in and around Project sites. Tall planting of ornamental plants will be done at suitable places. These tall plants will be raised in suitable container like gunny bags or bigger size polythene bags to accommodate the tall plants. The size of pits for planting of these plants will be of bigger size and will be filled with rich mixture of soil and manure for fast growth and establishment. Each plant so planted will be protected individually or in groups by employing site specific protection mode like tree guards, barbed wire fencing, thorny bush fencing or any other suitable method. The plants will also be watered in the period of drought to avoid mortality as also to give impetus to their growth. In essence, all efforts will be made to achieve early establishment and rapid growth of these plants. The required plants may also be procured from commercial sources if they can not be expeditiously raised in the existing departmental nurseries. A lump- sum norm of Rs. 100/- per plant is fixed for this component. No provision for maintenance of these plants in the subsequent years is being made as no maintenance is anticipated. Still, if any such eventuality arises, the fund may be released out of contingencies component. Apart from avenue plantation, some landscaping will also be done under this component around project site and lump-sum provision for the same has also been made. The total outlay for this component is Rs. 12,00,000 (0.53%). Out of this total Rs. 6,00,000/- will be spent during phase-II in Kinnaur Forest Division and Rs. 6,00,000/- in Wildlife Sarahan.

7. TREATMENT OF PRIVATE LAND

Some private lands are also in the state of degradation owing to their vulnerability to erosion. The CAT Plan will support the improvement of such private lands by contour bunding, terrace repairing and minor engineering works, so that they may not become the source of soil erosion. However intensive improvement measures on the individual lands will be avoided under this component and only minor interventions will be done to motivate beneficiaries. Rs. 1,60,000/- has been spent during phase-I and lump-sum provision of ~~Rs. 15,00,000~~ (0.66%) have been made for this component during phase-II and work will be done as per site condition after selecting appropriate areas.

8. DISTRIBUTION OF SEEDLING TO THE PEOPLE

Improved forest tree species as well as fruit trees will be distributed to local people for planting in their private areas. Seeds of improved variety of grasses may also be distributed. The forest plants/ seeds will be mainly raised in the departmental nurseries where as fruit plants will be procured from commercial nurseries. The number of plants at the total cost of ~~Rs. 50,000~~ (0.02%) are proposed to be distributed in the Project area.

9. WILD LIFE MANAGEMENT

The tribal communities of this project are largely occupied forestry region of the sanctuary area where for a long period in their history, they have lived in isolation but in harmony with the nature. They draw their sustenance largely from the forests for their day to day consumption and their livelihood. Tribal life is connected one way or the other with forest and wild life, right from birth to death. We can not deny the needs as the tribal people who live in the harmony with the forests, environment and ecologically they can not be disregarded. There is great need to breed Musk deer in captivity so as to increase its population which is dwindling in the plan area. Therefore, its Ex-situ conservation is proposed to be carried out in Chhitkul Rakcham wildlife sanctuary area.

EX-SITU CONSERVATION OF MUSK DEER

Musk Deer is locally known as (Musknapha). In the past, it has been hunted for its precious musk pod which in fact is an abdominal gland found only in the male animal. For its protection and preservation the GOHP has declared it as a state animal and is considered as protected animal. It has been kept in schedule I species under the Wildlife protection Act, 1972. A solitary and secretive animal, it is found between 2900 mtr. to 4000 mtr. elevation ranging in the Rakchham - Chhitkul Wildlife sanctuary and even in the out side of the protected areas of Sangla valley. The habitat of the Muskdeer species is in fact degrading causing their population to dwindle at a very fast pace in Sangla valley. Therefore the In-Situ conservation endeavors, however needs to be supplemented with Ex-Situ conservation measures to conserve the gene pool of the endangered species to breed such species in captivities and to release

this captive breed stock in the natural habitat in the Baspa valley from where it has been extirpated, so as to breed up the wild population of Muskdeer in Sangla valley.

In order to achieve these objective an guidelines framed by the GOI in National Wildlife action plan 2002-2016. The Muskdeer farm for Ex-Situ conservation is proposed to be established/ developed in an around the Rakchham - Chhitkul Wildlife sanctuary. A Five Year Ex-Situ conservation breeding project management plan will be prepared separately under the supervision of CZA of India under Wildlife protection Act, 1972. The proposed work will be executed on the basis of the approved conservation captive breeding plan by the CZA New Dehli. The necessary infrastructure will be developed for Ex-Situ conservation breeding project as per approved plan and necessary provision will be made for human resource development by providing training to the PA'S staff in captive breeding and reintroduction program.

A total outlay of Rs. 75,00,000/- has been proposed for this purpose which is given in the yearwise work schedule.

Safeguard is required to ensure that catchment area treatment and other works should not be affected. At the same time, it is essential that there is no adverse impact on the Wildlife habitat and the delicate equilibrium between the two is also maintained in future. In order to achieve these objective and reduce the pressure on forest and sanctuary area as also to maintain ecological balance, the following activities are proposed to be carried out under this CAT Plan. An outlay of Rs. 1,21,65,000(5.38%) is proposed to be incurred during phase-II. During phase-I Rs. 7,52,578/- has been spent on various activities under this component. The following component under intensive management and eco-development are proposed :-

(A) Intensive Management of Wild Life Sanctuary:

- (i) **Fire Protection:-** In order to protect the sanctuary area from fire the following works are proposed to be undertaken along the plan period as under:-
- (a) Engagement of the fire watcher during the season.
 - (b) Construction of fire watch tower.
 - (c) Purchase of fire fighting equipment.
 - (d) Clearance of debris disposal in the sanctuary area i.e. control debris burning.

An outlay for Rs. 4,40,000(0.19%) has been proposed to be incurred during the plan period.

- (ii) **Habitat Improvement:-** Since all wild life in nature live in complex web of linkage with other organisms, the proper evaluation of habitat of each species followed by its proper management is very essential. The plant life provides congenial home to wild life and bio-diversity, therefore the habitat of wild life is to be improved by undertaking planting and other works.

For this purpose bushy shrubby and thick forests are to be maintained and no grass should be removed from the habitat of the wild life. In degraded forest area the suitable species i.e. bamboo planting and fruit bearing species will be carried out as per site/ location, the bank area in the forests especially in high reaches along ridge should be maintained as pasture land by sowing suitable local grasses for the benefit of wild animal. Besides this water pond/ hole should be constructed wherever these are required. An outlay for Rs. 78,50,000(3.46%) has been proposed to be incurred during the plan period.

(iii) **Antipoaching activities:-** The sanctuary area is required to be guarded against poaching throughout the year. In order to curb nefarious activities poachers, antipoaching measures like joint patrolling is to be organized by engaging ex-serviceman and local un-employed youth. Local youth are to be trained and engaged them to give assistance to field staff and clues regarding poaching in the sanctuary area. Therefore an amount of Rs. 1,20,000(0.05%) is proposed during the plan period.

(iv) **Reward/ incentive to informers:-** Reward/ incentive to the informers are required for proper protection of sanctuary against poaching and illicit felling. Forest guard alone are helpless to protect or detect wild life offences. With the help of association of the local people by providing reward and incentives the department get clue from these peoples. It is necessary to make people aware about the biological, ecological hardship with the bio-diversity of the sanctuary area is facing. Therefore the people should be encouraged by providing them reward/ incentive for giving information about the offender/culprits. It is also ensured that informer's name should not be disclosed publically or otherwise people will not dare to come forward on this issue. Therefore an amount of Rs 1,50,000(0.07%) is proposed to meet this purpose during the plan period.

(v) **Wild life census Operation in Protected Area**

It is proposed to carry out wild life census in the key areas the key areas to know the density of key species so that these can be further improved and development from management point of view. During last four years no census has been carried out in the sanctuary area due to non-availability of funds. The census should be carried twice in an alternative year. Therefore an amount of Rs.1,20,000(0.05%) is proposed for this purpose.

vi) **Demarcation of boundaries and construction of boundary pillars.**

For the proper management of sanctuary area after final notification and to prevent any illegal activities i.e. encroachment and trespass in the sanctuary there is necessity of identification of the boundaries and construction of B/pillars and chalk pillars along the cultivation as per final notification. By constructing chalk Pillars/B/ Pillars, it will facilitate to prevent among illegal activities in the sanctuary area. Therefore an amount of Rs.50,000(0.02%) is proposed during the plan period.

vii) Sign and Slogan Boards

It is recommended that the sign and slogan boards must be put up at selected sites. All these sign and slogan boards must be in Hindi language in the form of an appeal to the local people, telling them the importance of wild life conservation and provisions of Wild Life Protection ACT, 1972 and IFA, 1927 and F.C Act, 1980 etc. All such development works which are taking in the project period must be properly displayed at their site execution for example i.e. plantation work, nursery, pasture development, soil conservation works etc. Therefore an amount of Rs. 80,000(0.04%) has been proposed for this purpose during the plan period.

B. Eco- Development Activities

i) Vaccination of domestic cattle

The local people have grazing rights in and around the sanctuary area. It is therefore necessary to immunise the domestic cattle against contagious disease like foot and mouth etc. It will prevent disease from spreading from domestic cattle to wild animals and vice versa. Therefore an amount of Rs. 3,00,000 (0.13%) has been proposed during this plan period.

(ii) Purchase of equipments and medicines

It is necessary to purchase immobilization equipment and medicine for wild Life Management because in the past frequent call from a different part of the plan area has been received to deal with human wild life conflict i.e. damage caused by bear and leopards etc. The equipments will help in capturing of such animals and release them in their natural habitat. Provision of Rs. 2,00,000 (0.09%) has been kept for this purpose.

(iii) Income Generation Activities

One of the major factors impacting on the effective bio- diversity conservation is the dependence of tribal communities on the forest bio mass resources for meeting their fuel folder, timber and livelihood. Local people have a right to collect/ extraction of Minor Forest Produce in and around the sanctuary area under provision of Forest Settlement Report, 1921. Although a four felling circle has been prescribed by the H.P. Forest deptt. but people extract MFP from forest area on year to year basis of domestic use and their livelihood, thereby threatening the very existing of the rare and endangered species of medical herbs. Therefore it is need to address the livelihood issue by encouraging forest based enterprises for development MFP is required on the sustainable basis as it provides alternative income generation activities. Under this scheme medicinal herbs like Dhoop, Karoo, Salam Panja, Ban kakri, Patish and Banaksha etc. will be raised which will be an income generation activities for the plan area. Medicinal plants shall be planted in the area depending upon the site with the consent of the VFDS.

Vermi compost culture is one of the alternative source of income generation which is easy to adopt, home based and can bring fast income returns to the local people ecologically. Forest department and horticulturist in kinnaur district will be a potential buyer of all such compost for its vast network of

Forest Nurseries. Woman of the sanctuary area can adopt these activities as a part time without compromising with their day to day work.

An outlay of Rs. 2,00,000 (0.09%) has been kept under income generation activities.

(iv) Provision for compensation against WL depredation

Human wildlife conflict is major problem in the plan area and sufficient funds are not available with the department. Therefore, provision of Rs. 5,00,000/- (0.22%) has been made for wildlife compensation during the plan period.

(v) Distribution of GI Pipes (Village support activities)

In order to reduce the pressure from forest and wild life, it is proposed to provide alternate sources like G.I. pipes for installation of religious flag for the villagers residing in and around the sanctuary area. By providing these alternative resources, the pressure on sanctuary and plan area would be reduced. Otherwise in the name of house construction and repair and also other work the villagers/ right holder cut minimum 3 to 4 trees by way of T.D per family at concessional rate under the provision of Forest Settlement Report 1921. The provision of Rs. 9,00,000 (0.40%) has been made for this purpose during the plan period. Out of this Rs. 6,50,000/- has been earmarked for Kinnaur forest division and Rs. 2,50,000/- for WL division.

(vi) Construction of Crematoria

To reduce the pressure from forest and wild life, it is proposed to construct the crematoria in the plan area. Lump-sum amount of Rs. 6,00,000 (0.27%) has been provided for this purpose.

(vii) Construction of Tracker hut

Tracker huts will be constructed at a strategic point in the plan area under Eco Development activities and Lump-sum amount of Rs. 1,50,000 (0.07%) has been provided for this purpose.

(viii) Installation of street solar light

Street light will be installed in the plan area as village support activities and Lump-sum amount of Rs. 1,05,000 (0.05%) has been provided for this purpose.

(ix) Sulabh Shochalya

Sulabh Shochalya will be constructed at a strategic point and Lump-sum amount of Rs. 4,00,000 (0.18%) has been provided for this purpose.

10. TRAINING, AWARENESS, EXTENTION AND PUBLICITY

In order to tackle the ecological problems; publicity, motivation, education and confidence building extension program has to be evolved for the local populace and also for the graziers dependent on the pasture eco-system. The extension workers and field staff need to be trained in joint forest management

and extension methodology. Focus on social & institutional aspects need a substantial re-orientation in vision, thought process, work culture & ethics, mentality and attitudinal behavior at all levels. Whatever technology is worked out through common dialogue would be the best. The consent and active participation of the local populace is a must for closure, treatment and development. Wide publicity through posters, notice boards, films shows and a community center (Farming training & information center) (Chetna Kendra) with sufficient motivation material is proposed to be opened at Sangla and provision for this purpose have been made and given in the year-wise schedule under the component Forest Infrastructure Development. Rs.2,00,000 has been spent during phase - I

Local villagers be also made aware of the importance of soil conservation and encouraged/ assisted and trained in adopting improved agricultural, horticultural and animal husbandry practices in their private lands. They being the important stake holders in the environmental rehabilitation of the tract need to be sensitized and made partners in the maintenance of assets and interventions made to this CAT plan to make them sustainable. Towards this objective, provision of Rs. 20,00,000 (0.88%) has been made for capacity building and skill up-gradation of local communities and institutions like Mahila Mandals, Yuvak Mandals, Panchyats, Environmental Groups and other community based organizations (CBOs) in natural resource managements. This will be done by way of exposure visits, seminars, workshops, publications, hoardings and other mass communications measures. Specialized training and study tours in India and abroad shall also be arranged for forest officials for implementing the plan.

Training of officers is required in soil and water conservation, pasture development etc. for which various training centers would be identified. The objective of this training component would be provide the people and staff working in the plan area to augment their existing skills, build partnerships, provide forums for exchange of information's, experiences and ideas in order to achieve the over all plan objectives by effective implementation of the plan. Annual allocation under this component has been indicated in the year wise work schedule. How ever this annual allocation is already indicative and actual funds required on this account will be sought for annually after finalization of activities for that years as per requirement in the fields. Rs.2,48,945/- has been spent during phase-I

11. RESEARCH AND STUDIES

Funds will be allocated to implementing agencies who will determine priority study areas with focus on resolving plan implementation problems. The implementing agency will contract both appropriate agency/ institutions to conduct the research activities. Institution like HFRI Shimla will be actively involved in the studies. A provision of Rs.5,00,000(0.22%) has been made for this component. Year wise allocation shown in the year wise schedule is only indicative and funds may be used as per actual requirement of research activity plan.

12. OPERATIONAL SUPPORT

Support will be provided to the implementing agency in the form of the operational vehicles, office equipments, establishment costs, office expenses, amenities to staff and labour, and traveling allowance to meet up additional responsibilities of the implementation of the CAT Plan. A total out lay of Rs.1,79,95,000/-(7.96%) have been made to meet up these requirements as per detail given in the year wise work schedule. Rs. 69,03,324/- has been spent during phase-I

13. AGRICULTURAL AND HORTICULTURAL SUPPORT

Agriculture and Horticulture are the main occupation of the people in the Project area. The farm lands are generally poor in productivity. More over, the problems of agriculture and forestry circle are interdependent and have influence over economic well being of the masses and local eco system. It is thus imperative that appropriate technological interventions made in agriculture/ horticulture sector to have a harmonious effect on the environment. A sum of Rs. 30,00,000(1.33%) has been year marked to carry out the works in this component. Rs 4,00,000 has been spent during phase-I

14. ANIMAL HUSBANDRY SUPPORT

Animal husbandry is an important occupation of the people of the area. Live stock practices are rather primitive in the project area. Mostly open grazing is practiced with little stall feeding and minimal fodder cultivation. A large number of unproductive cattle trample the grazing land resulting in severe damage to the vegetation and soil productivity. It is, therefore, required that need to keep large herds of unproductive cattle is reduced by demonstrating benefits of improved breed cattle to the local people and strengthening the animal husbandry infrastructure to support such a change. Thus a provision of Rs.15,00,000(0.66%) has been made under this component to provide animal husbandry support services in the project area. Rs 6,00,000 has been spent during phase-I.

15. REVENUE OF STATE

Rs. 2,39,123/- has inadvertently been made as revenue of the state in defunct Nichar Forest Division during 5/98.

16. CONTINGENCIES

Outlay for the various components has been worked out on the prevalent wage rate of Rs. 70/- and market rates of the material prevailing as on today i.e. 1-4-2006. Since the CAT PLAN is to be implemented over a period of eight years, hence in order to absorb the any future escalation in the cost of plan proposals on account of increase in wage or material rate etc., 9.09% contingency have been provided under this component. Beside this cost of

escalation factor, the funds provided under this component may also be utilized for miscellaneous expenses/ minor works not fore seen or provided in any of the components but are subservient to achievement of the objective of the CAT plan. Minor repairs to the engineering structures to prolong their life and damage caused to the plantation due to natural calamities like fire, flood etc. will be met out of this component. Such funds will be released by the CF, Rampur who is the Project Director of USVWD Society for the CAT Plan, out of this component on the receipt of the proposal from the concern DFOs -cum- Project Officers in USVWDS. All proposal for works to be under taken out of this component will be framed by the concerned implementing division and CF Rampur -cum- Project Director shall be the final authority to approve the proposal and release the funds under this component. In case of irrigation of the plantation area where ever possible if felt necessary subject to area specific condition for which proposal will be sent by the concerned DFOs -cum- Project Officers to Project Director -cum- CF Rampur who will consider the proposal and release the funds out of the contingency. Lump-sum provision based on rough estimation has been made under some components especially for engineering structures. These works are to be undertaken after preparing detailed estimates as per actual works required to be done. Although efforts will be made to restrict the expenditure as far as possible to the allocated amount but slight excess or deficit may occur as the allocation is based on rough estimation. In such cases excess or deficit of one site may be adjusted against the other site but the over all allocation should not be exceeded. In the eventuality of burden due to cost escalation exceeding the amount provided in the contingencies, the works provided for later years may be reduced proportionality so as not to raise any financial liability beyond the provision of the CAT Plan. Similarly any unspent amount left may be utilized by proposing additional works in consonance with the project objectives. The expenditure on account of auditing etc. should also be met with from the contingencies. The total outlay under this head is Rs. 2,05,51,265(9.09%).

CAT PLAN AREA

Catchment area of Baspa stage-II hydroelectric Project is about 96814 ha. out of which only 1543 ha. is agricultural land and demarcated forests area is 2731 ha. Remaining area is barren, rocky, pastures or snow covered areas.

Component wise abstract of financial outlay Phase-I (1994-98 to 2005-06)			
Sr. No.	Name of component	Financial	% age
1	Forest establishment & Improvement		
a	Afforestation of degraded forest land	4123000	6.63
b	Assisted natural regen.	467750	0.75
c	Raising of NTFP	731500	1.18
d	Treatment of culturable	472000	0.76
e)	Raising of Nurseries	1460127	2.35
Total Forest establishment =		7254377	
2	Improvement of Alpine Pasture	387400	0.62
3	Soil & Moisture conservation works	36539456	58.74
4	Rural infrastructure development	600000	0.96
5	Forest infrastructure development	6960777	11.19
6	Avenue plantation & land scaping	0	0
7	Treatment of private land	160000	0.26
8	Distribution of seedlings to people	0	0
9	Wildlife management	752578	1.21
10	Taining awareness & publicity	248945	0.40
11	Research & studies	57865	0.09
12	Operational support	6903324	11.10
13	Agriculture & Horticulture support	400000	0.64
14	Animal Husbandary support	600000	0.96
15	Revenue of State	239123	0.38
16	Contingencies	1105378	1.78
G. Total =		62209223	100.00

**Component - wise abstract of financial outlay
Phase-II (2006-07 to 2013-14)**

Sr. No.	Name of component	Financial	% age
1	Forest establishment & Improvement		
a	Afforestation of degraded forest land	10796500	4.78
b	Assisted natural regen.	1616000	0.71
c	Raising of NTFP	4115900	1.82
d	Treatment of culturable	3309500	1.46
	Total Forest establishment =	19837900	8.78
2	Improvement of Alpine Pasture	6075750	2.69
3	Soil & Moisture conservation works	121210000	53.62
a)	Treatment of land slips/slides	32360000	14.31
b)	Treatment of Nallah	49400000	21.85
c)	River bank stabilization	35900000	15.88
d)	Road side stabilization	3550000	1.58
4	Rural infrastructure development	10500000	4.64
a)	Village pond/tank	1400000	0.62
b)	Soil & Water Conservation Structures	1800000	0.80
c)	Repair of spring, bawries/Kuhl & other water sources	2000000	0.88
d)	Repair of village road & path/ bridge Construction of foot bridge	1800000	0.80
e)	Construction of foot bridges	3500000	1.54
5	Forest infrastructure development	7979000	3.53
a)	Const./repair of operational buildings New	5579000	2.47
b)	Construction /repair of I path and B/path	900000	0.40
c)	Construction of bridges	1500000	0.66
6	Avenue plantation & land scaping	1200000	0.53
7	Treatment of private land	1500000	0.66
8	Distribution of seedlings to people	50000	0.02

9	Wildlife management	12165000	5.38
	<i>Intensive management of Wildlife Sanctuary</i>		
	A) Intensive management of W.L. sanctuary		
	i) Fire Protection	440000	0.19
	ii) Habitat improvement	7850000	3.46
	iii) Antipoaching activities	120000	0.05
	iv) Reward & incentive to informer	150000	0.07
	v) Census operation	120000	0.05
	vi) Demarcation of boundary pillar	50000	0.02
	vii) Slogan & Sign board	80000	0.04
	B) Eco-development activities		
	i) Vaccination of domestic cattle	300000	0.13
	ii) Purchase of equipments & Med	200000	0.09
	iii) Income generation activities	200000	0.09
	iv) Provision for compensation against WL depredation	500000	0.22
	v) Distribution of GI Pipes for installation of religious flag	900000	0.40
	vi) Const. of Crematoria	600000	0.27
	vii) Const. of Tracker hut	150000	0.07
	viii) Installation of street solar light	105000	0.05
	ix) Sulabh Shochalya	400000	0.18
10	Taining awareness & publicity	2000000	0.88
11	Research & studies	500000	0.22
12	Operational support	17995000	7.96
a)	Establishment cost	9600000	4.23
b)	Office expenses	2550000	1.13
c)	Travelling allowance	1875000	0.83
d)	Office equipment	120000	0.05
e)	Motor Vehicle & POL	2840000	1.26
f)	Aminities to staff & labour	910000	0.40
g)	Purchase of computer with accessories	100000	0.04
13	Agriculture & Horticulture support	3000000	1.33
14	Animal Husbandary support	1500000	0.66
15	Contingencies	20665365	9.09
G. Total =		227319015	100.00

CHAPTER-VI

TECHNICAL DETAILS OF CAT PLAN

6.1 SITE CONDITIONS

The physiography of the plan area is rather tough and gradients are steep. The soil is sandy to sandy loam with fragile-strata, therefore, problem of land slips and incidence of erosion is rather high, particularly where the land is not properly terraced. Nothing grows unless irrigation is provided. The condition of alpine pastures is degraded.

6.2 SPECIES

Choice of species depends upon climatic & edaphic factors and requirement of people. The list of species that support the areas is given as under:-

Sr. No.	Local name	Value	Botanical name
1	Deodar	Timber	Cedrus deodara
2	Kail	Timber	Pinus wallichiana
3	Robinia	Fuel/fodder	Robinia pseudoacacia
4	Rai	Timber	Picea smythiana
5	Fir	Timber	Abies pinderow
6	Karamal	Fuel/fodder	Populus ciliate
7	Shon (willow)	Fuel/fodder	Salix spp.
8	Ailanthus	Fuel	Ailanthus spp.
9	Ash	Fuel	Fraxinus zanthoxyloides
10	Akhrot		Juglans regia

6.3 AFFORESTATION

In forests where stocking and density is poor and in blank areas, rehabilitation of such areas will be carried out through afforestation by planting nursery raised seedlings and by patch sowing of Deo / kail species etc. Preference will be made for the Polythene raised plants. Looking to the high incidence of grazing during summer all the plantation areas will be fenced with barbed wire in 3-4 strands and irrigated by kuhls or by A/pipe wherever possible. Provision for the same has been kept under contingency as a special case on the recommendation of site specific proposal from Project Officer -cum- DFO concern. Maintenance of these areas shall be done for 5 years.

6.4 TREATMENT OF ALPINE PASTURE

The alpine pastures would be improved by way of eradication of unwanted / unpalatable grasses and shrubs. The degraded pastures at lower elevations in the alpine zone need immediate attention and corrective measures to save them from serious damage. These impoverished pastures are to be closed for the animals and given proper soil conservation treatment and fertilizer un-till

there is adequate regeneration of grasses. In one hectare area 800 strips of 100x30x5cm. size shall be dug in a staggered manner along the contour at an interval of 2 mt. and then sowing with suitable species of legumes and grasses. There will be social fencing. It is pointed out that continuous grazing is one of the main causes of deterioration of pasture lands, so this continuity in grazing will be avoided by the rotational grazing system. Maintenance of these areas shall be done for 2 years.

6.5 SOIL CONSERVATION

It is proposed to adopt various biological/engineering measures for preventing soil erosion in Nallahs, on banks of river, land slides/slips of road etc. These are detailed as under:-

- 1) Land Slide/Slip Stabilization
- 2) Nallah Stabilization
- 3) River Bank Stabilization
- 4) Road Stabilization

1. LAND SLIDE/SLIP STABILIZATION:-

The identified areas given in the CAT Plan shall be stabilized by control measures which will depend upon the size, extent and location of slips. However, in general the following measures shall be applied depending upon situation on the site/field :-

- a) Construction of masonry check walls and undertaking of vegetative measures.
- b) Planting trees on level portions above check walls to provide stability.
- c) Planting grasses, shrubs, quick growing species and carrying out soil conservation measures to treat the sliding/eroding slip areas.

2. NALLAH STABILIZATION:-

The identified areas given in the CAT Plan shall be stabilized by Control measures which will depend upon the size extent and location of the nallah/area. The following methods shall be applied depending upon the situation in the field :-

- a) Construction of check dams with crate wire to check the flow speed.
- b) The eroded and effected stream/nallah bank will be channelised and protected by constructing:-
 - i) Crate wire spurs.
 - ii) Live hedge vegetative spurs.

Live hedge vegetative spurs shall be put up where the flow of water is slow and not torrential. Local species which are known as good soil binders like *Salix* spps. (Willow) *Alnus nitida* and *Ailanthus* etc. will be used.

c) **Avalanche control measures:-**

Coupled with soil conservation works, check walls, pillars will be constructed in the avalanche prone areas.

d) **Silt detention dams:-**

The sites which are highly vulnerable to soil erosion shall be taken on high priority and silt detention dams constructed on such sites in order to reduce the silt load to the river. These structures will break the velocity of water and arrest the silt discharge. Beside this construction of masonry spurs where ever required will also be constructed. Sowing / planting of grasses, shrubs and quick growing species to treat the nallas bank areas will also be carried out. Above Bio-Engineering works shall be adopted in vulnerable area to prevent further erosion of nallas bank.

4. RIVER BANK STABILIZATION:-

35.9 Kms. of river bank cutting by Baspa has been identified for stabilization which will depend upon the size, extent and location of the area. The following measures are proposed to be undertaken depending upon the situation in the field :-

- a) Construction of masonry spurs.
- b) Construction of check dams and vegetative measures.
- c) Construction of training wall etc.
- d) Sowing/planting grasses, shrubs and quick growing species to treat the river bank areas.

Above Bio-Engineering works shall be adopted in the reaches to prevent further erosion of river bank.

4. ROAD STABILIZATION:-

The road in Baspa valley are generally along the banks of river and pose a threat of siltation as the sides of roads are vulnerable to flooding because of loose strata. It is proposed to construct retaining walls, breast walls on road sides to prevent slides and intercept loose soil. Exposed soil on road side shall be treated by grasses, shrubs and fast growing species etc.

6.6 TREATMENT OF CULTURABLE WASTE LAND:-

Since culturable wasteland are proposed to be treated and shall be improved by undertaking plantation activities. Beside this the following measures will also be undertaken:-

- i) To eradicate unwanted bushes and shrubs.
- ii) Sowing of suitable palatable grasses/leguminous species.
- iii) Soil conservation measures.
- iv) Fertilizer application to increase growth rate of grasses, legumes and plants etc.

In one hectare area 1100 plants shall be dug out and planted with suitable plants found in the project area. All such areas are to be fenced with barbed wire fencing in 3-4 strands. Maintenance of these areas shall be done for five years.

CHAPTER -VII

ORGANISATION

7.1 TIME PHASING

The CAT Plans phase-I has been implemented from 1994-98 to 2005-06. The accelerated and time bound implementation will be carried out in phase-II from 2006-07 to 2013-14 (i.e. Total of 16 years).

The implementation of CAT Plan will be done on society mode. The Govt. of HIMACHAL PRADESH has notified UPPER SATLUJ VALLEY WATERSHED DEVELOPMENT SOCIETY by HP. Govt. notification No. FFE-B(F) 2-73/97 dated 23-10 -2002 and has been registered by the Registrar, Co-Operative Societies, Shimla, H.P.

The afforestation works will preferably be completed during 1st 3-4 years & thereafter maintainance will be done up to five years, and under NTFP component this will be for three years. Pasture development works and soil and water conservation works will be completed within 1st five year and will be further maintained till the completion of the project period. Most of the building works/necessary infrastructures such as locations of offices and establishment of nurseries at suitable places have already been done during phase-I of the plan. A detailed plan for execution of various schemes will also be prepared during this period.

7.2 ORGANISATION STRUCTURE AND IMPLEMENTATION ARRANGEMENT

The execution of CAT Plan is proposed to be carried out through HP Forest Department through Conservator of Forests, Rampur circle cum Project Director. AT the field level the actual implementation will be done by the DFO, Kinnaur and DFO, W.L. Sarahan having territorial jurisdiction over the area covered under this Plan. The DFO. will be assisted by the regular staff posted under them and by the DFO, CAT Plan, Nichar. This division will be under the control of Project Officer of DFO rank and under over all control of Conservator of Forests, Rampur Circle. The area of the CAT Plan will be divided in to small watershed. The communities living in these watersheds will be associated in preparing micro plans with in the frame work of this CAT PLAN. The annual plan of operation will be prepared by the DFO. concerned who shall then submit these to the DFO CAT Plan Division Nichar. He will then scrutinize and send the consolidated APO. to CF-cum- Project Director, Rampur. The broad frame work of APO. for each year shall be approved by the PCCF, HP on the recommendation of CF-cum-Project Director. The approved APO will be implemented by respective DFOs. The CF-cum-PD shall be empowered to modify the interventions/activities under this plan, if required during its implementations with in the over all objectives and frame work of the plan. Any major modification to this CAT Plan shall be approved by PCCF H.P. / Governing body / Financial / Executive committee of the society. This CAT Plan is designed to address the issues related to environmental

degradation. Therefore, it is necessary to involve the local communities in micro planning. A close liaison shall also be maintained with other Govt. department like Agriculture, Horticulture, PWD. & Animal Husbandry etc.

7.3 PROJECT STAFF

The existing staff of the concern division will be involved for implementation of CAT Plan in addition to their own duties. Governing Body & Executive/Finance committee in their First meeting held on 18-12-2002 and 15-9-2003 respectively have given their approval for engaging staff (on Contract basis) for implementation of CAT Plan.

7.4 HEADQUARTER OF THE PROJECT

Since the CAT Plan is to be implemented through DFO (T) and through DFO Wildlife Sarahan hence the headquarter of all the allied staff will be as per their territorial jurisdiction.

CHAPTER – VIII

COST ESTIMATE

8.1 TOTAL OF CAT PLAN COST

Cost of the various CAT Plan components have been worked out on the basis of present cost and norms existing in Forest Department. Details of expenditure for various components have been shown in respective chapter. Total plan cost for 16 years will be **Rs. 28,82,73,138/-**.

1 st year (94-98)	Rs.7,79,548/-
2 nd year(99-2000)	Rs. 20,75,500/-
3 rd year (2000-2001)	Rs. 6,25,152/-
4 th year (2001-2002)	Rs. 47,41,975/-
5 th year(2002-2003)	Rs. 1,32,66,232/-
6 th year(2003-04)	Rs. 19,90,432/-
7 th year (2004-05)	Rs. 2,35,95,734/-
8 th year (2005-06)	Rs. 1,51,34,650/-
Total Phase-I	Rs. 6,22,09,223/-
9 th year (2006-07)	Rs. 5,13,46,240/-
10 th year (2007-08)	Rs. 5,23,57,195/-
11 th year (2008-09)	Rs. 5,57,15,715/-
12 th year (2009-10)	Rs. 4,15,25,825/-
13 th year(2010-11)	Rs. 1,85,51,060/-
14 th year(2011-12)	Rs. 28,34,975/-
15 th year(2012-13)	RS. 19,76,590/-
16 th year(2013-14)	Rs. 17,56,315/-
Total Phase –II	Rs. 22,60,63,915/-
G. Total Phase I & II	Rs. 28,82,73,138/-

Divisionwise and Yearwise Plantation Targets																											
S	Name of component	1999-2000		2000-01		2001-02		2002-03		2003-04		2004-05		2005-06		2006-07		2007-08		2008-09		2009-10		Total			
		Km	Wt	Km	Wt	Km	Wt	Km	Wt	Km	Wt	Km	Wt	Km	Wt	Km	Wt	Km	Wt	Km	Wt	Km	Wt	Km	Wt		
N																											
O																											
		Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy	Phy		
1	Forest Establishment & Improvement																										
a	Afforestation of Degraded Forest	30	0	0	0	20	0	37	0	5	0	15	20	30	13	35	30	40	35	44	32	0	0	267	130		
b	Assisted Natural Regeneration	20	0	0	0	0	0	0	15	0	0	0	0	0	10	8	20	5	15	12	10	0	0	45	70		
c	Raising of NTFP Plantation	0	0	0	0	0	0	0	0	0	0	0	0	0	15	12	20	12	20	10	8	0	0	34	80		
d	Treatment of Culturable Wasteland	0	0	0	0	0	0	10	0	0	0	0	10	0	0	10	20	12	15	8	5	0	0	40	50		
	Total	50	0	0	0	30	0	47	15	5	0	15	30	30	38	68	60	69	65	74	52	0	0	306	310		
2	Improvement of Alpine Pasture	0	0	0	0	10	0	15	0	0	0	20	0	0	0	25	100	25	125	20	120	0	70	115	435		
	G.Total	50	0	0	0	40	0	62	15	5	0	35	30	30	38	91	190	94	210	94	182	0	70	501	735		

8.3 Component wise consolidated financial outlay (phase-I & phase-II) and percentage at a Glance

Sr. No.	Name of component	Phase-I	Phase-II	Total	%age
1	Forest establishment & Improvement				
a)	Afforestation of degraded forest land	4123000	10796500	14919500	5.18
b)	Assisted natural regen.	467750	1616000	2083750	0.72
c)	Raising of NTFP	731500	4115900	4847400	1.68
d)	Treatment of culturable	472000	3309500	3781500	1.31
e)	Raising of Nurseries	1460127	0	1460127	0.51
	Total Forest establishment =	7254377	19837900	27092277	9.40
2	Improvement of Alpine Pasture	387400	6075750	6463150	2.24
3	Soil & Moisture conservation works	36539456	121210000	157749456	54.72
a)	Treatment of land slips/slides	9098500	32360000	41458500	14.38
b)	Treatment of Nallah	16624925	49400000	66024925	22.90
c)	River bank stabilization	10815625	35650000	46465625	16.21
d)	Road side stabilization	0	3550000	3550000	1.23
4	Rural infrastructure development	600000	10500000	11100000	3.85
a)	Village pond/tank	0	1400000	1400000	0.49
b)	Soil & Water Conservation Structures	0	1800000	1800000	0.62
c)	Repair of spring, bawees/Kuhri & other water sources	0	2000000	2000000	0.69
d)	Repair of village road & path/bridge	0	1800000	1800000	0.62
e)	Construction of foot bridge	600000	3500000	4100000	1.42
5	Forest infrastructure development	6960777	7979000	14939777	5.18

Sr. No.	Name of component	Phase-I	Phase-II	Total	%age
a)	Const. repair of operational buildings New	6249777	5579000	11828777	4.10
b)	Construction/repair of path and Bpath.	751000	900000	1611000	0.56
c)	Construction of bridges	0	1500000	1500000	0.52
6	Avenue plantation & land scaping	0	1200000	1200000	0.42
7	Treatment of private land	160000	1500000	1660000	0.58
8	Distribution of seedlings to people	0	50000	50000	0.02
9	Wildlife management	752578	12165000	12917578	4.48
	Intensive management of Wildlife Sanctuary				
	A) Intensive management of W.L. sanctuary				
i)	Fire Protection	110000	440000	550000	0.19
ii)	Habitat improvement	215000	7850000	8065000	2.80
iii)	Anti-poaching activities	70000	120000	190000	0.07
iv)	Reward & incentive to Informer	0	150000	150000	0.05
v)	Census operation	0	120000	120000	0.04
vi)	Demarcation of boundary pillar	0	50000	50000	0.02
vii)	Slogan & Sign board	250000	80000	330000	0.11
	B) Eco-development activities				
i)	Vaccination of domestic cattle	0	300000	300000	0.10
ii)	Purchase of equipments & Med.	0	200000	200000	0.07
iii)	Income generation activities	0	200000	200000	0.07
iv)	Provision for compensation against W.L. degradation	0	500000	500000	0.17
v)	Distribution of GI Pipes for installation of religious flag	0	900000	900000	0.31
vi)	Const. of Crematoria	0	600000	600000	0.21

Sr. No.	Name of component	Phase-I	Phase-II	Total	%age
	vi) Const. of Tracker hut	0	150000	150000	0.05
	vii) Installation of street solar light	0	105000	105000	0.04
	ix) Sulabh Shochaya	0	400000	400000	0.14
	x) Nature awareness and exposure visits	107578	0	107578	0.04
10	Taining awareness & publicity	248945	2000000	2248945	0.78
11	Research & studies	57865	500000	557865	0.19
12	Operational support	6903324	17995000	24898324	8.64
a)	Establishment cost	2740492	9600000	12340492	4.28
b)	Office expensses	1207106	2550000	3757106	1.30
c)	Travelling allowance	563160	1875000	2438160	0.85
d)	Office equipment	52163	120000	212163	0.07
e)	Motor Vehicle & FOL	1185851	2840000	4025851	1.40
f)	Aminities to staff & labour	268223	910000	1178223	0.41
g)	Purchase of computer with accessories	846329	100000	946329	0.33
13	Agriculture & Horticulture support	400000	3000000	3400000	1.18
14	Animal Husbandary support	600000	1500000	2100000	0.73
15	Revenue of State	239123		239123	0.08
16	Contingencies	1105378	20551265	21656643	7.51
	G. Total =	62209223	226063915	288273138	100.00

8.4 ANNUAL PHASING

Annual phasing of works to be carried out in Baspa hydropower Project in Sangla Valley and component wise work schedule is given in the Plan, and attached.

PHASE-I 1994-98						
Sl. No.	Component	Name of area	Unit	Quantity	Rate	Amount
Detail of works/expenditure for the year 1994-1998						
1	Forest Establishment & Improvement					
e)	Raising of Nurseries	Raising of plants in Limsanhang nursery 1/94 to 7/96	No.	1	L/S	260877
		Total:-				260877
15	Revenue of State	Inadvertently made revenue of Nichar Division during 5/98	-	-	L/S	239123
		Total:-				239123
12	Operational Support					
e)	Motor Vehicle & POL	One Gypsy DFO Kirinaur 29.9.94	No.	1	L/S	279548
		Total:-				279548
		Grand Total 1994-1998:-				779548

PHASE-I 1999-2000						
Sl. No.	Component	Name of area	Unit	Quantity	Rate	Amount
Detail of works/expenditure for the year 1999-2000						
1	Forest Establishment and Improvement					
a)	Afforestation of Degraded Forest Lands	UF- Kamru-I	ha.	10	15100	151000
		UF-Kamru-II	ha.	5	15100	75500
		Kamru Kanda	ha.	5	15100	75500
		C-154 (C)	ha.	10	15100	151000
		Total of 1a):-		30		453000
b)	Assisted Natural Regeneration	C-153 Chhidoo	ha.	15	5625	84375
		C-151 (b) Shong	ha.	5	5625	28125
		Total of 1b):-		20		112500
e)	Raising of Nurseries	Raising of plants & establishment of Sangla	No.	2	L/S	150000
		& Limsanhang nurseries				
		Establishment of Sholtu	No.	1	L/S	400000
		modern nursery				
		Water supply to Sholtu	No.	1	L/S	89000
		nursery				
		Total of 1e):-		4		639000
		Total:-				1204500
3	Soil & Moisture Conservation Works					
b)	Treatment of Nailah	1) Rukti Khad				
		a) Spurs const.	No.	2	L/S	
		b) Checkwalls const.	No.	46	L/S	250000
		2) Tongtongcha nailah				
		a) Spurs const.	No.	2	L/S	
		b) Checkwalls const.	No.	20	L/S	200000
		Total of 3b):-				450000
		Total:-				450000
5	Forest Infrastructure Development					
a)	Const./Repair of operational buildings	Extraction of timber for const. of field hostel	-	-	L/S	10000
		Total of 5a):-				10000
b)	Const./Repair of I.path/B.path & roads	Const. of approach road & foot bridge over Sholtu khad	No.	1	L/S	411000
		Total of 5b):-				411000
		Total:-				421000
		Grand Total 1999-2000:-				2075500

PHASE-I 2000-01						
Sl. No.	Component	Name of area	Unit	Qty.	Rate	Amount
Detail of works/expenditure for the year 2000-01						
1	Forest Establishment & Improvement					
a)	Afforestation of Degraded Forest Lands					
	1st year maintenance	UF-Kamru-I	ha	10	2200	22000
		UF-Kamru-II	ha	5	2200	11000
		Kamru Kanda	ha	5	2200	11000
		C-154 (C)	ha	10	2200	22000
		Total of 1a):-		30		66000
b)	Assisted Natural Regeneration					
	1st year maintenance	C-153 Chhidoo	ha	15	800	12000
		C-151 (b) Shong	ha	5	800	4000
		Total of 1b):-		20		16000
		Total:-				82000
3	Soil & Moisture Conservation Works					
b)	Treatment of Nallah	1) Rukti Khad				
		a) Spurs const.	No.	-	-	
		b) Check wall Const.	No.	20	L/S	
		Total:-				70000
		2) Tongtongcha nallah				
		a) Spurs const.	No.	2	L/S	80000
		b) Check wall Const.	No.	4	L/S	120000
		Total:-				200000
		Total of 3b):-				270000
		Total:-				270000
12	Operational Support					
d)	Office Equipment	DFO Kinnaur, 19.3.01				
		1) Computer	No.	1	L/S	L/S
		ii) Fax	No.	1	L/S	L/S
		iii) Photocopier	No.	1	L/S	L/S
		iv) Laser Printer	No.	1	L/S	L/S
		Total of 12d):-		4		273152
		Total:-				273152
		Grand Total 2000-2001:-				625152

PHASE-I 2001-02						
Sl. No.	Component	Name of area	Unit	Quantity	Rate	Amount
Detail of works/expenditure for the year 2001-2002						
1	Forest Establishment & Improvement					
a)	Afforestation of Degraded Forest Lands					
		C-155 (i)	ha.	5	15100	75500
		C-155 (ii)	ha.	5	15100	75500
		UF-Ruturang	ha.	5	15100	75500
		UF-Wadang	ha.	5	15100	75500
		C-153	ha.	5	15100	75500
		C-152 (b)	ha.	5	15100	75500
		Total:-		30		453000
	2nd year maintenance		ha.	30	1400	42000
		Total of 1a):				495000
b)	Assisted Natural Regeneration					
	2nd year maintenance		ha.	20	800	16000
		Total of 1b):				16000
		Total:-				511000
2	Improvement of Alpine Pastures	Sangla Kanda	ha.	10	7550	75500
		Total:-				75500
3	Soil & Moisture Conservation Works					
a)	Treatment of land slips/slides	Tongtongcha Nailah	ha.	20	L/S	1000000
		Total of 3a):				1000000
b)	Treatment of Nailah	Rukh Khad-checkwalls & R/walls	ha.	6	L/S	300000
		Tongtongcha nailah	Km.	1	L/S	400000
		Gangrang nailah			L/S	674100
		Total of 3b):				1374100
c)	River bank stabilization	Hurba to Sangla	Km.	1	L/S	400000
		Total of 3c):				400000
		Total:-				2774100
5	Forest Infrastructure Development					
a)	Const./Repair of operational buildings					
	Maintenance	1) Special repair of FRH at Sangla	No.	1	L/S	100000
		2) Maint. of office & residen. building at Nichar	-	-	L/S	100000
		Total of 5a):-				200000
		Total:-				200000

PHASE-I 2001-02						
Sl. No.	Component	Name of area	Unit	Quantity	Rate	Amount
9	Wildlife Management					
A	Intensive management of Wildlife Sanctuary					
vii)	Purchase of medicines & equipment for pheasantry	At Saraban	-	-	L/S	250000
		Total of 5a):-				250000
		Total:-				250000
12	Operational Support					
a)	Establishment Cost	CAT Plan Division, Nichar	-	-	L/S	40500
		Total of 12a):-				40500
b)	Office Expenses	CAT Plan Division, Nichar	-	-	L/S	75000
		Kinnaur Division	-	-	L/S	125000
		Total of 12b):-				200000
c)	Travelling Allowance	CAT Plan Division, Nichar	-	-	L/S	6000
		Kinnaur Division	-	-	L/S	100000
		Total of 12c):-				106000
d)	Office Equipment		-	-	-	-
e)	Motor vehicle & POL	CAT Plan Division, Nichar	-	-	L/S	10000
		Kinnaur Division	-	-	L/S	50000
		One Ambassador Car	No.	1	L/S	414875
		19.2.02				
		Total of 12d):-				474875
f)	Amenities to staff & labour	CAT Plan Division, Nichar	-	-		50000
		Kinnaur Division	-	-		60000
		Total of 12e):-				110000
		Total:-				931375
		Grand Total for 2001-02:-				4741975

PHASE-I 2002-03						
Sl. No.	Component	Name of area	Unit	Quantity	Rate	Amount
Detail of works/expenditure for the year 2002-2003						
1	Forest Establishment & Improvement					
a)	Afforestation of Degraded	C-154 (b)	ha	5	12500	62500
	Forest Lands	C-155	ha	10	12500	125000
		C-156	ha	5	12500	62500
		C-153	ha	10	12500	125000
		UF-Ruturang	ha	7	12500	87500
		Total:-		37		462500
	1st year maintenance		ha	30	2200	66000
	3rd year maintenance		ha	30	850	25500
		G.Total of 1a):				554000
b)	Assisted Natural Regeneration	C-157	ha	5	10000	50000
		C-158	ha	10	10000	100000
		Total:-		15		150000
	3rd year maintenance		ha	20	800	16000
		G.Total of 1b):				166000
d)	Treatment of Culturable Wasteland	Kamru-Sangla	ha	10	12500	125000
		G.Total of 1d):				125000
e)	Raising of Nurseries	Chhidoo Nursery	No.	1	L/S	152000
		Batseri Nursery	No.	1	L/S	300000
		G.Total of 1e):-		2		452000
		Total:-				1297000
2	Improvement of Alpine Pastures	Sangla Kanda	ha	5	7900	39500

PHASE-I 2002-03						
Sl. No.	Component	Name of area	Unit	Quantity	Rate	Amount
		Dever Kanda	ha.	10	7900	79000
		Total:-		15		118500
	1st year maintenance	Sangla Kanda	ha.	10	1160	11600
		Total:-				130100
3	Soil & Moisture Conservation Works					
a)	Treatment of land slips/slides	1. Tongtongcha	ha.	20	50000	1000000
		2. Rukti Khad	ha.	16	50000	800000
		3. Hurba Khad	ha.	10	50000	500000
		4. Chhidoo	ha.	0.7	L/S	81172
		5. Shushang Nallah	ha.	7	70000	490000
		6. Shoney Khad	ha.	7	70000	490000
		7. Rakchham Khad	ha.	5	70000	350000
		Total of 3a):-		65.7		3711172
b)	Treatment of Nallah	1. Tongtongcha	Km.	3.35	L/S	500000
		2. Gangarang Nallah	Km.	2.65	150000	400000
		3. Hurba Khad	Km.	4	150000	600000
		4. Rukti Khad	Km.	1	150000	150000
		5. Nagasti Nallah	-	-	L/S	300000
		6. Chhitkul Nallah	-	-	L/S	300000
		7. Noshang Khad	-	-	L/S	300000
		8. Seringcha Nallah	-	-	L/S	300000
		Total of 3b):-				2850000
c)	River bank stabilization	1. Ruturang to Batseri (R bank)	Km.	1.5	400000	600000
		2. Ruturang to Power House (L Bank)	Km.	1.7	400000	680000
		3. Power House to Batseri (L bank)	Km.	0.425	400000	170000
		4. Hurba to Singan Khad (L bank)	-	-	L/S	770000
		Total of 3c):-				2220000
		Total:-				8781172
5	Forest Infrastructure Development					
a)	Const./Repair of operational buildings	i) Const. of DFO residence at Reckongpeo	No.	1	L/S	200000
		ii) Const. of type II qtrs.	No.	1	L/S	150000
		iii) Const. of type I qtr	No.	1	L/S	150000
	Maintenance	i) Maint. of residential buildings at Sarahan	No.	4	L/S	80000
		ii) Maint. of office/residential buildings at Nichar			L/S	51244

PHASE-I 2002-03						
Sl. No.	Component	Name of area	Unit	Quantity	Rate	Amount
		Total of 5a):-				631244
		Total:-				631244
10	Training, Awareness, Extension & Publicity		-	-	L/S	34366
		Total:-				34366
11	Research & Studies		-	-	L/S	4874
		Total:-				4874
12	Operational support					
a)	Establishment Cost		-	-	L/S	983358
b)	Office Expenses		-	-	L/S	498356
c)	Travelling Allowance		-	-	L/S	114438
d)	Office Equipment	One computer with accessories (15.4.02)	-	1	L/S	92163
e)	Motor Vehicle & POL	1) POL & Maintenance	-	-	L/S	160332
		2) One Ambassador Car (25.10.02)	-	1	L/S	431454
		G.Total of 12e):-				591786
		Total:-				2280101
f)	Amenities to staff & labour		-	-	L/S	107373
		Total:-				107373
		Grand Total for 2002-03:				13266232

PHASE-I 2003-04						
Sl. No.	Component	Name of area	Unit	Quantity	Rate	Amount
Detail of works/expenditure for the year 2003-2004						
1	Forest Establishment and improvement					
	(a) Afforestation of					
	Degraded Forest land	C-154(a)	ha.	5	22050	110,250
	Total		ha.	5	22050	110,250
	1st Year Maintenance					
		C-154(b)	ha.	5	3800	19,000
		C-155	ha.	10	3800	38,000
		C-156	ha.	5	3800	19,000
		C-153	ha.	10	3800	38,000
		UF Ruturang	ha.	7	3800	26,600
	Total		ha.	37		140,600
	2nd Year Maintenance					
		C-155 (i)	ha.	5	3,000	15,000
		C-155 (ii)	ha.	5	3,000	15,000
		UF Ruturang	ha.	5	3,000	15,000
		UF Wadang	ha.	5	3,000	15,000
		C-153	ha.	5	3,000	15,000
		C-152 (b)	ha.	5	3,000	15,000
	Total		ha.	30		90,000
	4th Year Maintenance					
		UF Kamroo (i)	ha.	10	1500	15,000
		UF Kamroo (ii)	ha.	5	1500	7,500
		Kamroo Kanda	ha.	5	1500	7,500
		C-154- (C)	ha.	10	1500	15,000
	Total		ha.	30		45,000
	Grand Total Maintenance.		ha.	97		275,600
	Total of 1a)			102		385,850
	(b) Assisted Natural Regeneration					
	1st Year maintenance	C-157 & 158	ha.	15	L/S	11,250
	Total		ha.	15	-	11,250
	4th year Maintenance	C-153 chhidoo	ha.	15	500	7,500
		C-151 (b) Shong	ha.	5	500	2,500
	Total		ha.	20		10,000
	Total of 1b)		ha.	35		21,250
	(d) Treatment of culturable Waste land	Kamru Sangla	ha.	10	4000	40,000
	Total of 1d)			10		40,000
	(e) Raising of Nurseries	Chiddo/Limsanthag	-	1	L/S	25,500
		Batsery Nursery	No.	1	L/S	82,750
			No.	2		108,250

PHASE-I 2003-04						
Sl. No.	Component	Name of area	Unit	Quantity	Rate	Amount
		Total of Forest Est. & Improvement		149		555350
2	Improvement of					
	Alpine pasture	Sangla Kanda	ha.	5	800	4,000
		Devar Kanda	ha.	10	800	8,000
		Total		15		12000
3	Soil & Moisture Conservation Works					
	(a) Treatment of land slip/slide					
		Rukti	ha.	1.5	L/S	11,609
		Hurba	ha.	1	L/S	9,614
		Chhidoo	ha.	1.5	L/S	17,321
		Total	ha.	4		38,544
	(b) Treatment of Nallah					
	1st Year Maintenance	Hurba	ha.	L/S	L/S	16,000
	Nallah Planting	Hurba	ha.	0.5	L/S	7,972
		Rukti	ha.	1	L/S	11,706
		Chhidoo	ha.	0.5	L/S	8,011
		Total	ha.	2		43,689
	(c) River Bank stabilization					
	1st Year Maintenance	Ruturang to Power House	ha.	0.5	L/S	7,831
		Total	ha.	0.5		7,831
		Total of 3)		6.5		90064
		Or		6.5		90,064
	say					
3	Forest Infrastructure Development					
	(a) Construction/ Repair of operational Buildings new	DFO, Residence at R/Peo	No.	1	L/S	499776
		Type II Qtrs. at R/Peo	No.	1	L/S	142438
		Type I Qtrs. at R/Peo	No.	1	L/S	225586
		Total	No.	3		867800
		1.Division Office Nichar	No.	1	L/S	16,432
		2.DFO Residence Nichar	No.	1	L/S	27,555
		3.Suptd. Qtr. Nichar(Type II)	No.	1	L/S	2000
		4.R.O. Qtr. Nichar(Type II)	No.	1	L/S	2,393
		5.Accountant Qtr Nichar(T.II)	No.	1	L/S	16,244

PHASE-I 2003-04						
Sl. No.	Component	Name of area	Unit	Quantity	Rate	Amount
		6. Clerk Qtr. Nichar (Type II)	No.	2	L/S	23,744
		7. Forest Guard Qtr Nichar (II)	No.	1	L/S	3,000
		8. Class IV Qtrs. Nichar (T. II)	No.	3	L/S	7,735
		Total	No.	11		99,103
		Total Maintenance of Buildings	No.	11	or say	99103
		Total Building		14		966903
4	Research Study and Training			1	L/S	52,991
5	Operational Support					
		1. Salary (Contract engaged staff)	-	-	-	47,200
		2. T.A.	-	-	-	29,764
		3. O.E.	-	-	-	114,490
		4. Amenity to staff and labours	-	-	-	850
		5. Motor Vehicle	-	-	-	120,820
		Total				313,124
		G Total of 2003-2004				1,990,432

PHASE-I 2004-05						
Sl. No.	Component	Name of area	Unit	Qty	Rate	Amount
Detail of works/expenditure for the year 2004-05						
1	Forest Establishment & Improvement					
a)	Afforestation of Degraded Forest Lands New	UF - Batsen	ha	10	0	126935
		UF - Rakchham	ha	10	22050	126936
		UF-Pailingcha	ha	10	22050	176400
		C-154 (b)	ha	5	22050	88200
		Total :-		35	22050	518471
	1st year Maintenance	C-154 (a)	ha	5	3800	19000
		Total		5		19000
	2nd Year maintenance	C-154 (b)	ha	5	3000	15000
		C-155	ha	10	3000	30000
		C-156	ha	5	3000	15000
		C-153	ha	10	3000	30000
		UF-Ruturang	ha	7	3000	21000
		Total :-		37		111000
	3rd Year Maintenance	C-155(I)	ha	5	2200	11000
		C-155 (II)	ha	5	2200	11000
		UF- Ruturang	ha	5	2200	11000
		UF-Wadang	ha	5	2200	11000
		C-153	ha	5	2200	11000
		C-152(b)	ha	5	2200	11000
		Total :-		30		66000
	5th Year maintenance	UF- Kamroo (I)	ha	10	1500	15000
		UF- Kamroo (II)	ha	5	1500	7500
		Kamroo Kanda	ha	5	1500	7500
		C-154 (c)	ha	10	1500	15000
		Total :-		30	1500	45000
		G.Total Maint.		102		241000
		Total of 1(a)		137		759471
b)	Assisted Natural Regeneration					
	New	C-156	ha	0	10050	0
		C-159	ha	0	10050	0
		C-162 (a)	ha	0	10050	0
		UF Mastrang	ha	0	10050	0
		Total:-		0		0
	2nd Year maintenance	C-158	ha	10	1000	10000
		C-157	ha	5	1000	5000
		Total		15		15000
	5th Year maintenance	C-153 Chhidoo	ha	15	500	7500
		C-152(b) Shong	ha	5	500	2500
		Total		20		10000
		G.Total Maint.		35		25000
		Total of 1b):				25000
c)	Raising of NTFP Plantation					
	New	UFKamru Kanda	ha	0	25100	0
		Total :-		4		0
	Est. of Nursery New	Rakchham	No.	1	L/S	178000
		Chitkul	No.	1	L/S	177000

PHASE-I 2004-05						
Sl. No.	Component	Name of area	Unit	Qty	Rate	Amount
		Total:-		2		355000
		Total of 1c):-				355000
d)	Treatment of Culturable Wasteland					
	New	Kamru Sangla	ha	0	20400	0
		Barcho-Ziarang	ha	0	20400	0
		Saringcha -	ha	5	20400	71415
		Dungdangshee	ha	5	20400	71415
		Total new plant.		10		142830
	2nd Year maintenance	Kamru sangla	ha	10	3500	35000
		Total		10		35000
		G. Total d		20		177830
		G.Total :- 1 (a to d)		157		1317301
2	Improvement of Alpine Pastures					
	New	Dever Kanda	ha	10	9050	72400
		Sangla Kanda	ha	5	9050	36200
		Kamru Kanda	ha	5	9050	36200
		Chhitkul Kanda	ha	0	9050	0
		Rakchham Kanda	ha	0	9050	0
		Rani Kanda	ha	0	9050	0
		Total:-		20		144800
	2nd Year maintenance	Sangla Kanda	ha	5	600	3000
		Dever Kanda	ha	10	600	6000
		Total		15		9000
		Total :- 2		35		153800
3	Soil & Moisture Conservation Works					
a)	Treatment of land slips/slides					
	New	Tongtongcha	L/S	L/S	L/S	1124729
		Rukti Khad	L/S	L/S	L/S	581414
		Hurba Khad	L/S	L/S	L/S	198034
		Shoney Khad	L/S	L/S	L/S	70000
		Rakchham Khad	L/S	L/S	L/S	210000
		Seringcha Nallah	L/S	L/S	L/S	0
		Chhidoo	L/S	L/S	L/S	957507
		Bafun slip	L/S	L/S	L/S	200000
		Barua slip	L/S	L/S	L/S	283271
		Total:-				3624955
	Maintenance	Tongtongcha	L/S	L/S	L/S	0
		Rukti Khad	L/S	L/S	L/S	21287
		Hurba Khad	L/S	L/S	L/S	1603
		Chhidoo	L/S	L/S	L/S	1345
		Shushang Nallah	L/S	L/S	L/S	48000
		Shoney Khad	L/S	L/S	L/S	48000
		Rakchham Khad	L/S	L/S	L/S	34000
		Total:-				154235
		Total of 3 a):				3779190
b)	Treatment of Nallah					

PHASE-I 2004-05						
Sl. No.	Component	Name of area	Unit	Qty	Rate	Amount
	New	Tongtongcha Nallah	L/S	L/S	L/S	2113014
		Gangarang Nallah	L/S	L/S	L/S	606966
		Hurba Khad	L/S	L/S	L/S	446407
		Rukti Khad	L/S	L/S	L/S	816320
		Nagasti Nallah	L/S	L/S	L/S	910400
		Chhitkul Nallah	L/S	L/S	L/S	500000
		Seringcha Nallah	L/S	L/S	L/S	504100
		Batsari Nallah	L/S	L/S	L/S	700000
		Khumsungarang	L/S	L/S	L/S	600000
		Shoney Khad	L/S	L/S	L/S	600000
		Total:-				7797227
	1st year maintenance	Nagasti Nallah	L/S	L/S	L/S	80000
		Chhitkul Nallah	L/S	L/S	L/S	80000
		Seringcha Nallah	L/S	L/S	L/S	80000
		Tongtongcha	L/S	L/S	L/S	0
		Gangarang Nallah	L/S	L/S	L/S	0
		Hurba Khad	L/S	L/S	L/S	25909
		Rukti Khad	L/S	L/S	L/S	0
		Total:-				265909
		Total of 3 b):				8063136
c)	River bank stabilization					
	New	Ruturang to Zalarang (R bank)	L/S	L/S	L/S	1000000
		Chhido (L bank)	L/S	L/S	L/S	79042
		Zalarang to Burcho (R bank)	L/S	L/S	L/S	1020958
		Ruturang to Chhido (L Bank)	L/S	L/S	L/S	1226029
		Chhido to Sangla (L bank)	L/S	L/S	L/S	0
		Sangla to Hurba (L bank)	L/S	L/S	L/S	740655
		Singan Khad to Batsari (L bank)		L/S	L/S	500000
		Batsari to Khrogla and Kharogla to Dungdangshee	L/S	L/S	L/S	750000
		Total:-				5316684
	1st year maintenance	Ruturang to Batsari (R bank)		L/S	L/S	0
		Ruturang to Chhido/Sangla (L Bank)		L/S	L/S	9965
		Sangla to Hurba (L Bank)		L/S	L/S	9645
		Hurba to Singan Khad (L Bank)		L/S	L/S	115500
		Total:-				135110
		Total of 3 c):				5451794
d)	Road side stabilization					
	New	Batsari to Rakchham	L/S			0

PHASE-I 2004-05						
Sl. No.	Component	Name of area	Unit	Qty	Rate	Amount
		Total :- 3 (d)				0
		G.Total of 3(A to D)				17294120
4	Rural Infrastructure Development					
a)	Village pond/tank		Nos	1	L/S	0
b)	Soil & Water Conservation Structures		Nos	L/S	L/S	0
c)	Repair of spring, bawries & other water sources		Nos	3	L/S	0
d)	Repair of village road & path		Nos	2	L/S	0
e)	Construction of foot bridges	Over Rukti Khad	Nos	1	L/S	0
		Total:- of 4 (a to e)				0
5	Forest Infrastructure Development					
a)	Construction/Repair of operational buildings					
		1. Const. of Store at sangla		1		200000
		2. Const. of DFO residence at Recong-Peo (Contd. Work)		1		507769
		3. Const. of Type-II Qtrs. R. Peo (Contd. Work)		1		286135
		4. Const. of Type-I Qtrs. R. Peo (Contd. Work)		1		100000
		5. Const. of Type-I Qtrs. R. Peo				300000
		Total:-		4		1393904
	Maintenace	1. F.R.H at Sangla		1		0
		2. Div office building Nichar	Nos	1	L/S	85,000
		3. DFO Resident Nichar	Nos	1	L/S	50,000
		4. Type I,II, & III qtrs at Nichar	Nos	7	L/S	89,626
		5. Maint of Div office compound and other building at Serahan	Nos	1	L/S	175,000
		Total:- maintenance		11		399,626
		Total of 5 (a)				1,793,530
b)	Construction/repair of Inspection path/					
	bridle paths and roads					
	New	Seringcha to Pampa Kanda	Km	8	25000	200000

PHASE-I 2004-05						
Sl. No.	Component	Name of area	Unit	Qty	Rate	Amount
		Ruturang to Hurba	Km.	3	25000	0
		Total of 5b):-		18	30000	200000
c)	Construction of bridges	Const. of bridge over	No.	0	L/S	0
		Baspa river at Chhitkul				0
		Total of 5c):-		1		0
		Total:- of 5 (a to C)				1,993,530
6	Avenue plantation & land scaping	Beatification of lake -				
		Raising of tall plants			L/S	0
		Total:-				0
7	Treatment of Private Lands	Kamru	ha	0	0	0
		Total:-				0
8	Distribution of seedlings to people		No.	0	0	0
		Total:-				0
9	Wildlife Management					
A	Intensive management of Wildlife sanctuary					
i)	Fire protection	a) Engagement of fire watcher during the season -sanctuary area	Nos.		L/S	50000
		b) Purchase of fire fighting equipment			L/S	0
		c) Prep. of fire index board & publicity		4	L/S	20000
		d) Workshop on fire control technique		2	L/S	20000
		Total 9 A(1)				90000
ii)	Habitat Improvement	Const. of water pond in Wildlife santuary area	Nos.	4	L/S	215000
iii)	Antipoaching activities	Engagement of anti poacher in Sanctuary area for 6 months	Nos.	2	L/S	70000
iv)	Reward & incentive to informer	In sanctuary area	L/S	L/S	L/S	0
v)	Census operation	In sanctuary area (two times)	L/S	L/S	L/S	0
		Total :-				285000
		Total of 9 A:-				375000
B	Ecocodevelopment activities					
i)	Vaccination of domestic cattle					0
ii)	purchase of equipment & Med.					0
iii)	Income Generation Activities		L/S	L/S	L/S	0
iv)	Provision for Compansesion against WL Depredation					0
v)	Nature awareness/exposure visit for Mahila Mandal & VFDS			38		107578
		Total 9B:-				107578

PHASE-I 2004-05						
Sl. No.	Component	Name of area	Unit	Qty	Rate	Amount
		G.Total of 9 (A&B)				482578
10	Training, Awareness, Extension & Publicity		L/S	L/S	L/S	82155
		Total:-				82155
11	Research & Studies		L/S	L/S	L/S	0
		Total:-				0
12	Operational Support					
a)	Establishment Cost (Refund to Govt.)		L/S	L/S	L/S	1619434
b)	Office Expenses		L/S	L/S	L/S	180314
c)	Travelling Allowance		L/S	L/S	L/S	162958
d)	Office Equipment		L/S	L/S	L/S	0
e)	Motor Vehicle & POL		L/S	L/S	L/S	109544
f)	Amenities to staff & labour		L/S	L/S	L/S	0
g)	Purchase of Photo Copier		L/S	L/S	L/S	0
		Total:-				2072250
13	Agricultural & Horticultural support		L/S	L/S	L/S	0
		Total:-				0
14	Animal Husbandary support		L/S	L/S	L/S	200000
		Total:-				200000
15	Revenue of State		L/S	L/S	L/S	0
		Total:-				0
16	Contingencies		L/S	L/S	L/S	0
		Total:-				0
		Grand Total for 2004-05:				23595734

PHASE-I 2005-06						
Sl. No.	Component	Name of area	Unit	Qty	Rate	Amount
Detail of works/expenditure for the year 2005-06						
1	Forest Establishment & Improvement					
a)	Afforestation of Degraded Forest Lands - New					
		UF - Pallingcha	ha.	5	22050	110250
		UF-Rangsthang	ha.	5	22050	110250
		C-153	ha.	5	22050	110250
		UF-Wadang	ha.	5	22050	110250
		C-165	ha.	5	22050	110250
		C-152 (b)	ha.	5	22050	110250
		UF-Rackcham	ha.	8	22050	176400
		UF-Mastrang	ha.	5	22050	110250
		Cost of B/wire for 2004-05 (Unspent balance)				187129
		Total:-		43		1135279
	1st year maintenance	U.F - Batsari	ha.	10	3800	38000
		UF- Rakchham	ha.	10	3800	38000
		UF-Pallingcha	ha.	10	3800	38000
		C-154(b)	ha.	5	3800	19000
		Total:-		35		133000
	2nd year maintenance	C-154 (a)	ha.	5	3000	15000
		Total:-		5		15000
	3rd year maintenance	C-154 (b)	ha.	5	2200	11000
		C-155	ha.	10	2200	22000
		C-156	ha.	5	2200	11000
		C-153	ha.	10	2200	22000
		UF-Ruturang	ha.	7	2200	15400
		Total:-		37		81400
	4th year maintenance	C-155 1st	ha.	5	1500	7500
		C-155 2nd	ha.	5	1500	7500
		UF-Ruturang	ha.	5	1500	7500
		UF-Wadang	ha.	5	1500	7500
		C-153	ha.	5	1500	7500
		C-152 (b)	ha.	5	1500	7500
		Total:-		30		45000
		Total of 1 (a):-		150		1409679
b)	Assisted Natural Regeneration					
	New	C-152 (b)	ha.	0	10050	0
		C-156	ha.	0	10050	0
		C.No.-159	ha.	10	10050	100500
		Total:-		10		100500
	3rd year maintenance	C-159	ha.	10	700	7000
		C-157	ha.	5	700	3500
		Total:-		15		10500
		Total (b):-		25		111000
c)	Raising of NTFP Plantation					

PHASE-I 2005-06						
Sl. No.	Component	Name of area	Unit	Qty	Rate	Amount
	New	UF-Kamroo Kanda	ha	0	25100	0
		UF-Chhitkul	ha	5	25100	125500
		UF-Rackcham	ha	10	25100	251000
		Total (C) :-		15		376500
d)	Treatment of Culturable Wasteland					
	New	Sangla	ha	0	20400	0
		Kamru Kanda	ha	0	20400	0
		Rackcham	ha	0	20400	0
		Chhitkul	ha	0	20400	0
		Total (d):-		0		0
	1st year maintenance	UF-Saringcha	ha	5	3800	19000
		UF-Dungdangshee	ha	5	3800	19000
		Cost of B/wire for 2004-05 (Unspent balance)	ha	0	0	61170
		Total:-		10		99170
	3rd year maintenance	Kamru-Sangla	ha	10	3000	30000
		Total:-		20		129170
		Total (a) to (d)		210		2026349
2	Improvement of Alpine Pastures					
	1st year maintenance	Dever Kanda	ha	10	800	8000
		Sangla Kanda	ha	5	800	4000
		Kamru Kanda	ha	5	800	4000
		Total Alpine pasture:-		20		16000
3	Soil & Moisture Conservation Works					
a)	Treatment of land slips/slides					
	New	Chhiddo	L/S	L/S	L/S	0
		Tongtongcha Nallah	L/S	L/S	L/S	500000
		Rukti Khad	L/S	L/S	L/S	0
		Hurba Khad	L/S	L/S	L/S	0
		Gangerang Nallah	L/S	L/S	L/S	0
		Saringcha Nallah	L/S	L/S	L/S	70000
		Kharogla Nallah	L/S	L/S	L/S	0
		Total:-				570000
		Total of 3(a) :-				570000
b)	Treatment of Nallah					
	New	Tongtongcha	L/S	L/S	L/S	1000000
		Raidang/Dharcho	L/S	L/S	L/S	500000
		Gotkhalang (Kamroo) Khaita to Zalaring	L/S	L/S	L/S	200000
		Khyonahang	L/S	L/S	L/S	300000
		Hurba Khad	L/S	L/S	L/S	300000
		Rukti Khad	L/S	L/S	L/S	1000000
		Batsen Nallah	L/S	L/S	L/S	274000

PHASE-I 2005-06						
Sl. No.	Component	Name of area	Unit	Qty	Rate	Amount
		Total:-				3574000
		Total of 3 (b) :-				3574000
c)	River bank Stabilization					
	New	Ruturang to Zalaring (R. Bank)	L/S	L/S	L/S	600000
		Sangla to Hurba (L. Bank)	L/S	L/S	L/S	486000
		Sangla to Gangarang (R. Bank)	L/S	L/S	L/S	1000000
		Batseri to Rakcham (L. Bank)	L/S	L/S	L/S	250000
		Khrogia to Dangdangshee (L. Bank)	L/S	L/S	L/S	400000
		Total:-				2736000
		Total of 3 (c) :-				2736000
d)	Road side stabilization					
		G.Total of 3 (a to d)				6880000
4	Rural Infrastructure Development					
a)	Village pond/tank		Nos.	0	L/S	0
b)	Soil and Water Conservation Structures		Nos.	0	L/S	0
c)	Repair of spring, bawnies and other water sources		Nos.	0	L/S	0
d)	Repair of village road and path (Rakchham)		Nos.	0	L/S	0
e)	Construction of foot bridges	over Rukti Khad	Nos.	1	L/S	800000
		Total 4:-				600000
5	Forest Infrastructure Development					
a)	Const./repair of Operational buildings					
		1) Const. of community center at Sangla	No.	0	L/S	200000
		2) DFO Residence (Contd. Work)		0		1064900
		3) Type-II Qtrs. At R-Peo (Contd. Work)	No.	0	L/S	304800
		4) Type-II Qtrs. At R-Peo	No.	0	L/S	60000
		5) Type-I Qtrs. At R-Peo (Contd. Work)	No.	0	L/S	318400
		Total 5(a):-				1948100
	Maintenace	FRH Sangla		1	L/S	100000
		Chowkidar Qtr. FRH Sangla		1	L/S	50000

PHASE-I 2005-06						
Sl. No.	Component	Name of area	Unit	Qty	Rate	Amount
		B O Qtr Sangla		1	L/S	50000
		Maint of Division Office Nichar		1	L/S	50000
		Maint of DFO Residence at Nichar		1	L/S	50000
		Maint of Type I, II, III Qtrs		L/S	L/S	175000
		Maint Of water supply		L/S	L/S	50000
		Construction of foot path in forest colony		L/S	L/S	100000
		Maint of boundary wall		L/S	L/S	75000
		Total				700000
c)	Const./repair of inspection path & B/Path road etc.	Completion of path from Sarigcha to Pampa Kanda	Kms	8	L/S	20000
		Repair of existing B/Path from Chitkul to Ranikanda	Kms	15	L/S	80000
		Total				100000
G Total Forest Infrastructure Development						2748100
6	Avenue plantation & land scaping	Beatification of lake	L/S	L/S	L/S	0
		Raising of Tall plants / ornamental plants				
		Total :-				0
7	Treatment of Private Lands	Kamru	ha	1	80000	80000
	New	Sangla	ha	1	80000	80000
		Total:-		2		160000
8	Distribution of seedlings to people	In and around sanctuary area	No.	0	0	0
		Total:-				0
9	Wildlife Management					
	A. Intensive management of Wildlife sancturary					
	1) Fire Protection	a) Engagement of fire watcher during the fire season -sanctuary area	No.	0	L/S	20000
		Total				20000
10	Training , Awareness, Extension & Publicity		L/S	L/S	L/S	132422
		Total:-				132422
11	Research & studies		L/S	L/S	L/S	0
		Total:-				0
12	Operational support					
	a) Establishment cost		L/S	L/S	L/S	50000
	b) Office expensses		L/S	L/S	L/S	213946
	c) Travelling allowance		L/S	L/S	L/S	150000

PHASE-I 2005-06						
Sl. No.	Component	Name of area	Unit	Qty	Rate	Amount
d)	Office equipment		L/S	L/S	L/S	0
e)	Motor Vehicle & POL		L/S	L/S	L/S	182455
f)	Amenities to staff & labour		L/S	L/S	L/S	50000
	Total:-					648401
13	Agricultural & Horticultural Support		L/S	L/S	L/S	400000
	Total:-					400000
14	Animal Husbandary support		L/S	L/S	L/S	400000
	Total:-					400000
15	Revenue of State		L/S	L/S	L/S	0
	Total:-					0
16	Contingencies		L/S	L/S	L/S	1105378
	Total					1105378
	Grand Total for 2005-06:-					15134650

		PHASE-II 2006-07			
Sl. No.	Component	Name of Division	Name of area	Unit	Qty. Rate Amount
1	Forest establishment & Improvement	Detail of works/expenditure for the year 2006-07			
a)	Afforestation of Degraded Forest Lands New	Kinnaur	UF - Wadang	ha.	10 30600 306000
			UF-Pallingcha	ha.	10 30600 306000
			UF-Chensu	ha.	5 30600 153000
			C-165	ha.	5 30600 153000
			Rukhi-Baspa	ha.	3 30600 91800
			Hurba-Baspa	ha.	3 30600 91800
			Total Kinnaur	36	1101600
		Wild Life Sarahan	UF-Kharogla	ha.	10 30600 306000
			UF-Mastrang	ha.	10 30600 306000
			UF-Painpo	ha.	10 30600 306000
			Total WildLife	30	918000
			Total New	66	2019600
	1st year maintenance	Kinnaur	UF - Pallingcha	ha	5 4300 21500
			UF-Rangsthang	ha	5 4300 21500
			C-153	ha	5 4300 21500
			UF-Wadang	ha	5 4300 21500
			C-165	ha	5 4300 21500
			C-152 (b)	ha	5 4300 21500
			Total Kinnaur	30	129000
		Wild Life Sarahan	UF-Rackcham	ha	8 4300 34400
			UF-Mastrang	ha	5 4300 21500
			Total:-	13	55900
			Total 1st year	43	184900
	2nd year maintenance	Kinnaur	UF-Pallingcha	ha	10 3700 37000
			C-154(b)	ha	5 3700 18500

PHASE-II 2006-07						
Sl. No.	Component	Name of Division	Name of area	Unit	Qty.	Rate
			Total Kinnaur		15	
			UF- Rakchham	ha.	10	3700
			UF - Batseri	ha.	10	3700
			Total WildLife		20	74000
			Total 2nd year maint.		35	129500
	3rd year maintenance	Kinnaur	C-154 (a)	ha.	5	2500
			Total:-		5	12500
		Wild Life Sarahan			0	
			Total 3rd year Maint.		5	12500
	4th year maintenance	Kinnaur	C-154 (b)	ha.	5	1700
			C-155	ha.	10	1700
			C-156	ha.	5	1700
			C-153	ha.	10	1700
			UF-Ruturang	ha.	7	1700
			Total Kinnaur		37	62900
		Wild Life Sarahan	0	0	0	0
			Total 4th year Maint.		37	62900
	5th year maint.	Kinnaur	C-155 1st	ha	5	1700
			C-155 2nd	ha	5	1700
			UF-Ruturang	ha	5	1700
			UF-Wadang	ha	5	1700
			C-153	ha	5	1700
			C-152 (b)	ha.	5	1700
			Total 5th year Maint.		30	51000
			G, Total New & Maint (1) =		216	2460400
b)	Assisted Natural Regeneration New					
		Kinnaur	C-152 (b)	ha	8	17000
			Total Kinnaur		8	136000

PHASE-II 2006-07						
Sl. No.	Component	Name of Division	Name of area	Unit	Qty.	Rate
		Wild Life Sarahan	UF-159 Shoney	ha	10	17000
			UF-160 Mastrang	ha	10	17000
			Total Wildlife		20	340000
			G. Total New		28	476000
	1st year maintenance	Kinnaur		ha	0	0
				ha	0	0
		Wildlife Sarahan	C.No.-159	ha	10	1900
		Total 1st year Maint.			10	19000
	2nd year maintenance	Kinnaur		ha	0	1100
		Wildlife Sarahan		ha	0	1100
			Total 2nd year Maint.		0	0
	3rd year maint.	Kinnaur		ha	0	900
		Wildlife Sarahan		ha	0	900
		Total 3rd year maint.			0	0
	4th year Maint.	Kinnaur		ha	0	0
		Wildlife Sarahan	C-157	ha	5	600
			C-158	ha	10	600
			Total 4th year maint		15	9000
	5th year maint.	Kinnaur		ha	0	600
		Wildlife Sarahan		ha	0	600
		Total 5th year maint.			0	0
		G. Total ANR			53	504000
c) Raising of NTFP Plantation New		Kinnaur	Sangla Kanda	ha	6	38000
			UF-Kamru	ha	6	38000
			Total Kinnaur		12	456000
		Wildlife Sarahan	UF-Batsari	ha	10	38000
			UF-159 Chitkul	ha	5	38000

PHASE-II 2006-07						
Sl. Component No.	Name of Division	Name of area	Unit	Qty.	Rate	Amount
		UF-159 Rakcham	ha.	5	38000	190000
		Total Sarahan		20		760000
		G. Total New		32		1216000
				0	0	0
1st year maint	Kinnaur Wildlife Sarahan	UF-Chhitkul	ha.	5	7950	39750
		UF-Rackcham	ha.	10	7950	79500
		Total 1st year maint.		15		119250
			ha.	0	2600	0
2nd year maint.	Kinnaur Wildlife Sarahan		ha.	0	2600	0
				0		0
3rd year maint.	Kinnaur Wildlife Sarahan	Total 2nd year Maint.	ha.	0	1300	0
			ha.	0	1300	0
				0		0
		Total 3rd year maint		0		0
		G. Total NTFP		47		1335250
d) Treatment of Culturable Wasteland New	Kinnaur	Kamru Sangla	ha.	10	28650	286500
		Total Kinnaur		10		286500
	Wildlife Sarahan	UF-Nagasti	ha.	10	28650	286500
		UF-Chhitkul	ha.	10	28650	286500
		Total Sarahan		20		573000
		G. Total New		30		859500
1st year maintenance	Kinnaur		ha.	0	4500	0
			ha.	0	4500	0
	Wildlife Sarahan		ha.	0	4500	0
			ha.	0	4500	0
		Total 1st year maint.		0		0
2nd year maint.	Kinnaur Wildlife Sarahan		ha.	0	3900	0
		UF-Saringcha	ha.	5	3900	19500
		UF-Dungdangchee	ha.	5	3900	19500

PHASE-II 2006-07							
Sl. No.	Component	Name of Division	Name of area	Unit	Qty.	Rate	Amount
	3rd year maintenance	Kinnaur	Total 2nd year Maint.		10		39000
		Wildlife Sarahan			0	3400	0
	4th year maint.	Kinnaur	Total 3rd year maint		0	3400	0
		Wildlife Sarahan	Kamru-Sangla	ha	10	2250	22500
	5th year maint.	Kinnaur	Total 4th year maint		10	2250	22500
		Wildlife Sarahan			0	2250	0
			Total 5th year maint		0	2250	0
			G. Total (d)		50		921000
2	Improvement of Alpine Pastures New	Kinnaur	G. Total Forest Establishment				5220650
			Dewar Kanda	ha	10	10550	105500
			Dhumer Kanda	ha	15	10550	158250
			Total Kinnaur		25		263750
		Wildlife Sarahan	Batsen Denmo Kanda	ha	30	10550	316500
			Nardo Chikkul Kanda	ha	40	10550	422000
			Rakoham Kanda	ha	30	10550	316500
			Total Wildlife		100		1055000
	1st year maintenance	Kinnaur	G. Total New		125		1318750
		Wildlife Sarahan			0	1100	0
	2nd year maint.		Total 1st year maint.		0	1100	0
			Dewar Kanda	ha	10	600	6000
			Sangla Kanda	ha	5	600	3000
			Kamru Kanda	ha	5	600	3000
			Total 2nd year Maint.		20		12000

PHASE-II 2006-07						
Sl. No.	Component	Name of Division	Name of area	Unit	Qty.	Rate
3	Soil & Moisture Conservation Works		G. Total Alpine pasture:-		145	1330760
a)	Treatment of land slips/slides	Kinnaur	Tonglongcha	L/S	L/S	1060000
			Rukti	L/S	L/S	1800000
			Hurba	L/S	L/S	1540000
			Total Kinnaur			4400000
		Wildlife Sarahan	Shushang slip	L/S	L/S	300000
			Shoney slip	L/S	L/S	500000
			Saringche slip	L/S	L/S	400000
			Chispan slip	L/S	L/S	100000
			Khargola slip	L/S	L/S	300000
			Chitkul slip	L/S	L/S	500000
			Batsen slip	L/S	L/S	500000
			Kulange slip	L/S	L/S	400000
			Total Sarahan			3000000
			G. Total a			7400000
b)	Treatment of Nallah	Kinnaur	Tongtongche Nalla	L/S	L/S	1050000
			Hurba Nalla	L/S	L/S	1500000
			Rukti Nalla	L/S	L/S	1500000
			Gotkhalang Nalla	L/S	L/S	500000
			Khiyo Nallang	L/S	L/S	300000
			Total Kinnaur			4850000
		Wildlife Sarahan	Chitkul Nalla	L/S	L/S	1000000
			Batsen Nalla	L/S	L/S	1000000
			Shoney Nalla	L/S	L/S	1200000
			Kulange Garang	L/S	L/S	900000
			Bosoring Garang	L/S	L/S	900000
			Gor Garang	L/S	L/S	800000

		PHASE-II 2006-07				
Sl. No.	Component	Name of Division	Name of area	Unit	Qty.	Rate
			Shilpa Nalla Chitkul	L/S	L/S	600000
			Total Sarahan			6400000
			G. Total b			11250000
c)	River bank stabilization	Kinnaur	Zolaring Gangaran (R. Bank)	L/S	L/S	1500000
			Zolaring Rukti (L. Bank)	L/S	L/S	1000000
			Kashmir-Hurba (L. Bank)	L/S	L/S	800000
			Total Kinnaur			3300000
		Wildlife Sarahan	Singan to Batsari	L/S	L/S	600000
			Batsari to Kharogla	L/S	L/S	600000
			Rachham to Mastrang	L/S	L/S	500000
			Chitkul to Nagasti	L/S	L/S	500000
			Nagasti to Mujling	L/S	L/S	600000
			Mujling to Joryagarang	L/S	L/S	900000
			Total Sarahan			3700000
d)	Road side stabilization	Kinnaur	G. Total C			7000000
			Ruturang to Hurba	5 Kms	L/S	300000
		Wildlife Sarahan	Batsari to Rachham	11 Kms	L/S	500000
			Total road side			800000
			G. Total Soil & Mositure Conservation Works			26450000
4	Rural Infrastructure Development					
a)	Village pond/tank	Kinnaur	Chansu	1 No.	L/S	200000
		Wildlife Sarahan	Chitkul	1 No.	L/S	200000
			Total Village pond/tank			400000

PHASE-II 2006-07							
Sl. No.	Component	Name of Division	Name of area	Unit	Qty.	Rate	Amount
b)	Soil & Water Conservation Structures	Kinnaur	Kamru	1 No.	L/S	L/S	225000
		Wildlife Sarahan	Batseri	1 No.	L/S	L/S	225000
			Total Soil & Water Cons.				450000
c)	Repair of spring, bawries/Kuhl & other water sources	Kinnaur	Sangla	1 No.	L/S	L/S	150000
		Wildlife Sarahan	Chitkul	2 No.	L/S	L/S	300000
			Total bawari/Kuhl				450000
d)	Repair of village road & path/ bridge Construction of foot bridge	Kinnaur	Ruturang to Chansu	4 Kms	L/S	L/S	200000
		Wildlife Sarahan	Themgrang to Batseri	2 Kms	L/S	L/S	100000
			Total road/path				300000
e)	Construction of foot bridges	Kinnaur	Over Rukti Khad (Contd. Completion)	1 No.	L/S	L/S	400000
		Wildlife Sarahan	Over Saringche Nalla Themgrange	1 No.	L/S	L/S	400000
			Total foot bridges				800000
			G. Total Rural				2400000
5	Forest Infrastructure Development						
a)	Const./repair of operational buildings New	Kinnaur	Const. of type II Qtr at R/Peo Contd. Work and completion	2 No.	L/S	L/S	700000
			Const. of type III Qtr at R/Peo	1 No.	L/S	L/S	700000

PHASE-II 2006-07						
Sl. No.	Component	Name of Division	Name of area	Unit	Qty.	Rate
			Const. of DFO Residence (contd./completion) and compound at R/Peo	1 No.	L/S	369000
			Const. of store in Range H/Qtr. At Kilba	1 No.	L/S	100000
			Const. of Community center at Sangla (Contd. Work and completion)	1 No.	L/S	700000
			Total New			2569000
	Maintenance	Kinnaur	Maint. Of Div. office Nichar	1 No.	L/S	100000
			Maint. Of DFO Residence Nichar	1 No.	L/S	50000
			Maint. Of Div. office compound Nichar	1 No.	L/S	100000
			Maint. Of Type-I, II, III at Nichar	7 No.	L/S	200000
			Maint. Of Range office cum Residence at Kilba	1 No.	L/S	200000
			Total Maint. Kinnaur			650000
		Wildlife Sarahan	Maint. Of Range office cum Residence at Sangla	1 No.	L/S	100000
			Total Maint. Sarahan			100000
			Total Maint.		0	750000
			G. Total New & Maint. A			3319000
b)	Construction /repair of I path and B/path	Kinnaur	Shong Khad to Raturang	3 Kms	L/S	150000
		Wildlife Sarahan	Chitkul to Shilpya (L. Bank)	3 Kms	L/S	150000
c)	Construction of bridges	Kinnaur	G. Total B		0	300000
						0

PHASE-II 2006-07							
Sl. No.	Component	Name of Division	Name of area	Unit	Qty.	Rate	Amount
		Wildlife Sarahan	Const. of foot bridge over Baspa river at Batseni	1 No.	L/S	L/S	800000
			G. Total C				800000
			G. Total Forest Infrastructure Development				4419000
6	Avenue plantation & land scaping	Kinnaur	Planting of Tall avenue plantation		L/S	L/S	25000
		Wildlife Sarahan	Planting of Tall avenue plantation		L/S	L/S	25000
			G. Total Avenue plantation				50000
7	Treatment of Private Lands	Kinnaur	Kamru village	5 ha.	L/S	L/S	100000
		Wildlife	Batseni village	2 ha.	L/S	L/S	100000
			G. Total Private Land				200000
8	Distribution of seedlings to people	Kinnaur			L/S	L/S	5000
		Wildlife			L/S	L/S	5000
			G. Total seedlings to people				10000
9	Wildlife Management						
A	Intensive management of Wildlife Sanctuary						
	A) Intensive management of W.L. sanctuary						
	i) Fire Protection						
		Wildlife Sarahan	a) Fire watcher for six month (three years)	5 No.	L/S	L/S	48000
			b) Equipments	L/S	L/S	L/S	0

PHASE-II 2006-07							
Sl. No.	Component	Name of Division	Name of area	Unit	Qty.	Rate	Amount
			c) Fire index board & publicity	L/S	L/S	L/S	25000
			d) Workshop on fire control technique	L/S	L/S	L/S	10000
			Total Fire Pro.		L/S	L/S	83000
	ii) Habitat improvement		a) Creation of Musk deer farm for ex-situ conservation Musk deer at Kharogla	L/S	L/S	L/S	0
			b) Const. of water pond & saltlick	L/S	L/S	L/S	100000
			Total Habitat		L/S	L/S	100000
	iii) Antipoaching activities		a) Engagement of antipoaching for six month (Three years)	2	L/S	L/S	30000
			Total Antipoaching		L/S	L/S	30000
	iv) Reward & incentive to informer		in sanctuary area	L/S	L/S	L/S	30000
			Total Reward & incentive		L/S	L/S	30000
	v) Census operation			L/S	L/S	L/S	0
			Total Census		L/S	L/S	0
	vi) Demarcation of boundary pillar			L/S	L/S	L/S	0
	vii) Salogan & Sign board			L/S	L/S	L/S	25000
	G. Total A				L/S	L/S	268000
	B) Eco-development activities				L/S	L/S	
	i) Vaccination of domestic cattle			L/S	L/S	L/S	50000

PHASE-II 2006-07						
Sl. No.	Component	Name of Division	Name of area	Unit	Qty.	Rate
	ii) Purchase of equipments & Med.			L/S	L/S	40000
	iii) Income generation activities		Vermi composting	L/S	L/S	50000
	iv) Provision for compansession against WL debridation			L/S	L/S	100000
	v) Distribution of GI Pipes for installation of religious flag	WL Sarahan		250 No.	L/S	125000
	vi) Const. of Crematoria	Kinnaur		700 No.	L/S	350000
			Batsen	1 No.	L/S	100000
	vii) Const. of Tracker hut		Boeningsaring	1 No.	L/S	100000
	viii) Installation of street solar light		Chitkul	L/S	L/S	0
				1 No.	L/S	15000
			Rachham	1 No.	L/S	15000
			Batsen	1 No.	L/S	15000
	ix) Sulaab Shochalya		Chitkul	1 No.	L/S	100000
			G. Total B			1060000
10	Training, Awareness, Extension & Publicity	Kinnaur	G. Total Wildlife Management	L/S	L/S	1328000
		Wildlife Sarahan				250000
			G. Total Training, Awareness			500000
11	Research & studies	Kinnaur		L/S	L/S	50000
		Wildlife Sarahan		L/S	L/S	50000

PHASE-II 2006-07						
Sl. No.	Component	Name of Division	Name of area	Unit	Qty.	Rate
			G. Total Research & studies			100000
12	Operational support					
a)	Establishment cost	Kinnaur	Contractual staff	L/S	L/S	400000
b)	Office expenses		Refund to Govt.	L/S	L/S	2000000
c)	Travelling allowance			L/S	L/S	250000
d)	Office equipment					200000
e)	Motor Vehicle & POL					100000
f)	Aminities to staff & labour					300000
g)	Purchase of computer with accessories					100000
						0
			Total Kinnaur			3350000
a)	Establishment cost	Wildlife Sarahan	Contractual staff	L/S	L/S	50000
b)	Office expenses			L/S	L/S	100000
c)	Travelling allowance					50000
d)	Office equipment					20000
e)	Motor Vehicle & POL					80000
f)	Aminities to staff & labour					20000
g)	Purchase of computer with accessories					100000
			Total Sarahan			420000
			G. Total Operational Support			3770000
13	Agricultural & Horticultural support	Kinnaur		L/S	L/S	300000
		Wildlife Sarahan		L/S	L/S	300000

PHASE-II 2006-07						
Sl. No.	Component	Name of Division	Name of area	Unit	Qty.	Rate
14	Animal Husbandary support	Kinnaur	G. Total Agri. Horti.	L/S	L/S	600000
		Wildlife Sarahan				150000
15	Revenue of State		G. Total Animal Hus.	L/S	L/S	300000
			Total:-			0
16	Contingencies		Total Components			46678400
			Grand Total for 2006-07:-			51346240

		PHASE-II 2007-08			
Sl. No.	Component	Name of Division	Name of area	Unit	Amount
Detail of works/expenditure for the year 2007-08					
1	Forest Establishment & Improvement				
a)	Afforestation of Degraded Forest Lands - New	Kinnaur	UF - Wadang	ha.	15 30600 459000
			UF - Palingcha	ha.	10 30600 306000
			C-165	ha.	15 30600 459000
			Total Kinnaur	40	1224000
		Wild Life Sarahan	UF Panpo	ha.	15 30600 459000
			UF159	ha.	10 30600 306000
			UF Chhitkul	ha.	10 30600 306000
			Total WildLife	35	1071000
			G. Total New	75	2295000
	1st year maintenance	Kinnaur	UF - Wadang	ha.	10 4300 43000
			UF-Palingcha	ha.	10 4300 43000
			UF-Chansu	ha.	5 4300 21500
			C-165	ha.	5 4300 21500
			Rukti-Baspa	ha.	3 4300 12900
			Hurba-Baspa	ha.	3 4300 12900
			Total Kinnaur	36	154800
		Wild Life Sarahan	UF-Kharogla	ha.	10 4300 43000
			UF-Mastrang	ha.	10 4300 43000
			UF-Panpo	ha.	10 4300 43000
			Total WildLife	30	129000
			Total 1st year maint.	66	283800
	2nd year maintenance	Kinnaur	UF - Palingcha	ha.	5 3700 18500
			UF-Rangsthang	ha.	5 3700 18500
			C-153	ha.	5 3700 18500
			UF-Wadang	ha.	5 3700 18500

PHASE-II 2007-08						
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate
			C-165	ha.	5	3700
			C-152 (b)	ha.	5	3700
			Total Kinnaur		30	111000
		Wild Life Sarahan	UF-Rackcham	ha.	8	3700
			UF-Mastrang	ha.	5	3700
			Total:-		13	48100
	3rd year maintenance	Kinnaur	Total 2nd year maint.		43	159100
			UF-Pallingcha	ha.	10	2500
			C-154(b)	ha.	5	2500
			Total Kinnaur		15	37500
			UF-Rackcham	ha.	10	2500
			UF - Baisari	ha.	10	2500
			Total WildLife		20	50000
	4th year maintenance	Kinnaur	Total 3rd year Maint.		35	87500
			C-154 (a)	ha.	5	1700
			Total:-		5	8500
		Wild Life Sarahan				
	5th year maint.	Kinnaur	Total 4th year Maint.		5	8500
			C-154 (b)	ha.	5	1700
			C-155	ha.	10	1700
			C-156	ha.	5	1700
			C-153	ha.	10	1700
			UF-Ruturang	ha.	7	11900
			Total Kinnaur		37	62900
		Wild Life Sarahan	0	0	0	0
			Total 5th year maint.		37	62900
			Total New & Maint. (a)		261	2896800

SI. No.		PHASE-II 2007-08				
Component	Name of Division	Name of area	Unit	Quantity	Rate	Amount
b)	Assisted Natural Regeneration New	Kinnaur	ha.	5	17000	85000
		C-154 (b)				
		Total Kinnaur		5		85000
	Wild Life Sarahan	UF-159 Rakchham	ha.	10	17000	170000
		UF-Chitkul	ha.	5	17000	85000
		Total Wildlife		15		255000
		G. Total New		20		340000
1st year maint.	Kinnaur	C-152 (b)	ha.	8	1900	15200
		Total Kinnaur		8		15200
	Wild Life Sarahan	UF-159 Shoney	ha.	10	1900	19000
		UF-160 Mastrang	ha.	10	1900	19000
		Total Wildlife		20		38000
		Total 1st year maint.		28		53200
2nd year maint.	Kinnaur		ha.	0	1100	
		Wildlife Sarahan	ha.	0	1100	
		C.No.-159	ha.	10	1100	11000
3rd year maint.	Kinnaur	Total 2nd year Maint.		10		11000
	Wildlife Sarahan		ha.	0	900	
		Total 3rd year maint.		0		0
4th year maint.	Kinnaur		ha.	0	600	
	Wildlife Sarahan		ha.	0	600	
		Total 4th year maint.		0		0
5th year maint.	Kinnaur		0	0		0
	Wildlife Sarahan	C-157	ha.	5	600	3000
		C-158	ha.	10	600	6000

PHASE-II 2007-08							
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate	Amount
			Total 5th year maint.		15		9000
			G. Total ANR		73		413200
c)	Raising of NTFP Plantation New	Kinnaur	Sangla Kanda		6	38000	228000
			UF-153		6	38000	228000
			Total Kinnaur		12		456000
		Wildlife Sarahan	UF-Batsari Demno		10	38000	380000
			UF-159 Rakchham Kanda		10	38000	380000
			Total Sarahan		20		760000
			G. Total New NTFP		32		1216000
	1st year maint.	Kinnaur	Sangla Kanda	ha.	6	7950	47700
			UF-Kamru	ha.	6	7950	47700
			Total Kinnaur		12		95400
		Wildlife Sarahan	UF-Batsari	ha.	10	7950	79500
			UF-159 Chitkul	ha.	5	7950	39750
			UF-159 Rakchham	ha.	5	7950	39750
			Total Sarahan		20		159000
			Total 1st year maint.		32		254400
	2nd year maint.	Kinnaur			0		
		Wildlife Sarahan	UF-Chhitkul	ha.	5	2600	13000
			UF-Rackcham	ha.	10	2600	26000
			Total 2nd year Maint.		15		39000
	3rd year maint.	Kinnaur		ha.	0	1300	
		Wildlife Sarahan		ha.	0	1300	
			Total 3rd year maint.		0		0
			G. Total NTFP New & Maint.		79		1509400
d)	Treatment of Culturable Wasteland New	Kinnaur	UF-Kamru	ha.	8	28650	229200

Sl. No.	Component	Name of Division	PHASE-II 2007-08 Name of area	Unit	Quantity	Rate	Amount
			Burcha-Zalaring	ha	4	28650	114600
			Total Kinnaur		12		343800
		Wildlife Sarahan	UF-Panpo	ha	15	28650	429750
			Total Sarahan		15		429750
	1st year maintenance	Kinnaur	G. Total New		27		773550
			Kamru Sangla	ha	10	4500	45000
			Total Kinnaur		10		45000
		Wildlife Sarahan	UF-Nagastli	ha	10	4500	45000
			UF-Chhitkul	ha	10	4500	45000
			Total Sarahan		20		90000
	2nd year maint	Kinnaur	Total 1st year maint.		30		135000
				ha	0	3900	0
		Wildlife Sarahan		ha	0	3900	0
				ha	0	3900	0
				ha	0	3900	0
	3rd year maintenance	Kinnaur	Total 2nd year maint.		0		0
				ha	0	3400	0
		Wildlife Sarahan	UF-Saringcha	ha	5	3400	17000
			UF-Dungdangshee	ha	5	3400	17000
			Total 3rd year maint.		10		34000
	4th year maint.	Kinnaur			0		0
		Wildlife Sarahan			0		0
			Total 4th year maint.		0		0
	5th year maint	Kinnaur	Kamru-Sangla	ha	0	2250	0
		Wildlife Sarahan			10	2250	22500
			Total 5th year maint.		0		0
			G. Total New & Maint. (d)		77		22500
			G. Total ADF.		490		965050
							5784450

Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate	Amount
2	Improvement of Alpine Pastures New	Kinnaur	Dewar Kanda		10	10550	105500
			Sangla Kanda		15	10550	158250
			Total Kinnaur		25		263750
		Wildlife Sarahan	Mugaling Chitkul Kanda		40	10550	422000
			Jorya Rani Kanda		40	10550	422000
			Darimo Batsari Kanda		45	10550	474750
			Total Sarahan		125		1318750
	1st year maintenance	Kinnaur	G. Total New		150		1582500
			Dewar Kanda	ha	10	1100	11000
			Dhumer Kanda	ha	15	1100	16500
			Total Kinnaur		25		27500
		Wildlife Sarahan	Batsari Denmo Kanda	ha	30	1100	33000
			Nardo Chikkul Kanda	ha	40	1100	44000
			Rakcham Kanda	ha	30	1100	33000
			Total Wildlife		100		110000
	2nd year maint.	Kinnaur	Total 1st year maint.		125		137500
		Wildlife Sarahan			0	600	
			Total 2nd year maint.		0	600	
			G. Total Pasture New & Maint		275		1720000
3	Soil & Moisture Conservation Works						
a)	Treatment of land slips/slides	Kinnaur	Tongtongcha slip	L/S			
			Rukti slip	L/S			620000
			Hurba slip	L/S			1280000
				L/S			1000000

PHASE-II 2007-08						
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate Amount
			Palika slip		L/S	300000
			Total Kinnaur			3200000
		Wildlife Sarahan	Shushang slip		L/S	200000
			Shoney slip			300000
			Saringche slip			300000
			Kutange slip			400000
			Khargola slip			300000
			Chitkul slip			500000
			Batseri slip			200000
			Gongarang			300000
			Total Sarahan			2500000
			G. Total a			5700000
(b)	Treatment of Nallah	Kinnaur	Tongtongcha nallah	Km.	L/S	1000000
			Hurba khad		L/S	1200000
			Rukti kahd		L/S	1200000
			Got Khailang		L/S	500000
			Khavo Nallang		L/S	500000
			Total Kinnaur			4400000
		Wildlife Sarahan	Batseri Nalla		L/S	400000
			Jampa Garang Nalla		L/S	800000
			Shushang Nalla		L/S	800000
			Rasrang Nalla		L/S	500000
			Jorya Garang Nalla		L/S	1000000
			Shoney Nalla		L/S	500000
			Bossoring Garang Nalla		L/S	1000000
			Shipia Nalla Chitkul	L/S	L/S	400000
			Total Sarahan			5400000
			G. Total b			9800000
(c)	River bank stabilization	Kinnaur	Riverbank at Chhido		L/S	1000000
			Zolaring Gangaran (R. Bank)		L/S	800000

SI. No. Component		PHASE-II 2007-08				
	Name of Division	Name of area	Unit	Quantity	Rate	Amount
		Zalaring to Rukti L Bank		L/S	L/S	1000000
		Rukti		L/S	L/S	600000
		Ruturang		L/S	L/S	1000000
		Palingcha Ruturang (L. Bank)		L/S	L/S	1100000
		Total Kinnaur				5500000
	Wildlife Sarahan	Hurba to Singan		L/S	L/S	500000
		Kharogla to Dungdungshee		L/S	L/S	400000
		Dungdungshee to Rachham		L/S	L/S	300000
		Mastrang to Yak Farm		L/S	L/S	400000
		Yak Farm to Chitkul		L/S	L/S	500000
		Singan Batseni		L/S	L/S	700000
		Batseni Kharogla		L/S	L/S	600000
		Rachham to Mastrang		L/S	L/S	500000
		Nagasti to Mujling		L/S	L/S	600000
		Total Sarahan				4500000
		G. Total C				10000000
d)	Road side stabilization	Ruturang to Hurba (Completion)	5 Kms	L/S	L/S	200000
		Palingcha to Sangla	6 Kms. Partly	L/S	L/S	300000
		Batseni to Rachham	11 Kms partly	L/S	L/S	200000
		G. Total Road side				700000
		G. Total Soil & Moisture Conservation Works				26200000
4	Rural Infrastructure Development					
a)	Village pond/tank	Kinnaur				
		Wildlife Sarahan				
		Sangla	2 No	L/S	L/S	400000
		Rachham	1 No	L/S	L/S	200000

PHASE-II 2007-08						
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate
b)	Soil & Water Conservation Structures	Kinnaur	Total Village pond/tank			
			Kashmir	1 No.	L/S	600000
c)	Repair of spring, bawries/Kuhl & other water sources	Kinnaur	Chispan	1 No.	L/S	225000
			Total Soil & Water Cons.			450000
			Kamru	1 No.	L/S	150000
d)	Repair of village road & path/bridge Construction of foot bridge	Kinnaur	Mast Rang	1 No.	L/S	150000
			Total bawari/Kuhl			300000
			Sangla to Kamru	3 Kms.	L/S	150000
e)	Construction of foot bridges	Kinnaur	Shong to Rutrang	5 Kms	L/S	250000
			Batseni to Rachham	5 Kms	L/S	250000
			Total road/path			500000
			Over Shong Khad	1 No.	L/S	300000
			Over Batseni Nalla	1 No.	L/S	400000
5	Forest Infrastructure Development	Kinnaur	Total foot bridges			700000
			G. Total Rural			2700000
a)	Const./repair of operational buildings New	Kinnaur	Development of compount for community center at Sangla	1 No.	L/S	500000
	Maintenance	Kinnaur	Total New			500000
			Maint. Of Div. office Nichar	1 No.	L/S	100000
			Maint. Of DFO Residence Nichar	1 No.	L/S	50000

PHASE-II		2007-08					
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate	Amount
			Maint. Of Div. office compound Nihar	1 No.	L/S	L/S	100000
			Maint. Of Type-I, II, III at Nihar	7 No.	L/S	L/S	200000
			Maint. Of FG hut Kupa & Sangla	2 No.	L/S	L/S	60000
			Total Maint. Kinnaur				510000
		Wildlife Sarahan	Maint. Of Fg hut Batseni & Sangla	2 No.	L/S	L/S	50000
			Total Maint. Sarahan				50000
			Total Maint.			0	560000
b)	Construction /repair of I. path and B/path	Kinnaur	G. Total New & Maint. A Sangla to Hurba	3 Kms	L/S	L/S	1060000 150000
		Wildlife Sarahan	Chitkul to Tulla (L. Bank)	3 Kms	L/S	L/S	150000
			G. Total B				300000
c)	Construction of bridges	Kinnaur	Over Hurba Khad	1 No.	L/S	L/S	700000
			G. Total C				700000
			G. Total Forest Infrastructure Development				2060000
6	Avenue plantation & land scaping	Kinnaur	Planting of Tall avenue plantation		L/S	L/S	25000
		Wildlife Sarahan	Planting of Tall avenue plantation		L/S	L/S	25000
			Beautification and land escaping at Chitkul		L/S	L/S	500000
			G. Total Avenue plantation				550000

PHASE-II 2007-08							
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate	Amount
7	Treatment of Private Lands	Kinnaur	Kamru village	5 ha.	L/S	L/S	150000
			Sangla village	7 ha.	L/S	L/S	150000
		Wildlife	Themrang	6 ha.	L/S	L/S	300000
			G. Total Private Land				600000
8	Distribution of seedlings to people	Kinnaur			L/S	L/S	5000
		Wildlife			L/S	L/S	5000
			G. Total seedlings to people				10000
9	Wildlife Management						
A	Intensive management of Wildlife Sanctuary						
	A) Intensive management of W.L. sanctuary						
	i) Fire Protection						
		Wildlife Sarahan	a) Fire watcher for six month (three years)	5 No.	L/S	L/S	48000
			b) Equipments	L/S	L/S	L/S	50000
			c) Fire index board & publicity	L/S	L/S	L/S	50000
			d) Workshop on fire control technique	L/S	L/S	L/S	10000
			Total Fire Pro.		L/S	L/S	158000
	ii) Habitat improvement						
			a) Creation of Musk deer farm for ex-situ conservation Musk deer at Kharogla	L/S	L/S	L/S	1500000

PHASE-II 2007-08						
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate
			b) Const. of water pond & satellite	L/S	L/S	100000
	iii) Antipoaching activities		Total Habitat			
			a) Engagement of antipoaching for six month (Three years)	2	L/S	1600000
			Total Antipoaching in sanctuary area			30000
	iv) Reward & incentive to informer			L/S	L/S	30000
	v) Census operation		Total Reward & incentive			
				L/S	L/S	30000
	vi) Demarcation of boundary pillar		Total Census			40000
	vii) Salogan & Sign board			L/S	L/S	40000
	G. Total A			L/S	L/S	30000
	B) Eco-development activities			L/S	L/S	25000
						1913000
	i) Vaccination of domestic cattle			L/S	L/S	50000
	ii) Purchase of equipments & Med.			L/S	L/S	40000
	iii) Income generation activities		Vermi composting	L/S	L/S	50000
	iv) Provision for compensation against WL deprotection			L/S	L/S	100000
	v) Distribution of GI Pipes for installation of religious flag	WL Sarahan		250 No.	L/S	125000
		Kinnaur		600 No.	L/S	300000

PHASE-II 2007-08						
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate
	vi) Const. of Crematoria		Chitkul	1 No.	L/S	100000
	vii) Const. of Tracker hut				L/S	0
	viii) Installation of street solar light		Chitkul	1 No.	L/S	15000
	ix) Sulabh Shochalya		Rachham	1 No.	L/S	15000
			Batsari	1 No.	L/S	15000
			Rachham	1 No.	L/S	100000
			G. Total B			910000
			G. Total Wildlife Management			2823000
10	Training, Awareness, Extension & Publicity	Kinnaur		L/S	L/S	250000
		Wildlife Sarahan				250000
			G. Total Training, Awareness			500000
11	Research & studies	Kinnaur		L/S	L/S	100000
		Wildlife Sarahan		L/S	L/S	100000
			G. Total Research & studies			200000
12	Operational support					
a)	Establishment cost	Kinnaur	Contractual staff	L/S	L/S	400000
			Refund to Govt.	L/S	L/S	2000000
b)	Office expenses			L/S	L/S	250000
c)	Travelling allowance					200000
d)	Office equipment					0
e)	Motor Vehicle & POL					300000
f)	Aminities to staff & labour					100000
g)	Purchase of computer with accessories					0

SI. No. Component		PHASE-II 2007-08				
		Name of Division	Name of area	Unit	Quantity	Rate
			Total Kinnaur			Amount
a)	Establishment cost	Wildlife Sarahan				3250000
b)	Office expenses		Contractual staff	L/S	L/S	50000
c)	Travelling allowance			L/S	L/S	100000
d)	Office equipment					50000
e)	Motor Vehicle & POL					0
f)	Aminities to staff & labour					80000
g)	Purchase of computer with accessories					20000
						0
			Total Sarahan			300000
			G. Total Operational Support			3550000
13	Agricultural & Horticultural support	Kinnaur		L/S	L/S	300000
		Wildlife Sarahan		L/S	L/S	300000
14	Animal Husbandary support	Kinnaur	G. Total Agri, Horti.	L/S	L/S	600000
		Wildlife Sarahan		L/S	L/S	150000
15	Revenue of State		G. Total Animal Hus.			150000
				L/S	L/S	300000
			Total:-			0
16	Contingencies		Total Components			47597450
				L/S	L/S	4759745
			Grand Total for 2007-08:-			52357195

Sl. Component No	PHASE-II 2008-09		Name of area	Unit	Quant ity	Rate	Amount
	Name of Division						
Detail of works/expenditure for the year 2008-09							
1 Forest Establishment & Improvement							
a) Afforestation of Degraded Forest Lands - New	Kinnaur	C-150	ha.	10	30600	306000	
		C-162	ha.	10	30600	306000	
		C-156	ha.	10	30600	306000	
		UF-Pallingcha	ha.	10	30600	306000	
		Waglang	ha.	10	30600	306000	
		Total Kinnaur	ha.	40	30600	1224000	
	Wildlife Sarahan	UF-159 Chitkul	ha.	12	30600	367200	
		UF-160 Rekchham	ha.	10	30600	306000	
		C-162 @	ha.	10	30600	306000	
		Total Sarahan	ha.	32	30600	979200	
1st year maintenance	Kinnaur	G. Total New	ha.	76		2325600	
		UF - Wadang	ha.	15	4300	64500	
		UF - Pallingcha	ha.	10	4300	43000	
		C 165	ha.	15	4300	64500	
		Total Kinnaur	ha.	40		172000	
	Wild Life Sarahan	UF Panpo	ha.	15	4300	64500	
		UF159	ha.	10	4300	43000	
		UF Chitkul	ha.	10	4300	43000	
		Total Wildlife	ha.	35		150500	
2nd year maintenance	Kinnaur	Total 1st year maint.	ha.	75		322500	
		UF - Wadang	ha.	10	3700	37000	
		UF-Pallingcha	ha.	10	3700	37000	
		UF-Chansu	ha.	5	3700	18500	

9,79,200

1,50,370

Sl. No.	Component	PHASE-II 2008-09			
		Name of Division	Name of area	Unit	Amount
			C-165	ha	5 3700 18500
			Rukhi-Baspa	ha	3 3700 11100
			Hurba-Baspa	ha	3 3700 11100
			Total Kinnaur	36	133200
		Wild Life Sarahan	UF-Kharogla	ha	10 3700 37000
			UF-Mastrang	ha	10 3700 37000
			UF-Panpo	ha	10 3700 37000
			Total WildLife	30	111000
			Total 2nd year maint.	66	244200
	3rd year maintenance	Kinnaur	UF - Pallingcha	ha	5 2500 12500
			UF-Rangsthang	ha	5 2500 12500
			C-153	ha	5 2500 12500
			UF-Wadang	ha	5 2500 12500
			C-165	ha	5 2500 12500
			C-152 (b)	ha	5 2500 12500
			Total Kinnaur	30	75000
		Wild Life Sarahan	UF-Rackcham	ha	8 2500 20000
			UF-Mastrang	ha	5 2500 12500
			Total Sarahan	13	32500
			Total 3rd year Maint.	43	107500
	4th year maintenance	Kinnaur	UF-Pallingcha	ha	10 1700 17000
			C-154(b)	ha	5 1700 8500
			Total Kinnaur	15	25500
			UF-Rackcham	ha	10 1700 17000
			U F - Batsari	ha	10 1700 17000
			Total WildLife	20	34000

PHASE-II 2008-09							
Sl. No	Component	Name of Division	Name of area	Unit	Quant ity	Rate	Amount
	5th year maint	Kinnaur	Total 4th year Maint.		35		59500
			C-154 (a)	ha.	5	1700	8500
			Total:-		5		8500
		Wild Life Sarahan			0	1700	0
			Total 5th year Maint.		5		8500
			G. Total New & Maint (a)		300		3067800
b)	Assisted Natural Regeneration New	Kinnaur	C-155	ha.	7	17000	119000
			C-153	ha.	5	17000	85000
			Total Kinnaur		12		204000
		Wildlife Sarahan	UF-159 Chitkul	ha.	10	17000	170000
			Total Wild Life		10		170000
			G. Total New		22		374000
	1st year maint	Kinnaur	C-154 (b)	ha.	5	1900	9500
			Total Kinnaur		5		9500
		Wild Life Sarahan	UF-159 Rakchham	ha.	10	1900	19000
			UF-Chitkul	ha.	5	1900	9500
			Total WildLife		15		28500
			Total 1st year maint.		20		38000
	2nd year maint.	Kinnaur	C-152 (b)	ha.	8	1100	8800
			Total Kinnaur		8		8800
		Wild Life Sarahan	UF-159 Shoney	ha.	10	1100	11000
			UF-160 Masfrang	ha.	10	1100	11000
			Total Wildlife		20		22000

PHASE-II 2008-09					
Sl. Component No	Name of Division	Name of area	Unit	Quantity	Amount
		Total 2nd year maint.		28	30800
3rd year maint.	Kinnaur		ha	0	900
	Wildlife Sarahan	C.No.-159	ha	0	900
4th year maint.	Kinnaur	Total 3rd year maint.	ha	10	9000
	Wildlife Sarahan		ha	0	600
5th year maint.	Kinnaur	Total 4th year maint	ha	0	600
	Wildlife Sarahan		ha	0	600
		Total 5th year maint	ha	0	0
c) Raising of NTFP Plantations New	Kinnaur	G. Total ANR	ha.	80	451800
		Sangla Kanda II	ha.	5	38000
		Kamru Kanda II	ha.	5	38000
		Total Kinnaur		10	380000
	Wildlife Sarahan	UF-159 Janpa	ha	5	38000
		Total Sarahan		5	190000
1st year maint	Kinnaur	G. Total New NTFP		15	570000
		Sangla Kanda		6	7950
		UF-153		6	7950
		Total Kinnaur		12	95400
	Wildlife Sarahan	UF-Batsari Demno		10	79500
		UF-159 Rakchham Kanda		10	79500
		Total Sarahan		20	159000
2nd year maint.	Kinnaur	Total 1st year maint.		32	254400
		Sangla Kanda	ha	6	15600

PHASE-II 2008-09					
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Amount
		UF-Kamru	ha.	6	2600
		Total Kinnaur		12	15600
	Wildlife Sarahan	UF-Batsari	ha.	10	2600
		UF-159 Chitkul	ha.	5	2600
		UF-159 Rakcham	ha.	5	2600
		Total Sarahan		20	13000
		Total 2nd year Maint.		32	52000
	3rd year maint.	Kinnaur		0	83200
		Wildlife Sarahan	ha.	5	1300
		UF-Rackcham	ha.	10	1300
		Total 3rd year maint.		15	6500
		G. Total NTFP New & Maint.		94	19500
d) Treatment of Culturable Wasteland New	Kinnaur	UF-Kaitra	ha.	4	28650
		UF-Tongtongcha	ha.	4	28650
		Total Kinnaur		8	114800
	Wildlife Sarahan	UF-Rackcham	ha.	5	28650
		Total Sarahan		5	143250
		G. Total New (d)		13	143250
1st year maintenance	Kinnaur	UF-Kamru	ha.	8	372450
		Burcha-Zalaring	ha.	4	36000
		Total Kinnaur		12	18000
	Wildlife Sarahan	UF-Panpo	ha.	15	54000
		Total Sarahan		15	67500
		Total 1st year maint.		27	121500
2nd year maint	Kinnaur	Kamru Sangla	ha.	10	39000

PHASE-II 2008-09					
Sl. No.	Component	Name of Division	Name of area	Unit	Quant Rate Amount
			G. Total New	150	1582500
	1st year maintenance	Kinnaur	Dewar Kanda	10	1100
			Sangla Kanda	15	1100
			Total Kinnaur	25	27600
		Wildlife Sarahan	Mugaling Chitkul Kanda	40	1100
			Jorya Rani Kanda	40	1100
			Danmo Balsei Kanda	45	1100
			Total Sarahan	125	137500
			Total 1st year maint.	150	165000
	2nd year maint.	Kinnaur	Dewar Kanda	10	600
			Dhumer Kanda	15	600
			Total Kinnaur	25	16000
		Wildlife Sarahan	Balsei Denmo Kanda	30	600
			Nardo Chitkul Kanda	40	600
			Rakham Kanda	30	600
			Total Wildlife	100	60000
			Total 2nd year Maint.	125	75000
			G. Total Pasture New & Maint.	425	1822500
3	Soil & Moisture Conservation Works				
a)	Treatment of land slips/slides	Kinnaur	Tongtongcha slip	L/S	560000
			Rukti slip	L/S	1200000
			Hurba slip	L/S	1200000
			Kimmo slip	L/S	300000

PHASE-II 2008-09		Name of Division Name of area			
Sl. Component No.		Name of Division	Name of area	Unit	Quant Rate Amount
		Wildlife Sarahan	Total Kinnaur		3260000
			Shushang slip	L/S	500000
			Racham slip	L/S	300000
			Saringcha slip	L/S	300000
			Kharogla slip	L/S	800000
			Chitkul slip	L/S	900000
			Nagasti slip	L/S	400000
			Gorgrang slip	L/S	600000
			Kutange slip	L/S	600000
			Shoney Slip	L/S	400000
			Batseri slip	L/S	500000
			Total Sarahan		5400000
			G. Total a		8660000
b) Treatment of Nallah		Kinnaur	Tongtongcha nallah	Km	500000
			Hurba Nalla	L/S	1200000
			Rukti Nalla	L/S	1500000
			Gangaran Nalla	L/S	300000
			Shong Nalla	L/S	1000000
			Khayo Nallang	L/S	400000
			Total Kinnaur		4900000
		Wildlife Sarahan	Saringcha Nalla	L/S	600000
			Batseri Nalla	L/S	1000000
			Shoney Nalla	L/S	500000
			Janpa Garang Nalla	L/S	600000
			Mangsa Garang Nalla	L/S	500000
			Jorya Garang Nalla	L/S	1000000
			NardoGarang Nalla	L/S	1000000
			Rasrang Nalla	L/S	500000

PHASE-II 2008-09					
Sl. Component No	Name of Division	Name of area	Unit	Quant Rate	Amount
		Total Sarahan			5700000
		G. Total b			10600000
c) River bank stabilization	Kinnaur	Zolaring Gangaran (R. Bank)	L/S	L/S	1200000
		Kashmir to Hurbu	L/S	L/S	1200000
		Rukti	L/S	L/S	1000000
		Palingcha to Ruturang (R. Bank)	L/S	L/S	1200000
		Changsarang	L/S	L/S	500000
		Zalarang to Rukti L. Bank	L/S	L/S	1000000
		Palingcha to Ruturang (L. Bank)	L/S	L/S	500000
		Total Kinnaur			6600000
	Wildlife Sarahan	Batsari to Kharogla	L/S	L/S	200000
		Dungdungshe to Rachham	L/S	L/S	600000
		Mastrang to Yak Farm	L/S	L/S	500000
		Rachham to Mastrang	L/S	L/S	1000000
		Yak Farm to Chitkul	L/S	L/S	900000
		Kharogla to Dungdungcha	L/S	L/S	500000
		Singan Batsari	L/S	L/S	700000
		Total Sarahan			4400000
		G. Total C			11000000
d) Road side stabilization	Kinnaur	Palingcha to Sangla (Completion)	6 Kms.	L/S	300000
	Wildlife Sarahan	Batsari to Rachham (Completion)	11 Kms	L/S	400000
		G. Total Road side			700000

PHASE-II 2008-09						
Sl. No.	Component	Name of Division	Name of area	Unit	Quant Rate	Amount
4	Rural Infrastructure Development					
a)	Village pond/tank	Kinnaur	Kuppa	1 No	L/S	200000
		Wildlife Sarahan	Batseni	1 No	L/S	200000
			Total Village pond/tank			400000
b)	Soil & Water Conservation Structures	Kinnaur	Sangla	1 No	L/S	225000
		Wildlife Sarahan	Chitkul	1 No	L/S	225000
			Total Soil & Water Cons.			450000
c)	Repair of spring, bawries/Kuhl & other water sources	Kinnaur	Kuppa	1 No	L/S	150000
		Wildlife Sarahan	Rakchham	1 No	L/S	150000
			Total bawari/Kuhl			300000
d)	Repair of village road & path/ bridge	Kinnaur	FRH Sangla to Hurba Khad	2	L/S	100000
	Construction of foot bridge	Wildlife Sarahan	Chhitkul to Lalanti	5	L/S	250000
			Total road/path			350000
e)	Construction of foot bridges	Kinnaur	Over Gangarang Khad	1 No	L/S	400000
		Wildlife Sarahan	Over Rasrang Khad	1 No	L/S	400000
			Total foot bridges			800000
			G. Total Rural			2300000

PHASE-II 2008-09					
Sl. Component No	Name of Division	Name of area	Unit	Quant ity	Rate Amount
5	Forest Infrastructure Development				
	Maintenance	Kinnaur			
		Kinnaur			
		Total New			0
		Maint. Of Div. office Nichar	1 No	L/S	100000
		Maint. Of DFO Residence Nichar	1 No	L/S	50000
		Maint. Of Div. office compound Nichar	1 No	L/S	100000
		Maint. Of Type-I, II, III at Nichar	7 No	L/S	200000
		Maint. Of Tracker Hut at Chentsu Kanda	1 No	L/S	100000
		Total Maint. Kinnaur			550000
		Maint. Of Fg hut Chhiku & Rakchham	2 No	L/S	50000
		Total Maint. Sarahan			50000
		Total Maint.		0	600000
		G. Total New & Maint. A			600000
b)	Construction /repair of l path and B/path	Kinnaur	3	L/S	150000
		Wildlife Sarahan	3 Kms	L/S	150000
		Dangdangshe to Rakchham Kanda	3 Kms	L/S	150000
		G. Total B			300000
c)	Construction of bridges	Kinnaur	0	L/S	0
		Wildlife Sarahan	0	L/S	0
		G. Total C			0

PHASE-II 2008-09					
Sl. Component No.	Name of Division	Name of area	Unit	Quant ity	Amount
		G. Total Forest Infrastructure Development			900000
6 Avenue plantation & land scaping	Kinnaur	Planting of Tall avenue plantation	L/S	L/S	25000
	Wildlife Sarahan	Planting of Tall avenue plantation	L/S	L/S	25000
		G. Total Avenue plantation			50000
7 Treatment of Private Lands	Kinnaur	Sangla village(Contd & completion)	7 ha	L/S	200000
	Wildlife	Boehingsaring	6 ha	L/S	300000
		G. Total Private Land			500000
8 Distribution of seedlings to people	Kinnaur			L/S	5000
	Wildlife			L/S	5000
		G. Total seedlings to people			10000
9 Wildlife Management					
A Intensive management of Wildlife Sanctuary					
A) Intensive management of W L sanctuary					
i) Fire Protection					

PHASE-II 2008-09						
Sl. No	Component	Name of Division	Name of area	Unit	Quant Rate ity	Amount
		Wildlife Sarahan	a) Fire watcher for six month (three years)	5 No.	L/S	48000
			b) Equipments	L/S	L/S	0
			c) Fire index board & publicity	L/S	L/S	25000
			d) Workshop on fire control technique	L/S	L/S	10000
			Total Fire Pro.		L/S	83000
	ii) Habitat improvement		a) Creation of Musk deer farm for ex-situ conservation Musk deer at Kharogla	L/S	L/S	3000000
			b) Const. of water pond & saltlick	L/S	L/S	100000
			Total Habitat		L/S	3100000
	iii) Antipoaching activities		a) Engagement of antipoaching for six month (Three years)	2	L/S	90000
			Total Antipoaching		L/S	30000
	iv) Reward & incentive to informer		In sanctuary area	L/S	L/S	30000
			Total Reward & Incentive		L/S	30000
	v) Census operation		Total Census		L/S	0
	vi) Demarcation of boundary pillar		Demarcation of Boundary Pillars	L/S	L/S	0
	vii) Salogan & Sign board		Salogan & sign boards	L/S	L/S	30000
	G. Total A		G. Total A		L/S	3273000
	B) Eco-development activities					

PHASE-II 2008-09						
Sl. No.	Component	Name of Division	Name of area	Unit	Quant- ity	Amount
		Wildlife Sarahan	G. Total Research & studies	L/S	L/S	50000
						100000
12	Operational support					
a)	Establishment cost	Kinnaur	Contractual staff	L/S	L/S	400000
			Refund to Govt.	L/S	L/S	2000000
b)	Office expenses			L/S	L/S	250000
c)	Travelling allowance					200000
d)	Office equipment					0
e)	Motor Vehicle & POL					300000
f)	Aminities to staff & labour					100000
g)	Purchase of computer with accessories					0
			Total Kinnaur			3250000
a)	Establishment cost	Wildlife Sarahan	Contractual staff	L/S	L/S	50000
b)	Office expenses			L/S	L/S	100000
c)	Travelling allowance					50000
d)	Office equipment					0
e)	Motor Vehicle & POL					80000
f)	Aminities to staff & labour					20000
g)	Purchase of computer with accessories					0
			Total Sarahan			300000
			G. Total Operational Support			3550000
13	Agricultural & Horticultural support	Kinnaur		L/S	L/S	300000

PHASE-II 2008-09					
Sl. Component No	Name of Division	Name of area	Unit	Quant Rate ity	Amount
		Wildlife Sarahan	L/S	L/S	300000
					600000
14 Animal Husbandary support	Kinnaur	G. Total Agri. Horti.	L/S	L/S	150000
	Wildlife Sarahan				150000
		G. Total Animal Hus.			300000
15 Revenue of State		Total:-	L/S	L/S	0
		Total Components			0
16 Contingencies			L/S	L/S	50650650
		Grand Total for 2008-09:-			5065065
					55715715

		PHASE-II 2009-10			
Sl. No.	Component	Name of Division	Name of area	Unit	Amount
Detail of works/expenditure for the year 2009-10					
1	Forest Establishment & Improvement				
a)	Afforestation of Degraded Forest Lands	Kinnaur	C-150	ha.	43000
	1st year maintenance		C-162	ha.	43000
			C-156	ha.	43000
			UF-Pallingcha	ha.	43000
			Wagdag	ha.	17200
			Total Kinnaur	44	189200
		Wildlife Sarahan	UF-159 Chitkul	ha.	51600
			UF-160 Rakchham	ha.	43000
			C-162 @	ha.	43000
			Total Sarahan	32	137600
			Total 1st year maint.	76	326800
	2nd year maintenance	Kinnaur	UF - Wadang	ha.	55500
			UF - Palingcha	ha.	37000
			C-165	ha.	55500
			Total Kinnaur	40	148000
		Wild Life Sarahan	UF Panpo	ha.	55500
			UF159	ha.	37000
			UF Chhitkul	ha.	37000
			Total WildLife	35	129500
			Total 2nd year maint.	75	277500
	3rd year maintenance	Kinnaur	UF - Wadang	ha.	25000
			UF-Pallingcha	ha.	25000
			UF-Chansu	ha.	12500
			C-165	ha.	12500
			Rukti-Baspa	ha.	7500
			Hurba-Baspa	ha.	7500

PHASE-II 2009-10						
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Rate	Amount
		Total Kinnaur		36		90000
	Wild Life Sarahan	UF-Kharogla	ha	10	2500	25000
		UF-Mastrang	ha	10	2500	25000
		UF-Panpo	ha	10	2500	25000
		Total WildLife		30		75000
		Total 3rd year maint.		66		165000
4th year maintenance	Kinnaur	UF - Palingcha	ha	5	1700	8500
		UF-Rangsthang	ha	5	1700	8500
		C-153	ha	5	1700	8500
		UF-Wadang	ha	5	1700	8500
		C-165	ha	5	1700	8500
		C-162 (b)	ha	5	1700	8500
		Total Kinnaur		30		51000
	Wild Life Sarahan	UF-Rackcham	ha	8	1700	13600
		UF-Mastrang	ha	5	1700	8500
		Total Sarahan		13		22100
		Total 4th year Maint.		43		73100
5th year maint	Kinnaur	UF-Palingcha	ha	10	1700	17000
		C-154(b)	ha	5	1700	8500
		Total Kinnaur		15		25500
		UF-Rackcham	ha	10	1700	17000
		UF - Batsen	ha	10	1700	17000
		Total WildLife		20		34000
		Total 5th year Maint.		35		59500
		G. Total Maint (a)		295		901900
b) Assisted Natural Regeneration	Kinnaur	C-155	ha	7	1900	13300
1st year maint		C-153	ha	5	1900	9500
		Total kinnaur		12		22800

PHASE-II 2009-10					
Sl. No.	Component	Name of Division	Name of area	Unit	Amount
		Wildlife Sarahan	UF-159 Chitkul	ha	19000
			Total Wild Life	10	19000
	2nd year maint.	Kinnaur	Total 1st year maint.	22	41800
			C-154 (b)	ha	5500
			Total Kinnaur	5	5500
		Wild Life Sarahan	UF-159 Rakchham	ha	11000
			UF-Chitkul	ha	5500
			Total Wild Life	15	16500
			Total 2nd year maint.	20	22000
	3rd year maint.	Kinnaur	C-152 (b)	ha	900
			Total Kinnaur	8	7200
		Wild Life Sarahan	UF-159 Shorey	ha	9000
			UF-160 Mastrang	ha	9000
			Total Wildlife	20	18000
			Total 3rd year maint.	28	25200
	4th year maint.	Kinnaur		ha	0
				ha	0
		Wildlife Sarahan	C.No.-159	ha	6000
			Total 4th year maint.	10	6000
	5th year maint.	Kinnaur		ha	0
		Wildlife Sarahan		ha	0
			Total 5th year maint	0	0
			G. Total ANR	80	95000
c) Raising of NTFP Plantations		Kinnaur	Sangla Kanda II	ha	39750
1st year maint			Kamru Kanda II	ha	39750
			Total Kinnaur	10	79500
		Wildlife Sarahan	UF-159 Janga	ha	39750
			Total Sarahan	5	39750

PHASE-II 2009-10						
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Amount
	2nd year maint.	Kinnaur	Total 1st year maint.		15	119250
			Sangla Kanda		6	2600
			UF-153		6	15600
			Total Kinnaur		12	15600
		Wildlife Sarahan	UF-Batsari Demno		10	31200
			UF-159 Rakchham Kanda		10	2600
			Total Sarahan		10	26000
			Total 2nd year Maint.		20	52000
	3rd year maint.	Kinnaur	Total 2nd year Maint.		32	83200
			Sangla Kanda	ha.	6	7800
			UF-Kamru	ha.	6	1300
			Total Kinnaur		12	15600
		Wildlife Sarahan	UF-Batsari	ha.	10	1300
			UF-159 Chitkul	ha.	5	1300
			UF-159 Rakchham	ha.	5	6500
			Total Sarahan		20	8500
			Total 3rd year maint.		32	26000
			G. Total Maint.		79	41600
d)	Treatment of Culturable Wasteland	Kinnaur	UF-Kaitra	ha.	4	244050
	1st year maintenance		UF-Tongtongcha	ha.	4	18000
			Total Kinnaur		8	18000
		Wildlife Sarahan	UF-Rackcham	ha.	5	36000
			Total Sarahan		5	22500
			Total 1st year maint.		13	22500
	2nd year maint.	Kinnaur	UF-Kamru	ha.	8	58500
			Burcha-Zelaring	ha.	4	31200
			Total Kinnaur		12	15600
		Wildlife Sarahan	UF-Panpo	ha.	15	46800
			Total Sarahan		15	58500

Sl. No.	Component	PHASE-II 2009-10				
		Name of Division	Name of area	Unit	Quantity	Amount
	3rd year maintenance	Kinnaur	Total 2nd year Maint.		27	105300
			Kamru Sangla	ha	10	3400
			Total Kinnaur			34000
		Wildlife Sarahan	UF-Nagasti	ha	10	34000
			UF-Chhitkul	ha	10	34000
			Total Sarahan		20	68000
	4th year maint.	Kinnaur	Total 3rd year maint.		30	102000
				ha	0	2250
				ha	0	2250
		Wildlife Sarahan		ha	0	2250
				ha	0	2250
				ha	0	2250
	5th year maint	Kinnaur	Total 4th year maint.		0	0
		Wildlife Sarahan	UF-Saringchia	ha	0	2250
			UF-Dungdangshee	ha	5	11250
			Total 5th year maint.		5	11250
			G. Total (d) Maint.		10	22500
	2 Improvement of Alpine Pastures New	Kinnaur	G.Total ADF		80	288300
				ha	0	1529250
		Wildlife Sarahan	Chitkul Janpa Kanda	ha	36	10550
			Nagasti Kanda	ha	35	10550
			Total Sarahan		70	738500
	1st year maintenance	Kinnaur	G. Total New		70	738500
			Sangla Kanda	ha	10	11000
			Dewar Kanda	ha	10	11000
			Total Kinnaur		20	22000
		Wildlife Sarahan	Dewar Kanda (R Bank)	ha	40	44000
			Bathori Thach Chitkul	ha	60	66000

PHASE-II 2009-10					
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Rate Amount
		UF-159 Batcheri Kanda	ha.	30	1100 33000
		Total Sarahan		130	143000
		Total 1st year maint.		150	165000
2nd year maint.	Kinnaur	Dewar Kanda	10	600	6000
		Sangla Kanda	15	600	9000
		Total Kinnaur		25	15000
	Wildlife Sarahan	Mugaling Chitkul Kanda	40	600	24000
		Jorya Rani Kanda	40	600	24000
		Danmo Batsari Kanda	45	600	27000
		Total Sarahan		125	75000
		Total 2nd year Maint.		150	90000
		G. Total Pasture New & Maint.		370	993500
3 Soil & Moisture Conservation Works					
a) Treatment of land slips/slides					
	Kinnaur	Ruturang slip		L/S	L/S 1500000
		Rukti		L/S	L/S 1000000
		Ruturang (Right) slip		L/S	L/S 1500000
		Total Kinnaur			4000000
	Wildlife Sarahan	Shushang slip			200000
		Rachham slip			300000
		Saringcha slip			300000
		Kharopla slip			400000
		Chitkul slip			700000
		Nagasti slip			200000
		Batsari slip			800000
		Gangarang			300000

PHASE-II 2009-10						
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Rate	Amount
		Kutanga				400000
		Total Sarahan				3600000
		G. Total a				7600000
b) Treatment of Nallah	Kinnaur	Gangarang Nalla	Km.	L/S	L/S	800000
		Hurba Nalla		L/S	L/S	1200000
		Rukti Nalla		L/S	L/S	1200000
		Tongtongcha Nalla		L/S	L/S	500000
		Shong Nalla		L/S	L/S	1000000
		Total Kinnaur				4700000
	Wildlife Sarahan	Shirangcha		L/S	L/S	200000
		Batsari Nalla		L/S	L/S	600000
		Shoney Nalla		L/S	L/S	600000
		Nardo Garang		L/S	L/S	1000000
		Kharogla Nalla		L/S	L/S	1000000
		Noshing Khad		L/S	L/S	500000
		Hugru Garang Nalla		L/S	L/S	1000000
		Shanchya Garang		L/S	L/S	1200000
		Total Sarahan				6100000
		G. Total b				10800000
c) River bank stabilization	Kinnaur	Rukti		L/S	L/S	500000
		Changsaring		L/S	L/S	500000
		Pallingcha-Ruturang(R Bank)		L/S	L/S	500000
		Pallingcha-Ruturang(L Bank)		L/S	L/S	400000
		Zolaring Gangrang(R Bank)		L/S	L/S	1000000
		Total Kinnaur				2900000
	Wildlife Sarahan	Batsari Kharogla		L/S	L/S	1000000
		Racktham to Mastrang		L/S	L/S	500000
		Kharogla to Dungdungcha		L/S	L/S	300000
		Dungdungshe to Rachham		L/S	L/S	500000
		Mastrang to Yak Farm		L/S	L/S	300000

PHASE-II 2009-10						
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Rate	Amount
		Yak Farm to Chitkul		L/S	L/S	600000
		Singan Batseri		L/S	L/S	500000
		Total Sarahan				3700000
		G. Total C				6600000
						25000000
d) Road side stabilization	Kinnaur	Sangla to Sangla Kanda	3.5 Kms.	L/S	L/S	350000
	Wildlife Sarahan	Rachham to Chitkul	10 Kms Partly	L/S	L/S	500000
		G. Total Road side				850000
4 Rural Infrastructure Development						
a) Village pond/tank	Kinnaur					0
	Wildlife Sarahan					0
		Total Village pond/tank				0
b) Soil & Water Conservation Structures	Kinnaur	Chansu	1 No.	L/S	L/S	225000
	Wildlife Sarahan					0
		Total Soil & Water Cons.				225000
c) Repair of spring, bawries/Kuhl & other water sources	Kinnaur	Chansu	1 No.	L/S	L/S	150000
	Wildlife Sarahan	Kharogla	1 No.	L/S	L/S	150000
		Total bawari/Kuhl				300000
d) Repair of village road & path/ bridge Construction of foot bridge	Kinnaur	Hurba to Dewar Kanda	5 Kms	L/S	L/S	250000

PHASE-II 2009-10						
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Rate	Amount
	Wildlife Sarahan	Chikul to Lalanti (cont. & completion)	5 Kms	L/S	L/S	250000
e) Construction of foot bridges	Kinnaur	Total road/path Over Gangarang Khad (Cont. & completion)	1 No.	L/S	L/S	500000 400000
	Wildlife Sarahan	Over Shoney Khad	1 No.	L/S	L/S	400000
		Total foot bridges				800000
		G. Total Rural				1825000
5 Forest Infrastructure Development						
a) Const./repair of operational buildings New	Kinnaur	New				0
Maintenance	Kinnaur	Maint. Of Div. office Nichar	1 No.	L/S	L/S	100000
		Maint. Of DFO Residence Nichar	1 No.	L/S	L/S	50000
		Maint. Of Div. office compound Nichar	1 No.	L/S	L/S	50000
		Maint. Of Type-I, II, III at Nichar	7 No.	L/S	L/S	100000
		Total Maint. Kinnaur				300000
	Wildlife Sarahan	Total Maint.		0		300000
		G. Total New & Maint. A				300000
b) Construction /repair of I. path and B/path	Kinnaur					
	Wildlife Sarahan					
		G. Total B		0 L/S	L/S	0
c) Construction of bridges	Kinnaur					0
	Wildlife Sarahan					
		G. Total C				0

PHASE-II 2009-10						
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Amount
6	Avenue plantation & land scaping	Kinnaur	G. Total Forest Infrastructure Development Planting of Tall avenue plantation		L/S	300000
		Wildlife Sarahan	Beautification of Lake at Kupa Planting of Tall avenue plantation		L/S	25000
			G. Total Avenue plantation			550000
7	Treatment of Private Lands	Kinnaur				
		Wildlife	Rakcham Right Bank	2 ha	L/S	100000
			G. Total Private Land			100000
8	Distribution of seedlings to people	Kinnaur			L/S	5000
		Wildlife			L/S	5000
			G. Total seedlings to people			10000
9	Wildlife Management					
A	Intensive management of Wildlife Sanctuary					
	A) Intensive management of W.L. sanctuary					
	i) Fire Protection	Wildlife Sarahan	a) Fire watcher for six month (three years) b) Equipments c) Fire index board & publicity d) Workshop on fire control technique	5 No.	L/S	48000
					L/S	0
					L/S	0
					L/S	10000

Sl. Component		PHASE-II 2009-10				
Sl. No.	Name of Division	Name of area	Unit	Quantity	Rate	Amount
		Total Fire Pro.		L/S	L/S	58000
ii) Habitat improvement						
		a) Creation of Musk deer farm for ex-situ conservation Musk deer at Kharogla	L/S	L/S	L/S	3000000
		b) Const. of water pond & saltlick	L/S	L/S	L/S	50000
		Total Habitat		L/S	L/S	3050000
iii) Antipoaching activities		a) Engagement of antipoacher for six month (Three years)	2	L/S	L/S	30000
		Total Antipoaching		L/S	L/S	30000
iv) Reward & incentive to informer		in sanctuary area	L/S	L/S	L/S	30000
		Total Reward & Incentive		L/S	L/S	30000
v) Census operation			L/S	L/S	L/S	40000
		Total Census		L/S	L/S	40000
vi) Demarcation of boundary pillar		Const. / Maint. Of B/Pillar	L/S	L/S	L/S	20000
vii) Salogan & Sign board			L/S	L/S	L/S	0
G. Total A				L/S	L/S	3228000
B) Eco-development activities						
i) Vaccination of domestic cattle			L/S	L/S	L/S	50000
ii) Purchase of equipments & Med.			L/S	L/S	L/S	40000
iii) Income generation activities		Vermi composting	L/S	L/S	L/S	50000

PHASE-II 2009-10						
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Amount
	iv) Provision for compensation against WL deprivation			L/S	L/S	100000
	v) Distribution of GI Pipes for installation of religious flag				L/S	0
	vi) Const. of Crematoria		Dangdangche	1 No.	L/S	100000
	vii) Const. of Tracker hut				L/S	0
	viii) Installation of street solar light				L/S	0
	ix) Sulabh Shochalya		Batseni	1 No.	L/S	100000
			G. Total B			440000
			G. Total Wildlife Management			3668000
10	Training, Awareness, Extension & Publicity	Kinnaur		L/S	L/S	250000
		Wildlife Sarahan				250000
			G. Total Training, Awareness			500000
11	Research & studies	Kinnaur		L/S	L/S	50000
		Wildlife Sarahan		L/S	L/S	50000
			G. Total Research & studies			100000
12	Operational support					
a)	Establishment cost	Kinnaur	Contractual staff	L/S	L/S	400000
			Refund to Govt.	L/S	L/S	0
b)	Office expenses					
c)	Travelling allowance					
d)	Office equipment					
e)	Motor Vehicle & POL					
f)	Aminities to staff & labour					
						300000
						100000

PHASE-II 2009-10						
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate
g)	Purchase of computer with accessories					0
			Total Kinnaur			1250000
a)	Establishment cost	Wildlife Sarahan				
b)	Office expenses		Contractual staff	L/S	L/S	L/S
c)	Travelling allowance			L/S	L/S	L/S
d)	Office equipment					25000
e)	Motor Vehicle & POL					0
f)	Aminities to staff & labour					40000
g)	Purchase of computer with accessories					10000
						0
			Total Sarahan			175000
			G. Total Operational Support			1425000
13	Agricultural & Horticultural support	Kinnaur		L/S	L/S	L/S
		Wildlife Sarahan		L/S	L/S	L/S
				L/S	L/S	L/S
14	Animal Husbandary support	Kinnaur		L/S	L/S	L/S
		Wildlife Sarahan				150000
			G. Total Animal Hus.			300000
15	Revenue of State			L/S	L/S	L/S
			Total:-			0
16	Contingencies		Total Components			37750750
				L/S	L/S	L/S
			Grand Total for 2009-10:-			41525825

		PHASE-II 2010-11			
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Amount
Detail of works/expenditure for the year 2010-11					
1	Forest Establishment & Improvement				
a)	Afforestation of Degraded Forest Lands	Kinnaur	ha	10	37000
	2nd year maintenance	C-150	ha	10	37000
		C-162	ha	10	37000
		C-156	ha	10	37000
		UF-Pallingcha	ha	10	37000
		Wagdar	ha	4	14800
		Total Kinnaur		44	162800
		Wildlife Sarahan	ha	12	37000
		UF-159 Chitkul	ha	10	37000
		UF-160 Rakchham	ha	10	37000
		C-162 @	ha	10	37000
		Total Sarahan		32	118400
		Total 2nd year maint.		76	281200
	3rd year maintenance	Kinnaur	ha	15	25000
		UF - Wedang	ha	10	25000
		UF - Pallingcha	ha	15	25000
		C-165	ha	40	100000
		Total Kinnaur		40	100000
		Wild Life Sarahan	ha	15	25000
		UF Panpo	ha	10	25000
		UF 159	ha	10	25000
		UF Chitkul	ha	10	25000
		Total Wildlife		35	87500
		Total 3rd year maint.		75	187500
	4th year maintenance	Kinnaur	ha	10	17000
		UF - Wedang	ha	10	17000
		UF-Pallingcha	ha	5	8500
		UF-Chansu	ha	5	8500
		C-165	ha	3	5100
		Rukti-Baspa	ha	3	17000

PHASE-II 2010-11						
Sl. Component No.	Name of Division	Name of area	Unit	Quan tity	Rate	Amount
		Hurba-Baspa	ha.	3	1700	5100
		Total Kinnaur		36		61200
	Wild Life Sarahan	UF-Kharogla	ha	10	1700	17000
		UF-Mastrang	ha.	10	1700	17000
		UF-Panpo	ha.	10	1700	17000
		Total WildLife		30		51000
5th year maint		Total 4th year maint.		66		112200
	Kinnaur	UF - Palingcha	ha.	5	1700	8500
		UF-Rangsthang	ha	5	1700	8500
		C-153	ha.	5	1700	8500
		UF-Wadang	ha	5	1700	8500
		C-165	ha	5	1700	8500
		C-152 (b)	ha	5	1700	8500
		Total Kinnaur		30		51000
	Wild Life Sarahan	UF-Rackcham	ha	8	1700	13800
		UF-Mastrang	ha	5	1700	8500
		Total Sarahan		13		22100
		Total 5th year Maint.		43		73100
b) Assisted Natural Regeneration		G. Total Maint (a)		260		654000
2nd year maint	Kinnaur	C-155	ha	7	1100	7700
		C-153	ha	5	1100	5500
		Total kinnaur		12		13200
	Wildlife Sarahan	UF-159 Chikul	ha	10	1100	11000
		Total Wild Life		10		11000
3rd year maint.		Total 2nd year maint.		22		24200
	Kinnaur	C-154 (b)	ha	5	900	4500
		Total Kinnaur		5		4500
	Wild Life Sarahan	UF-159 Rakchham	ha	10	900	9000

Sl. Component No.	PHASE-II 2010-11			
	Name of Division	Name of area	Unit	Quantity
		UF-Chitkul	ha	5
		Total Wildlife		15
		Total 3rd year maint.		20
	4th year maint.	C-152 (b)	ha	8
		Total Kinnaur		8
	Wild Life Sarahan	UF-159 Shoney	ha	10
		UF-160 Mastrang	ha	10
		Total Wildlife		20
		Total 4th year maint.		28
				16800
	5th year maint	Kinnaur	ha	0
			ha	0
		Wildlife Sarahan	ha	10
		C.No.-159		6000
		Total 5th year maint.		10
		G. Total ANR b		80
c) Raising of NTFP Plantations	Kinnaur	Sangla Kanda II	ha	5
2nd year maint.		Kamru Kanda II	ha	5
		Total Kinnaur		10
	Wildlife Sarahan	UF-159 Janpa	ha	5
		Total Sarahan		5
		Total 2nd year maint.		15
	3rd year maint.	Sangla Kanda	ha	6
		UF-153		6
		Total Kinnaur		12
	Wildlife Sarahan	UF-Batsani Demno		10
		UF-159 Rakchham Kanda		10
		Total Sarahan		20
		Total 3rd year maint.		32
				41600

PHASE-II 2010-11					
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Amount
d)	Treatment of Culturable Wasteland				
		Kinnaur		47	80600
		UF-Kaifra	ha.	4	3900
	2nd year maint				15600
		UF-Tongtongcha	ha.	4	3900
		Total Kinnaur		8	31200
		Wildlife Sarahan			
		UF-Rackcham	ha.	5	3900
		Total Sarahan		5	19500
		Total 2nd year maint.		13	50700
	3rd year maintenance				
		Kinnaur			
		UF-Kamru	ha.	8	3400
		Burcha-Zalaring	ha.	4	3400
		Total Kinnaur		12	40800
		Wildlife Sarahan			
		UF-Panpo	ha.	15	3400
		Total Sarahan		15	51000
		Total 3rd year Maint.		27	91800
	4th year maint.				
		Kinnaur			
		Kamru Sangla	ha.	10	2250
		Total Kinnaur		10	22500
		Wildlife Sarahan			
		UF-Nageati	ha.	10	2250
		UF-Chhikul	ha.	10	2250
		Total Sarahan		20	45000
		Total 4th year maint.		30	67500
	5th year maint				
		Kinnaur			
			ha.	0	2250
			ha.	0	2250
		Wildlife Sarahan			
			ha.	0	2250
			ha.	0	2250
			ha.	0	2250
		Total 5th year maint.		0	0
		G. Total (d) Maint.		70	210000
		G.Total ADF			1009600

PHASE-II 2010-11							
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate	Amount
2	Improvement of Alpine Pastures	Kinnaur		ha.	0	1100	0
	1st year maintenance	Wildlife Sarahan	Chitkul Janpa Kanda	ha.	35	1100	38500
			Nagasti Kanda	ha.	35	1100	38500
			Total Sarahan		70		77000
			Total 1st year maint.		70		77000
	2nd year maint.	Kinnaur	Sangla Kanda	ha.	10	600	6000
			Dewar Kanda	ha.	10	600	6000
			Total Kinnaur		20		12000
		Wildlife Sarahan	Dewar Kanda (R Bank)	ha.	40	600	24000
			Bathon Thach Chitkul	ha.	60	600	36000
			UF-159 Batcheri Kanda	ha.	30	600	18000
			Total Sarahan		130		78000
			Total 2nd year Maint.		150		90000
			G. Total Pasture New & Maint.		220		167000
3	Soil & Moisture Conservation Works						
a)	Treatment of land slips/slides	Kinnaur	Rufurang slip (L. Bank)		U/S	U/S	800000
			Rukti slip		U/S	U/S	500000
			Rufurang slip (R. Bank)		U/S	U/S	800000
			Total Kinnaur				2100000
		Wildlife Sarahan	Shushang slip		U/S	U/S	200000
			Khoragla slip		U/S	U/S	200000
			Chitkul slip		U/S	U/S	300000
			Kotanga slip		U/S	U/S	200000
			Total Sarahan				900000

PHASE-II 2010-11						
Sl. No.	Component	Name of Division	Name of area	Unit	Quan tity	Amount
b)	Treatment of Nallah	Kinnaur	G. Total a			3000000
			Hurba Nalla	Km.	L/S	L/S
			Rukti Nalla	Km.	L/S	L/S
			Gangarang Nalla	Km.	L/S	L/S
			Total Kinnaur		L/S	L/S
		Wildlife Sarahan	Kuru Garang Nalla		L/S	2000000
			Kharogla nalla	Km.	L/S	L/S
		Noshing Khad	Km.	L/S	L/S	
		Jabtiya Garang Nalla		L/S	L/S	
		Total Sarahan				1000000
		G. Total b				4500000
c)	River bank stabilization	Kinnaur	Rukti		L/S	6950000
			Changsaring		L/S	L/S
			Palingcha to Ruturang (R Bank)		L/S	L/S
			Total Kinnaur			
d)	Road side stabilization	Wildlife Sarahan	G. Total C			1300000
			Rachham to Chitkul (Completion)	10 Kms	L/S	L/S
			G. Total Road side			
			G. Total Soil & Moisture			500000
4	Rural Infrastructure Development					
a)	Village pond/tank	Kinnaur				
		Wildlife Sarahan				

		PHASE-II 2010-11					
Sl. No.	Component	Name of Division	Name of area	Unit	Quan tity	Rate	Amount
b)	Soil & Water Conservation Structures	Kinnaur	Total Village pond/tank Thapa Saring	1 No	L/S L/S		0 225000
		Wildlife Sarahan					0
c)	Repair of spring, bawries/Kuhl & other water sources	Kinnaur	Total Soil & Water Cons. Kashmir	1 No	L/S L/S		225000 150000
		Wildlife Sarahan	Batseni	1 No	L/S L/S		150000
d)	Repair of village road & path/ bridge Construction of foot bridge	Kinnaur	Total bawari/Kuhl				300000
		Wildlife Sarahan					0
e)	Construction of foot bridges	Kinnaur	Total road/path				
		Wildlife Sarahan	Over Rimgrang Nala	1 No	L/S L/S		400000
			Total foot bridges				400000
			G. Total Rural				925000
5	Forest Infrastructure Development						
a)	Const./repair of operational buildings New	Kinnaur					
	Maintenance	Kinnaur	Total New Maint. Of Div. office Nichar	1 No	L/S L/S		0 100000
			Maint. Of DFO Residence Nichar	1 No	L/S L/S		100000

PHASE-II 2010-11							
Sl. No.	Component	Name of Division	Name of area	Unit	Quan tity	Rate	Amount
			Maint. Of FRH Sangla	1	L/S	L/S	100000
			Total Maint. Kinnaur	No.			300000
		Wildlife Sarahan					
			Total Maint. Sarahan				0
			Total Maint.		0		300000
			G. Total New & Maint. A				300000
b)	Construction /repair of l path and B/path	Kinnaur					
		Wildlife Sarahan					
			G. Total B				0
c)	Construction of bridges	Kinnaur					
		Wildlife Sarahan					
			G. Total C				0
			G. Total Forest Infrastructure Development				300000
6	Avenue plantation & land scaping	Kinnaur					
		Wildlife Sarahan					
			G. Total Avenue plantation				0
7	Treatment of Private Lands	Kinnaur					
		Wildlife	Chitkul	2	L/S	L/S	100000
			G. Total Private Land	ha.			100000

PHASE-II 2010-11						
Sl. Component No.	Name of Division	Name of area	Unit	Quan tity	Rate	Amount
8	Distribution of seedlings to people	Kinnaur Wildlife		L/S	L/S	5000
				L/S	L/S	5000
		G. Total seedlings to people				10000
9	Wildlife Management					
A	Intensive management of Wildlife Sanctuary					
	A) Intensive management of W.L. sanctuary					
	i) Fire Protection					
		Wildlife Sarahan		5	L/S	48000
		a) Fire watcher for six month (three years)	No.	L/S	L/S	0
		b) Equipments		L/S	L/S	0
		c) Fire index board & publicity		L/S	L/S	0
		d) Workshop on fire control technique		L/S	L/S	10000
		Total Fire Pro.		L/S	L/S	58000
	ii) Habitat improvement					
		a) Creation of Musk deer farm for ex-situ conservation Musk deer at Kharogla		L/S	L/S	0
		b) Const. of water pond & saltlick		L/S	L/S	0
		Total Habitat		L/S	L/S	0
	iii) Antipoaching activities					
		a) Engagement of antipoacher for six month (Three years)		L/S	L/S	0

PHASE-II 2010-11							
Sl. No.	Component	Name of Division	Name of area	Unit	Quan tity	Rate	Amount
			Total Antipoaching in sanctuary area	L/S	L/S	L/S	0
	iv) Reward & incentive to Informer		Total Reward & Incentive	L/S	L/S	L/S	30000
	v) Census operation			L/S	L/S	L/S	0
			Total Census	L/S	L/S	L/S	0
	vi) Demarcation of boundary pillar			L/S	L/S	L/S	0
	vii) Salogan & Sign board			L/S	L/S	L/S	0
	G. Total A			L/S	L/S	L/S	88000
	B) Eco-development activities						
	i) Vaccination of domestic cattle			L/S	L/S	L/S	50000
	ii) Purchase of equipments & Med.			L/S	L/S	L/S	40000
	iii) Income generation activities		Vermi composting	L/S	L/S	L/S	0
	iv) Provision for compansession against WL depredation			L/S	L/S	L/S	100000
	v) Distribution of GI Pipes for installation of religious flag						
	vi) Const. of Crematoria			L/S	L/S	L/S	0
	vii) Const. of Tracker hut			L/S	L/S	L/S	0
	viii) Installation of street solar light			L/S	L/S	L/S	0
	ix) Sulabh Shochalya			L/S	L/S	L/S	0
			G. Total B				190000
			G. Total Wildlife Management				278000
10	Training, Awareness, Extension & Publicity	Kinnaur					
		Wildlife Sarahan					
			G. Total Training, Awareness				0

PHASE-II 2010-11						
Sl. No.	Component	Name of Division	Name of area	Unit	Quan tity	Amount
11	Research & studies	Kinnaur				
		Wildlife Sarahan				
			G. Total Research & studies			0
12	Operational support					
a)	Establishment cost	Kinnaur	Contractual staff	U/S	L/S	400000
			Refund to Govt.	U/S	L/S	0
b)	Office expenses			U/S	L/S	250000
c)	Travelling allowance					200000
d)	Office equipment					0
e)	Motor Vehicle & POL					300000
f)	Aminities to staff & labour					100000
g)	Purchase of computer with accessories					0
			Total Kinnaur			1250000
a)	Establishment cost	Wildlife Sarahan	Contractual staff	U/S	L/S	50000
b)	Office expenses			U/S	L/S	50000
c)	Travelling allowance					25000
d)	Office equipment					0
e)	Motor Vehicle & POL					40000
f)	Aminities to staff & labour					10000
g)	Purchase of computer with accessories					0
			Total Sarahan			175000
			G. Total Operational Support			1425000

PHASE-II 2010-11							
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate	Amount
13	Agricultural & Horticultural support	Kinnaur		L/S	L/S	L/S	300000
		Wildlife Sarahan		L/S	L/S	L/S	300000
14	Animal Husbandary support	Kinnaur	G. Total Agri. Horti.	L/S	L/S	L/S	600000
		Wildlife Sarahan		L/S	L/S	L/S	150000
							150000
15	Revenue of State		G. Total Animal Hus.	L/S	L/S	L/S	300000
			Total:-	L/S	L/S	L/S	0
			Total Components				16364600
16	Contingencies			L/S	L/S	L/S	1636460
			Grand Total for 2010-11:-				18001060

PHASE-II 2011-12							
Sl. No	Component	Name of Division	Name of area	Unit	Quant ity	Rate	Amount
Detail of works/expenditure for the year 2011-12							
1	Forest Establishment & Improvement						
a)	Afforestation of Degraded Forest Lands	Kinnaur	C-150	ha.	10	2500	25000
	3rd year maintenance		C-162	ha.	10	2500	25000
			C-156	ha.	10	2500	25000
			UF-Pallingcha	ha.	10	2500	25000
			Wagdag	ha.	4	2500	10000
			Total kinnaur		44		110000
		Wildlife Sarahan	UF-159 Chitkul	ha.	12	2500	30000
			UF-160 Rakchtham	ha.	10	2500	25000
			C-162 @	ha.	10	2500	25000
			Total Sarahan		32		80000
			Total 3rd year maint.		76		190000
4th year maintenance		Kinnaur	UF - Wadang	ha.	15	1700	25500
			UF - Pallingcha	ha.	10	1700	17000
			C-165	ha.	15	1700	25500
			Total Kinnaur		40		68000
		Wild Life Sarahan	UF Panpo	ha.	15	1700	25500
			UF159	ha.	10	1700	17000
			UF Chhitkul	ha.	10	1700	17000
			Total WildLife		35		59500
			Total 4th year maint.		75		127500
5th year maint		Kinnaur	UF - Wadang	ha.	10	1700	17000
			UF-Pallingcha	ha.	10	1700	17000
			UF-Chansu	ha.	5	1700	8500

PHASE-II 2011-12					
Sl. Component No	Name of Division	Name of area	Unit	Quantity	Rate Amount
		C-165	ha	5	1700 8500
		Rukhi-Baspa	ha	3	1700 5100
		Hurba-Baspa	ha	3	1700 5100
		Total Kinnaur		36	61200
	Wild Life Sarahan	UF-Kharogla	ha	10	1700 17000
		UF-Mastrang	ha	10	1700 17000
		UF-Panpo	ha	10	1700 17000
		Total WildLife		30	51000
		Total 5th year Maint.		66	112200
		G. Total Maint (a)		217	429700
b) Assisted Natural Regeneration	Kinnaur	C-155	ha	7	900 6300
3rd year maint.		C-153	ha	5	900 4500
		Total kinnaur		12	10800
	Wildlife Sarahan	UF-159 Chitkul	ha	10	900 9000
		Total Wild Life		10	9000
		Total 3rd year maint.		22	19800
4th year maint.	Kinnaur	C-154 (b)	ha	5	600 3000
		Total Kinnaur		5	3000
	Wild Life Sarahan	UF-159 Rakchham	ha	10	600 6000
		UF-Chitkul	ha	5	600 3000
		Total WildLife		15	9000
		Total 4th year maint.		20	12000
5th year maint.	Kinnaur	C-152 (b)	ha	8	600 4800
		Total Kinnaur		8	4800

PHASE-II 2011-12					
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Rate Amount
		Wild Life Sarahan	ha.	10	600 6000
		UF-159 Shoney			
		UF-160 Mastrang	ha.	10	600 6000
		Total Wildlife		20	12000
		Total 5th year maint.		28	16800
		G. Total ANR		70	48600
c) Raising of NTFP Plantations	Kinnaur	Sangla Kanda II	ha.	5	1300 6500
3rd year maint.		Kamru Kanda II	ha.	5	1300 6500
		Total Kinnaur		10	13000
	Wildlife Sarahan	UF-159 Janpa	ha.	5	1300 6500
		Total Sarahan		5	6500
		Total 3rd year maint.		15	19500
		G. Total Maint.		15	19500
d) Treatment of Culturable Wasteland	Kinnaur	UF-Kaitra	ha.	4	3400 13600
3rd year maintenance		UF-Tongtongcha	ha.	4	3400 13600
		Total Kinnaur		8	27200
	Wildlife Sarahan	UF-Rackcham	ha.	5	3400 17000
		Total Sarahan		5	17000
		Total 3rd year maint.		13	44200
4th year maint.	Kinnaur	UF-Kamru	ha.	8	2250 18000
		Burcha-Zalaring	ha.	4	2250 9000
		Total Kinnaur		12	27000
	Wildlife Sarahan	UF-Panpo	ha.	15	2250 33750
		Total Sarahan		15	33750
		Total 4th year Maint.		27	60750
5th year maint.	Kinnaur	Kamru Sangla	ha.	10	2250 22500

PHASE-II 2011-12					
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Rate Amount
		Total Kinnaur		10	22500
	Wildlife Sarahan	UF-Nagasti	ha	10	2250
		UF-Chhikul	ha	10	2250
		Total Sarahan		20	45000
		Total 5th year maint.		30	67500
		G. Total (d) Maint.		70	172450
		G. Total ADF			670250
2 Improvement of Alpine Pastures	Kinnaur		ha.	0	0
2nd year maint.	Wildlife Sarahan	Chikul Janpa Kanda	ha.	35	600
		Nagasti Kanda	ha.	35	600
		Total Sarahan		70	42000
		G. Total Pasture Maint.		70	42000
3 Soil & Moisture Conservation Works					
a) Treatment of land slips/slides					
b) Treatment of Nallah					
c) River bank stabilization					
d) Road side stabilization					
4 Rural Infrastructure Development					
a) Village pond/tank	Kinnaur				
	Wildlife Sarahan				
		Total Village pond/tank			0

PHASE-II 2011-12						
Sl. No	Component	Name of Division	Name of area	Unit	Quant ity	Amount
b)	Soil & Water Conservation Structures	Kinnaur				
		Wildlife Sarahan				
			Total Soil & Water Cons.			0
c)	Repair of spring, bawries/Kuhl & other water sources	Kinnaur	Bawri at Sangla	1 No.	L/S	200000
		Wildlife Sarahan	Boening Saring	1 No.	L/S	150000
			Total bawari/Kuhl			350000
d)	Repair of village road & path/ bridge Construction of foot bridge	Kinnaur				
		Wildlife Sarahan				
			Total road/path			0
e)	Construction of foot bridges	Kinnaur				
		Wildlife Sarahan				
			Total foot bridges			0
			G. Total Rural			350000
5 Forest Infrastructure Development						
a)	Const./repair of operational buildings New	Kinnaur				
			Total New			0
	Maintenance	Kinnaur				
			Total Maint. Kinnaur			0
		Wildlife Sarahan				
			Total Maint. Sarahan			0
			Total Maint.	0		0

PHASE-II 2011-12						
Sl. No	Component	Name of Division	Name of area	Unit	Quant Rate	Amount
			G. Total New & Maint. A			0
b)	Construction /repair of I path and B/path	Kinnaur				
		Wildlife Sarahan				
			G. Total B			0
c)	Construction of bridges	Kinnaur				
		Wildlife Sarahan				
			G. Total C			0
			G. Total Forest Infrastructure Development			0
6	Avenue plantation & land scaping	Kinnaur				
		Wildlife Sarahan				
			G. Total Avenue plantation			0
7	Treatment of Private Lands	Kinnaur				
		Wildlife				
			G. Total Private Land			0
8	Distribution of seedlings to people	Kinnaur				
		Wildlife				
			G. Total seedlings to people			0
9	Wildlife Management					

PHASE-II 2011-12					
Sl. Component No	Name of Division	Name of area	Unit	Quant ity	Amount
A	Intensive management of Wildlife Sanctuary				
A)	Intensive management of W.L. sanctuary				
i)	Fire Protection	Wildlife Sarahan			
		a) Fire watcher for six month (three years)			
		b) Equipments	L/S	L/S	L/S
		c) Fire index board & publicity	L/S	L/S	L/S
		d) Workshop on fire control technique	L/S	L/S	L/S
		Total Fire Pro.		L/S	L/S
ii)	Habitat improvement				
		a) Creation of Musk deer farm for ex-situ conservation Musk deer at Khargola	L/S	L/S	L/S
		b) Const. of water pond & saltlick	L/S	L/S	L/S
		Total Habitat		L/S	L/S
iii)	Antipoaching activities				
		a) Engagement of antipoaching for six month (Three years)		L/S	L/S
		Total Antipoaching		L/S	L/S
iv)	Reward & incentive to informer				
		Total Reward & incentive		L/S	L/S
v)	Census operation				
				L/S	L/S
					40000

PHASE-II 2011-12						
Sl. Component No	Name of Division	Name of area	Unit	Quant ity	Rate	Amount
		Total Census	L/S	L/S	L/S	40000
	vi) Demarcation of boundary pillar		L/S	L/S	L/S	0
	vii) Salogan & Sign board		L/S	L/S	L/S	0
	G. Total A					40000
	B) Eco-development activities					
	i) Vaccination of domestic cattle		L/S	L/S	L/S	50000
	ii) Purchase of equipments & Med.		L/S	L/S	L/S	0
	iii) Income generation activities					
	iv) Provision for compensation against WL deprivation	Vermi composting	L/S	L/S	L/S	0
	v) Distribution of Gi Pipes for installation of religious flag		L/S	L/S	L/S	0
	vi) Const. of Crematoria					
	vii) Const. of Tracker hut		L/S	L/S	L/S	0
	viii) Installation of street solar light		L/S	L/S	L/S	0
	ix) Sulebh Shochalaya					
		G. Total B		L/S	L/S	0
		G. Total Wildlife Management				50000
						90000
10	Training, Awareness, Extension & Publicity	Kinnur				
		Wildlife Serahan				
		G. Total Training, Awareness				0

PHASE-II 2011-12					
Sl. No	Component	Name of Division	Name of area	Unit	Quant Rate Amount
11	Research & studies	Kinnaur			
		Wildlife Sarahan			
			G. Total Research & studies		0
12	Operational support				
a)	Establishment cost	Kinnaur	Contractual staff	L/S	L/S 400000
b)	Office expenses		Refund to Govt.	L/S	L/S 0
c)	Travelling allowance			L/S	L/S 250000
d)	Office equipment			L/S	L/S 200000
e)	Motor Vehicle & POL				0
f)	Aminities to staff & labour				300000
g)	Purchase of computer with accessories				100000
					0
			Total Kinnaur		1250000
a)	Establishment cost	Wildlife Sarahan	Contractual staff	L/S	L/S 50000
b)	Office expenses			L/S	L/S 50000
c)	Traveling allowance			L/S	L/S 25000
d)	Office equipment				0
e)	Motor Vehicle & POL				40000
f)	Aminities to staff & labour				10000
g)	Purchase of computer with accessories				0
			Total Sarahan		175000
			G. Total Operational Support		1425000

PHASE-II 2011-12					
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Amount
13	Agricultural & Horticultural support	Kinnaur			
		Wildlife Sarahan			
		G. Total Agri. Horti.			0
14	Animal Husbandary support	Kinnaur			
		Wildlife Sarahan			
		G. Total Animal Hus.			0
15	Revenue of State		L/S	L/S	0
		Total:-			0
		Total Components			2577250
16	Contingencies		L/S	L/S	257725
		Grand Total for 2011-12:-			2834975

PHASE-II 2012-13						
Sl. No.	Component	Name of Division	Name of area	Unit	Quant ity	Amount
Detail of works/expenditure for the year 2012-13						
1	Forest Establishment & Improvement					
a)	Afforestation of Degraded Forest Lands	Kinnaur	C-150	ha.	10	17000
	4th year maintenance		C-162	ha.	10	17000
			C-156	ha.	10	17000
			UF-Pallingcha	ha.	10	17000
			Wagdag	ha.	4	6800
			Total kinnaur		44	74800
		Wildlife Sarahan	UF-159 Chitkul	ha.	12	20400
			UF-160 Rakchham	ha.	10	17000
			C-162 @	ha.	10	17000
			Total Sarahan		32	54400
			Total 4th year maint.		76	129200
	5th year maint	Kinnaur	UF - Wagdag	ha.	15	25500
			UF - Pallingcha	ha.	10	17000
			C-165	ha.	15	25500
			Total Kinnaur		40	68000
		Wild Life Sarahan	UF Panpo	ha.	15	25500
			UF159	ha.	10	17000
			UF Chhitkul	ha.	10	17000
			Total WildLife		35	59500
			Total 5th year Maint.		75	127500
			G. Total Maint (a)		151	256700
b)	Assisted Natural Regeneration	Kinnaur	C-155	ha.	7	600
	4th year maint.		C-153	ha.	5	600
			Total kinnaur		12	3000
						7200

PHASE-II 2012-13							
Sl. No.	Component	Name of Division	Name of area	Unit	Quant ity	Rate	Amount
		Wildlife Sarahan	UF-159 Chitkul	ha	10	600	6000
			Total Wild Life		10		6000
			Total 4th year maint.		22		13200
	5th year maint	Kinnaur	C-154 (b)	ha	5	600	3000
			Total Kinnaur		5		3000
		Wild Life Sarahan	UF-159 Rakchham	ha	10	600	6000
			UF-Chitkul	ha	5	600	3000
			Total WildLife		15		9000
			Total 5th year maint.		20		12000
			G. Total ANR		42		25200
c)	Raising of NTFP Plantations						
d)	Treatment of Culturable Wasteland	Kinnaur	UF-Kaitra	ha	4	2250	9000
	4th year maint		UF-Tongtongcha	ha	4	2250	9000
			Total Kinnaur		8		18000
		Wildlife Sarahan	UF-Rackcham	ha	5	2250	11250
			Total Sarahan		5		11250
			Total 4th year maint.		13		29250
	5th year maint	Kinnaur	UF-Kamru	ha	8	2250	18000
			Burcha-Zalaring	ha	4	2250	9000
			Total Kinnaur		12		27000
		Wildlife Sarahan	UF-Panpo	ha	15	2250	33750
			Total Sarahan		15		33750
			Total 5th year maint.		27		60750
			G. Total (d) Maint.		40		90000
			G.Total ADF				371900
	2/Improvement of Alpine Pastures						

PHASE-II 2012-13						
Sl. No.	Component	Name of Division	Name of area	Unit	Quant ity	Amount
3	Soil & Moisture Conservation Works					
a)	Treatment of land slips/slides					
b)	Treatment of Nallah					
c)	River bank stabilization					
d)	Road side stabilization					
4	Rural Infrastructure Development					
a)	Village pond/tank	Kinnaur Wildlife Sarahan				0
			Total Village pond/tank			
b)	Soil & Water Conservation Structures	Kinnaur Wildlife Sarahan				0
			Total Soil & Water Cons.			
c)	Repair of spring, bawries/Kuhl & other water sources	Kinnaur Wildlife Sarahan				0
			Total bawari/Kuhl			
d)	Repair of village road & path/ bridge Construction of foot bridge	Kinnaur Wildlife Sarahan				0
			Total road/path			
e)	Construction of foot bridges	Kinnaur Wildlife Sarahan				0
			Total foot bridges			

PHASE-II 2012-13						
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Amount
5	Forest Infrastructure Development		G. Total Rural			0
a)	Const./repair of operational buildings New	Kinnaur				
	Maintenance	Kinnaur	Total New			0
		Wildlife Sarahan	Total Maint. Kinnaur			0
			Total Maint. Sarahan			0
			Total Maint.		0	0
			G. Total New & Maint. A			0
b)	Construction /repair of I.path and B/path	Kinnaur				
		Wildlife Sarahan				
c)	Construction of bridges	Kinnaur	G. Total B			0
		Wildlife Sarahan				
			G. Total C			0
			G. Total Forest Infrastructure Development			0
6	Avenue plantation & land scaping	Kinnaur				
		Wildlife Sarahan	G. Total Avenue plantation			0

PHASE-II 2012-13						
Sl. No.	Component	Name of Division	Name of area	Unit	Quant Rate ity	Amount
7	Treatment of Private Lands	Kinnaur Wildlife				
			G. Total Private Land			0
8	Distribution of seedlings to people	Kinnaur Wildlife				
			G. Total seedlings to people			0
9	Wildlife Management					
A	Intensive management of Wildlife Sanctuary					
	A) Intensive management of W.L. sanctuary					
	i) Fire Protection	Wildlife Sarahan				
			a) Fire watcher for six month (three years)	L/S	L/S	0
			b) Equipments	L/S	L/S	0
			c) Fire index board & publicity	L/S	L/S	0
			d) Workshop on fire control technique	L/S	L/S	0
			Total Fire Pro.		L/S	0
	ii) Habitat improvement					
			a) Creation of Musk deer farm for ex-situ conservation Musk deer at Kharogla	L/S	L/S	0

PHASE-II 2012-13						
Sl. No.	Component	Name of Division	Name of area	Unit	Quant Rate ity	Amount
			b) Const. of water pond & sallick	L/S	L/S	0
			Total Habitat		L/S	0
	iii) Antipoaching activities		a) Engagement of antipoaching for six month (Three years)	L/S	L/S	0
			Total Antipoaching in sanctuary area	L/S	L/S	0
	iv) Reward & incentive to informer		Total Reward & incentive	L/S	L/S	0
	v) Census operation		Total Census	L/S	L/S	0
				L/S	L/S	0
	vi) Demarcation of boundary pillar			L/S	L/S	0
	vii) Salogan & Sign board			L/S	L/S	0
	G. Total A					
	B) Eco-development activities			L/S	L/S	0
	i) Vaccination of domestic cattle			L/S	L/S	0
	ii) Purchase of equipments & Med.			L/S	L/S	0
	iii) Income generation activities		Vermi composting	L/S	L/S	0
	iv) Provision for compansession against WL deprivation			L/S	L/S	0
	v) Distribution of GI Pipes for installation of religious flag			L/S	L/S	0

PHASE-II 2012-13					
Sl. No.	Component	Name of Division	Name of area	Unit	Amount
	vi) Const. of Crematoria			L/S	0
	vii) Const. of Tracker hut			L/S	0
	viii) Installation of street solar light			L/S	0
	ix) Sulabh Shochalya			L/S	0
			G. Total B		0
			G. Total Wildlife Management		0
10	Training, Awareness, Extension & Publicity	Kinnaur			
		Wildlife Sarahan			
			G. Total Training, Awareness		0
11	Research & studies	Kinnaur			
		Wildlife Sarahan			
			G. Total Research & studies		0
12	Operational support				
a)	Establishment cost	Kinnaur	Contractual staff	L/S	400000
			Refund to Govt.	L/S	0
b)	Office expenses			L/S	250000
c)	Travelling allowance				200000
d)	Office equipment				0
e)	Motor Vehicle & POL				300000
f)	Aminities to staff & labour				100000
g)	Purchase of computer with accessories				0

PHASE-II 2012-13						
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Amount
			Total Kinnaur			1250000
a)	Establishment cost	Wildlife Sarahan	Contractual staff	L/S	L/S	50000
b)	Office expenses			L/S	L/S	50000
c)	Travelling allowance					25000
d)	Office equipment					0
e)	Motor Vehicle & POL					40000
f)	Aminities to staff & labour					10000
g)	Purchase of computer with accessories					0
			Total Sarahan			175000
			G. Total Operational Support			1425000
13	Agricultural & Horticultural support	Kinnaur				
		Wildlife Sarahan				0
			G. Total Agri. Horti.			
14	Animal Husbandary support	Kinnaur				
		Wildlife Sarahan				0
			G. Total Animal Hus.			
15	Revenue of State			L/S	L/S	0
			Total:-			1796900
			Total Components			179690
16	Contingencies			L/S	L/S	
			Grand Total for 2012-13:-			1976590

PHASE-II 2013-14						
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Rate	Amount
Detail of works/expenditure for the year 2013-14						
1	Forest Establishment & Improvement					
a)	Afforestation of Degraded Forest Lands	Kinnaur	ha.	10	1700	17000
	5th year maint					
		C-150	ha.	10	1700	17000
		C-162	ha.	10	1700	17000
		C-156	ha.	10	1700	17000
		UF-Pallingcha	ha.	10	1700	17000
		Wagdag	ha.	4	1700	6800
		Total Kinnaur		44		74800
		Wildlife Sarahan	ha.	12	1700	20400
		UF-159 Chitkul	ha.	10	1700	17000
		UF-160 Rakchham	ha.	10	1700	17000
		C-162 @	ha.	10	1700	17000
		Total Sarahan		32		54400
		Total 5th year Maint.		76		129200
		G. Total Maint (a)		76		129200
b)	Assisted Natural Regeneration	Kinnaur	ha.	7	600	4200
	5th year maint					
		C-155	ha.	5	600	3000
		C-153	ha.	5	600	3000
		Total Kinnaur		12		7200
		Wildlife Sarahan	ha.	10	600	6000
		UF-159 Chitkul	ha.	10	600	6000
		Total Wild Life		22		12000
		Total 5th year maint.		22		13200
		G. Total ANR		22		13200
c)	Raising of NTFP Plantations					
d)	Treatment of Culturable Wasteland	Kinnaur	ha.	4	2250	9000
	5th year maint					
		UF-Tongtongcha	ha.	4	2250	9000
		Total Kinnaur		8		18000
		Wildlife Sarahan	ha.	5	2250	11250
		UF-Rackchham	ha.	5	2250	11250

PHASE-II 2013-14						
Sl. No.	Component	Name of Division	Name of area	Unit	Rate	Amount
			Total Sarahan	5		11250
			Total 5th year maint.	13		29250
			G. Total (d) Maint.	13		29250
						171650
2	Improvement of Alpine Pastures					
3	Soil & Moisture Conservation Works					
a)	Treatment of land slips/slides					
b)	Treatment of Nallah					
c)	River bank stabilization					
d)	Road side stabilization					
4	Rural Infrastructure Development					
a)	Village pond/tank	Kinnaur Wildlife Sarahan				
			Total Village pond/tank			0
b)	Soil & Water Conservation Structures	Kinnaur Wildlife Sarahan				
			Total Soil & Water Cons.			0
c)	Repair of spring, bawries/Kuhl & other water sources	Kinnaur Wildlife Sarahan				
			Total bawari/Kuhl			0

PHASE-II 2013-14						
Sl. Component No.	Name of Division	Name of area	Unit	Quantity	Rate	Amount
d)	Repair of village road & path/ bridge	Kinnaur				
	Construction of foot bridge	Wildlife Sarahan				
e)	Construction of foot bridges	Kinnaur				0
		Wildlife Sarahan				
		Total road/path				
		Total foot bridges				0
		G. Total Rural				0
5	Forest Infrastructure Development					
a)	Const./repair of operational buildings New	Kinnaur				
	Maintenance	Kinnaur				
		Wildlife Sarahan				
		Total Maint. Sarahan				0
		Total Maint.		0		0
		G. Total New & Maint. A				0
b)	Construction /repair of f.path and B/path	Kinnaur				
		Wildlife Sarahan				
		G. Total B				0
c)	Construction of bridges	Kinnaur				
		Wildlife Sarahan				
		G. Total C				0
		G. Total Forest Infrastructure Development				0

PHASE-II 2013-14						
Sl. No.	Component	Name of Division	Name of area	Unit	Rate	Amount
6	Avenue plantation & land scaping	Kinnaur				
		Wildlife Sarahan				
			G. Total Avenue plantation			0
7	Treatment of Private Lands	Kinnaur				
		Wildlife				
			G. Total Private Land			0
8	Distribution of seedlings to people	Kinnaur				
		Wildlife				
			G. Total seedlings to people			0
9	Wildlife Management					
A	Intensive management of Wildlife Sanctuary					
	A) Intensive management of W.L. sanctuary					
	I) Fire Protection					
		Wildlife Sarahan	a) Fire watcher for six month (three years)	L/S	L/S	0
			b) Equipments	L/S	L/S	0
			c) Fire index board & publicity	L/S	L/S	0
			d) Workshop on fire control technique	L/S	L/S	0

PHASE-II 2013-14						
Sl. No.	Component	Name of Division	Name of area	Unit	Rate	Amount
	ii) Habitat improvement		Total Fire Pro.	L/S	L/S	0
			a) Creation of Musk deer farm for ex-situ conservation Musk deer at Kharogla	L/S	L/S	0
			b) Const. of water pond & saltlick	L/S	L/S	0
			Total Habitat			
	iii) Antipoaching activities		a) Engagement of antipoaching for six month (Three years)	L/S	L/S	0
			Total Antipoaching			
	iv) Reward & Incentive to informer		in sanctuary area	L/S	L/S	0
			Total Reward & Incentive			
	v) Census operation			L/S	L/S	0
	vi) Demarcation of boundary pillar			L/S	L/S	0
			Total Census			
	vii) Salogan & Sign board			L/S	L/S	0
	G. Total A					
	B) Eco-development activities			L/S	L/S	0
	i) Vaccination of domestic cattle			L/S	L/S	0
	ii) Purchase of equipments & Med			L/S	L/S	0
	iii) Income generation activities		Vermi composting	L/S	L/S	0

		PHASE-II 2013-14				
Sl. No.	Component	Name of Division	Name of area	Unit	Rate	Amount
	iv) Provision for compensation against WL debridation			L/S	L/S	0
	v) Distribution of GI Pipes for installation of religious flag			L/S	L/S	0
	vi) Const. of Crematoria			L/S	L/S	0
	vii) Const. of Tracker hut			L/S	L/S	0
	viii) Installation of street solar light			L/S	L/S	0
	ix) Sulabh Shochalya			L/S	L/S	0
			G. Total B			0
			G. Total Wildlife Management			0
10	Training, Awareness, Extension & Publicity	Kinnaur				
		Wildlife Sarahan				
			G. Total Training, Awareness			0
11	Research & studies	Kinnaur				
		Wildlife Sarahan				
			G. Total Research & studies			0
12	Operational support					
a)	Establishment cost	Kinnaur	Contractual staff Refund to Govt.	L/S	L/S	400000
b)	Office expenses			L/S	L/S	0
c)	Travelling allowance			L/S	L/S	250000
d)	Office equipment					200000
e)	Motor Vehicle & POL					0
						300000

PHASE-II 2013-14							
Sl. No.	Component	Name of Division	Name of area	Unit	Quantity	Rate	Amount
f)	Aminities to staff & labour						
g)	Purchase of computer with accessories						100000
							0
			Total Kinnaur				1250000
a)	Establishment cost	Wildlife Sarahan	Contractual staff	L/S	L/S	L/S	50000
b)	Office expensses			L/S	L/S	L/S	50000
c)	Travelling allowance						25000
d)	Office equipment						0
e)	Motor Vehicle & POL						40000
f)	Aminities to staff & labour						10000
g)	Purchase of computer with accessories						0
			Total Sarahan				175000
			G. Total Operational Support				1425000
13	Agricultural & Horticultural support	Kinnaur					
		Wildlife Sarahan					
14	Animal Husbandary support	Kinnaur	G. Total Agri. Horti.				0
		Wildlife Sarahan					
15	Revenue of State		G. Total Animal Hus.	L/S	L/S	L/S	0
			Total:-				0
			Total Components				1586650
15	Contingencies						159865
			Grand Total for 2013-14:-	L/S	L/S	L/S	1756315

ANNEXURE-4

1. Forest Establishment & Improvement					
a) Per hac. Cost Model for Afforestation of Degraded Forest Lands					
(A.) with Barbed wire fence only					
S.No	Particulars of works	Qty.	Rate	Unit	Amount
1	Survey & demarcation of plantation area including making sections, path & prep. of map etc.	1	40.95	hac	40.95
2	Layout of pits over 1 hac	1	68.15	hac	68.15
3	Cutting & Prep. of wooden Fence Posts 1.80 mtr long & 8 to 10 cm dia including debarking & fastening the top 15 cm conical shape	60	518.2	% Nos	310.92
4	Charring & coal-tarring of the ends of F. Posts 45cm bottom & 15cm conical top	60	111.8	% Nos	67.08
5	Carriage of F. Posts over distance of 1.5 Km	60	272.7	% Nos./Km	245.43
6	Digging of holes for fixing of Fence Post 45cm deep	60	362.8	% Nos	217.68
7	Fixing of Fence Posts i/c strutting	60	278.45	% Nos	167.07
8	Carriage of B/wire from depot to site O/D 1.5 Km (up hill side)	1	68.25	Qtls./Km	102.38
9	Stretching & Fixing of B/wire with U/staple in 180x4 strand	720	1.9	Rmt.	1368
10	Interlacing of bushes in B/wire fence	180	1.65	Rmt	297
11	Preparation of inspection path 60 cm wide	150	4.35	Rmt	652.5
12	Digging of pits 45x45x45 cm for B/L spp.	500	381.8	% Nos	1909
13	Digging of pits 30x30x30 cm for P/bags.	600	190.95	% Nos	1145
14	Filling of pits 45x45x45 cm	500	109.4	% Nos	547
15	Filling of pits 30x30x30 cm	600	76.35	% Nos	458.1
16	Carriage of naked root plants O/D 2 Kms (uphill side)	500	14.1	% Nos./Km	141
17	Carriage of plants in P/bags O/D 2 Km (uphill side)	600	87.25	% Nos./Km	1047
18	Planting of naked root plants (O.B.L.) i/c ramming	500	73.6	% Nos	368
19	Planting of plants raised in P/bags i/c ramming	600	87.3	% Nos	523.8
20	Moisture retention intervention including V ditches (M.R.I.)	1	2500	hac	2500
21	Construction of stairs including cost of I/Nails	2	L/S	Nos	400
			Total:		12576.76
			Add 15.60% increase		2067.74
			Total(works):		14644.50
			Add 25% increase for tribal areas		3666.13
			Total(works):		18310.63
Material Cost					
1	Cost of B/wire	1	3900	Per Qtls	3900
2	Cost of U Nails	1.25	45	Kg	56
3	Cost of plants	1100	3	Nos	3300
4	Cost of fence posts	L/S	L/S	L/S	5000
			Total (Material):		12256
			G. Total:		30587
			Or say Rs.		30600

ANNEXURE-II					
a) Per hac. Cost Model for Afforestation of Degraded Forest Lands					
Maintenance Norms of First Year (30% mortality)					
S.No	Particulars of works	Qty.	Rate	Unit	Amount
1	Re-digging of failure Pits 30x30x30 cm for P/bags	180	95.45	% Nos.	171.81
2	Re-digging of failure pits 45x45x45 cm for B/L spp.	150	190.95	% Nos.	286.43
3	Filling of Pits 30x30x30 cm	180	76.35	% Nos.	137.43
4	Filling of Pits 45x45x45 cm	150	109.4	% Nos.	164.1
5	Carriage of plants with P/bags O/D 2 Km (uphill side)	180	87.25	%Nos./Km	314.1
6	Carriage of naked root Plants(O.B.L.) O/D 2 Km (uphill side)	150	14.1	%Nos./Km	42.3
7	Planting of plants raised in P/bags s/c ramming	180	87.3	% Nos.	157.14
8	Planting of naked root plants of (O.B.L.) s/c ramming	150	73.6	% Nos.	110.4
9	Mulching/weeding of plants in P/area	800	23.9	% Nos.	191.2
10	Cutting & Prep. of wooden Fence Posts 1.80 mtr. long & 8 to 10 cm dia including debarking & fastening the top 15 cm conical shape	15	518.2	% Nos.	77.73
11	Carriage of F Posts O/D of 1.5 Km	15	272.7	% Nos.	61.36
12	Digging of holes for fixing of F/Posts	15	362.8	% Nos.	54.42
13	Fixing of Fence Posts	15	278.45	% Nos.	41.77
14	Repair of B/wire fence	200	0.65	Rmt.	130
15	Interlacing of thorny brush wood in B/wire	180	1.65	Rmt.	297
				Total	2237.18
Add 16.60% Increase					
				Total	371.37
Add 25% Increase in Tribal area					
				Total	2608.55
					652.14
Material Cost				Total(works):	3260.69
1	Cost of Plants	330	3	Nos.	990
2	Cost of U/staple	0.5	45	kg	22.50
				Total(Material):	1012.50
				G.Total:	4273.19
				or say	4300
New norm for plantation					
Maintenance norm for 1st year plantation (30% mortality)				L/S	30600
1	Maintenance norm for 2nd year plantation (20% mortality)			L/S	4300
2	Maintenance norm for 3rd year plantation (15% mortality)			L/S	3700
3	Maintenance norm for 4th year plantation (10% mortality)			L/S	2500
4	Maintenance norm for 5th year plantation (10% mortality)			L/S	1700
				L/S	1700
G. Total for Afforestation of Degraded Forest Lands (with Barbed wire fence only)					44500
G. Total for Afforestation of Degraded Forest Lands (with Stone fence wall & barbed wire)					51700

ANNEXURE-IB

1. b) Per hac. Cost Model for Assisted Natural Regeneration

S.No	Particulars of works	Qty.	Rate	Unit	Amount
1	Survey and Demarcation of Plantation area including making of sections, path & prep. of map etc.	1	40.95	hac	40.95
2	Cutting & Prep. of wooden fence posts 1.80 mtr long & 8 to 10 cm dia including debarking & fastening the top 15 cm conical shape	60	518.2	% Nos.	310.92
3	Charring and coal-tarring of the ends of Fence Posts 45cm bottom & 15cm conical top	60	111.8	% Nos.	67.08
4	Carriage of Fence Posts Q/D of 1.5 Km	60	272.7	%Nos./km	245.43
5	Digging of holes for fixing of Fence Posts 45cm deep	60	362.8	% Nos.	217.68
6	Fixing of Fence Posts including strutting	60	278.75	% Nos.	167.25
7	Carriage of B/wire from depot to work site Q/D 1.5 Km (uphill side)	1	68.25	Qts./km	102.38
8	Stretching & fixing of B/wire with U/staple in 180x4 strand	720	1.9	Rmt.	1368
9	Interlacing of bushes in B/wire fence	180	1.65	Rmt.	297
10	Prep./Digging of Patches 60x60x25 cm	250	258.05	% Nos.	647.63
11	Sowing of seed in Patches	250	75.3	% Nos.	188.25
12	Digging of Pits 30x30x30 cm for P/bags planting	250	190.95	% Nos.	477.38
13	Carriage of plants in P. bags Q/D of 2 Km (uphill side)	250	87.25	%Nos./Km.	436.25
14	Planting of plants raised in P/bags i/c ramming	250	87.3	% Nos.	218.25
15	Filling of Pits 30x30x30cm	250	76.35	% Nos.	190.88
				Total:	4975.31
			Add 15.80% increase		825.90
				Total:	5801.21
			Add 25% increase in Trial area		1450.30
				Total(works):	7251.51
	Material Cost				
1	Cost of Plants	250	3	each	750
2	Cost of B/wire	1	3900	Qts	3900
3	Cost of U/nails	1.25	45	Kg	56.25
4	Cost of seed	0.5	120	Kg	60
5	Cost of fence posts	L/S	L/S	L/S	5000
				Total(Material):	9796.25
				G.Total:	17017.76
				or say	17000

ANNEXURE-IV

1. b) Per hac. Cost Model for Assisted Natural Regeneration

Maintenance norms for First Year (30% mortality)

S.No	Particulars of works	Qty.	Rate	Unit	Amount
1	Re-digging of patches 60x60x25 cm	75	129.52	% Nos	97.14
2	Re-digging of pits 30x30x30 cm	75	95.45	% Nos	71.59
3	Fillings of pits 30x30x30 cm	75	76.35	% Nos	57.26
4	Carriage of plants in P/bags D/D 2 Km (uphill side)	75	87.25	%Nos /Km	130.88
5	Planting of plants in P/bags	75	87.3	% Nos	65.48
6	Sowing of seeds in patches	75	75.3	% Nos	56.48
7	Repair of B/wire fence over	200	0.65	Rmt	130
8	Cutting & prep. Of wooden Fence Posts 1.80 mtr. long & 8 to 10 cm dia w/c debarking and fastening the top 15 cm conical shape	15	518.2	% Nos	77.73
9	Carriage of Fence post O/D 1 Km	15	272.7	% Nos	40.91
10	Digging of holes for fixing of Fence Posts	15	362.8	% Nos	54.42
11	Fixing of Fence Post	15	278.45	% Nos	41.77
12	Interlacing of Bushes with B/wire fence	180	1.65	Rmt	297
				Total:	1120.64
				Add 16.60 increase	160.03
				Total:	1306.67
				Add 25% increase in tribal area	326.67
				Total(works):	1633.33
	Material Cost				
1	Cost of plants	75	3	Nos	225
2	Cost of seed	0.2	120	kg	24
3	Cost of U/nails	0.5	45	kg	22.50
				Total(Material):	271.50
				G.Total:	1904.83
				or say	1900
	New norm for plantation				
	Maintenance norm for 1st year plantation (30% mortality)			L/S	17000
1	Maintenance norm for 2nd year plantation (20% mortality)			L/S	1900
2	Maintenance norm for 3rd year plantation (15% mortality)			L/S	1100
3	Maintenance norm for 4th year plantation (10% mortality)			L/S	900
4	Maintenance norm for 5th year plantation (10% mortality)			L/S	600
	Grand Total for Assisted Natural Regeneration				22100

ANNEXURE-V

ANNEXURE-V

1. c) Per hac. Cost norms for Raising of N.T.F.P. Plantation					
S.No	Particulars of works	Qty.	Rate	Unit	Amount
1	Survey & demarcation of P/area i/c making sections, path & preparation of map etc.	1	40.95	hac	40.95
2	Layout of Patches over 1 hac.	1	68.15	hac	68.15
3	Cutting & prep. of wooden fence posts 1.80mtr. long & 8 to 10cm dia including debarking & fastening the top 15cm conical shape	60	518.2	% Nos	310.92
4	Carriage of Fence Posts O/D of 1.5 Km	60	272.7	% Nos./Km	245.43
5	Digging of holes for fixing of F/Posts 45 cm deep	60	362.8	% Nos.	217.68
6	Fixing of Fence Posts i/c strutting	60	278.45	% Nos.	167.07
7	Charring & coal-tarring of the ends of F Posts 45cm bottom & 15cm conical top	60	111.8	% Nos.	67.08
8	Stretching & fixing of B/wire with U/strapple-180 Rmt-4 strand	720	1.9	Rmt	1368
9	Carriage of B/wire from depot to work site O/D of 1.5 Km (uphill side)	1	68.25	Qtls./Km	102.38
10	Interlacing of Bushes in B/wire fence	180	1.65	Rmt	297
11	Prep. of J/Path 60 cm wide	150	4.35	Rmt	652.5
12	Prep. Of patches 30x30x25 cm	1000	130.9	% Nos	1309
13	Red Planting of Medicinal plants in patches (naked root)	5000	68.25	% Nos	3412.5
14	Carriage of naked root Medicinal plants O/D 3 Km (uphill side)	5000	14.1	% Nos./Km	1410
	Total:				9658.66
	Add 15.50% increase				1605.00
	Total:				11273.66
	Add 25% increase in tribal areas				2818.41
	Total (works):				14092.07
	Material Cost				
1	Cost of Medicinal plants	5000	3	Nos	15000
2	Cost of B/wire	1	3900	Qtls	3900
3	Cost of U/strails	1.25	45	kg	56.25
4	Cost of fence posts	L/S	L/S	L/S	5000
	Total (Material):				23956.25
	G.Total:				38048.32
	or say				38000

Note Operation of fencing will be carried out only when an area is closed exclusively for NTFP Plantation.
If NTFP plants are grown in already fenced area the saving thereof will be utilized in additional areas.

ANNEXURE-VI

1.c) Per hac, Cost model for Raising of N.T.F.P. Plantation
Maintenance norms for First Year (30% mortality)

S.No	Particulars of works	Qty.	Rate	Unit	Amount.
1	Re-digging of patches 30x30x25 cm	300	65.45	% Nos.	196.35
2	Planting of medicinal plants in 600 patches each	1500	73.6	% Nos.	1104
3	Carriage of naked root medicinal plants 0/0-2 Km (uphill side)	1500	14.1	% Nos. / km	423
4	Cutting & preparation of Wooden Fence posts 1.80 Mtr. long & 8 to 10 cm dia w/c debarking & fastening the top 15 cm conical shape	15	518.2	% Nos.	77.73
5	Carriage of F. Posts over distance of 1.5 Km	15	272.7	% Nos.	61.38
6	Re-digging of hole for fixing of Fence Posts	15	181.4	% Nos.	27.21
7	Fixing of Fence Posts w/c strutting	15	276.45	% Nos.	41.77
8	Repair of B/wire fence	200	0.65	Rmt.	130
9	Interlacing of Bushes with B/wire fence	180	1.65	Rmt.	297
				Total:	2358.42
				Add 16.60% increase	391.50
				Total:	2749.92
				Add 25% increase in tribal areas	687.48
				Total(works):	3437.40
	Material Cost				
1	Cost of plants	1500	3	Nos.	4500
2	Cost of U/nails	0.5	45	kg	22.50
				Total(Material):	4522.50
				G.Total:	7959.90
				or say	7950
1	New norm for plantation			US	38000
2	Maintenance norm for 1st year plantation (30% mortality)			US	7950
3	Maintenance norm for 2nd year plantation			US	2600
4	Maintenance norm for 3rd year plantation			US	1300
	Grand Total for Raising of NTFP plantation				49850

ANNEXURE-VII

1. d) Per hac. Cost Model for Treatment of Culturable Wasteland

S.No	Particulars of works	Qty.	Rate	Unit	Amount
1	Survey & demarcation of P/area i/c making sections, path & prep. of map etc.	1	40.95	hac.	40.95
2	Layout of pits over 1 hac.	1	68.15	hac.	68.15
3	Cutting & Prep. of wooden Fence Post 1.60 Mtr long & 8 to 10 cm dia i/c debarking and fastening the top 15 cm conical shape	60	518.2	%Nos.	310.92
4	Carriage of Fence Post O/D 1.5 Km	60	272.7	%Nos./km.	245.43
5	Digging of holes for fixing of Fence Posts 45cm deep	60	362.8	% Nos.	217.68
6	Charring & coal-tarring the ends of Fence Posts 45cm bottom & 15cm conical shape	60	111.8	% Nos.	67.08
7	Fixing of Fence Post i/c strutting	60	278.45	% Nos.	167.07
8	Carriage of B/wire from depot to site O/D 1.5 Km (uphill side)	1	68.25	Qts/km	102.38
9	Stretching & fixing of B/wire with U/staple in 180x4 strand	720	1.9	Rmt.	1368
10	Interlacing of bushes with B/wire fence	180	1.65	Rmt.	297
11	Preparation of I/Path in P/area 60cm wide	150	4.35	Rmt.	652.5
12	Digging of pits 45x45x45 cm	1100	361.8	% Nos.	4199.8
13	Filling of pits 45x45x45 cm	1100	109.4	% Nos.	1203.4
14	Carriage of naked root plants O/D 2 Km (uphill side)	1100	14.1	%Nos./Km	310.2
15	Planting of naked root O.B.L. plants i/c ramming	1100	73.6	% Nos.	809.6
16	Preparation of strips 100x30x5 cm for sowing of grass seeds i/c sowing in strips	300	368.1	% Nos.	1104.3
				Total:	11164.46
				Add. 16.60% increase	1853.30
				Total:	13017.76
				Add. 25% increase in tribal area	3254.44
				Total(works):	16272.19
	Material Cost				
1	Cost of B/wire	1	3600	Qts.	3600
2	Cost of U/nails	1.25	45	Kg	56.25
3	Cost of plants	1100	3	Nos.	3300
4	Cost of grass seed	0.5	286.25	Kg	143.13
5	Cost of fence posts	L/S	L/S	L/S	5000
				Total(Material):	12399.38
				G. Total:	28671.57
				Or say Rs.	28650

ANNEXURE-VIII

ANNEXURE VIII

1. d) Per hac. Cost norms for treatment of Culturable Wasteland					
Maintenance norm for First Year (30% mortality)					
S.No	Particulars of works	Qty.	Rate	Unit	Amount
1	Re-digging of pits 45x45x45 cm	330	190.95	% Nos.	630.14
2	Filling of pits 45x45x45 cm	330	109.4	% Nos.	361.02
3	Carnage of naked root plants O/D 2 km (uphill side)	330	14.1	% Nos./km	93.00
4	Planting of naked root plants Q.B.L. i/c ramming	330	73.6	% Nos.	242.88
5	Cutting & preparation of Fence posts 1.80 Mtr. long & 8 to 10 cm dia i/c debarking & fastening the top 15 cm conical shape	15	518.2	% Nos.	77.73
6	Re-digging of hole for fixing of fence posts 45cm deep	15	181.4	% Nos.	27.21
7	Fixing of Fence Posts i/c strutting	15	278.45	% Nos.	41.77
8	Carnage of F/Posts O/D of 1.5 km	15	272.7	% Nos./km	81.81
9	Repair of B/wire fence	200	0.65	Rmt	130
10	Interlacing of Bushes with B/wire fence	180	1.65	Rmt	297
11	Preparation of strips of 100x30x5 cm for sowing of grass seeds i/c sowing in strips	100	358.1	% Nos.	358.1
				Total:	2350.71
				Add 16.60% increase	390.22
				Total:	2740.93
				Add 25% increase in tribal areas	685.23
				Total(works):	3426.16
	Material Cost				
1	Cost of plants	330	3	Nos.	990
2	Cost of U/nails	0.5	45	kg	22.50
3	Cost of grass seed			L/S	70
				Total(Material):	1082.50
				G.Total:	4508.66
				or say	4500
					28650
1	New norm for plantation				4500
2	Maintenance norm for 1st year plantation (30% mortality)				3900
3	Maintenance norm for 2nd year plantation (20% mortality)				3400
4	Maintenance norm for 3rd year plantation (15% mortality)				2250
5	Maintenance norm for 4th year plantation (10% mortality)				2250
6	Maintenance norm for 5th year plantation (10% mortality)				
					44950
	Grand Total for Treatment of Culturable Wasteland				

ANNEXURE-IX					
2. Per hac, Cost Model for Treatment of Alpine Pasture					
S.No	Particulars of works	Qty.	Rate	Unit	Amount
1	Survey and demarcation of Pasture land including making of section, path & preparation of map etc.	1	40.95	hac.	40.95
2	Weeding of obnoxious weeds	1	L/S	hac	1875
3	Preparation of strips 1/2 sowing along contour at 100x30x5cm interval of 2 Mtr for grass sowing	800	368.1	% Nos.	2944.8
4	Application of fertilizer (twice over 1 hac @ 25 kg/ha)	1	L/S	hac	300
5	Carriage of fertilizer from road side to work site O/D of 5 Km by manual labour	0.5	33.4	Qts./km	83.5
6	Moisture retention interventions	1	1500	hac.	1500
7	Cost of fertilizer & seed	L/S	L/S		500
				Total:	7244.25
				Add. 15.60% increase	1202.55
				Total:	8446.80
				Add. 25% increase in tribal areas	2111.70
				G.Total:	10558.49
				or say:	10550

ANNEXURE-X

ANNEXURE-X

2. Per hac. Cost Model for Treatment of Alpine Pasture					
Maintenance norm for First Year					
S.No	Particulars of works	Qty.	Rate	Unit	Amount.
1	Re-preparation of strips 100x 30x 50m	240	184.05	% Nos	441.72
	Add 16.60 % increase				70.68
				Total	512.395
	Add 25 % increase in tribal areas				120.099
				Total	640.494
Material Cost					
1	Cost of seed	1	286.25	Kg	286.25
				Total	286.25
				G.Total:	926.74
				or say	930
	New				10550
	1st year maintenance				1100
	2nd year maintenance				600
	Grand Total for Treatment of Alpine Pasture				12250

ANNEXURE-XI
INDICATIVE LIST OF AREAS IDENTIFIED FOR TREATMENT OF DEGRADED FOREST

Component	Name of Divisions					
	Kinnaur			WL		
	Name of Area	Unit	Ha.	Name of Area	Unit	Ha.
Afforestation of Degraded Forest Lands	UF - Wadang	ha.	10	UF-Kharogla	ha	10
	UF-Palingcha	ha.	10	UF-Mastrang	ha	10
	UF-Chansu	ha	5	UF-Panpo	ha	10
	C-165	ha.	5	UF Panpo	ha	15
	Rukti-Baspa	ha.	3	UF159	ha	10
	Hurba-Baspa	ha.	3	UF Chhitkul	ha	10
	UF - Wadang	ha	15	UF-159 Chitkull	ha.	12
	UF - Palingcha	ha	10	UF-160 Rakchham	ha	10
	C.165	ha.	15	C-162 ©	ha	10
	C-150	ha.	10			
	C-162	ha	10			
	C-156	ha.	10			
	UF-Palingcha	ha	10			
	Wagdag	ha.	4			
	TOTAL ADLF		120			97

ANNEXURE-XII						
INDICATIVE LIST OF AREAS IDENTIFIED FOR TREATMENT OF ASSISTED NATURAL REGENERATION						
Component	Name of Divisions					
	Kinnaur			WL		
	Name of Area	Unit	Ha.	Name of Area	Unit	Ha.
Assisted Natural Regeneration	C-152 (b)	ha.	8	UF-159 Shoney	ha.	10
	C-154 (b)	ha.	5	UF-160 Mastrang	ha.	10
	C-155	ha.	7	UF-159 Rakchham	ha.	10
	C-153	ha.	5	UF-Chitkul	ha.	5
				UF-159 Chitkul	ha.	10
	TOTAL ANR		25			45

ANNEXURE-XIII						
INDICATIVE LIST OF AREAS IDENTIFIED FOR TREATMENT OF RAISING OF NTFP						
Component	Name of Divisions					
	Kinnaur			WL		
	Name of Area	Unit	Ha.	Name of Area	Unit	Ha.
Raising of NTFP Plantation	Sangla Kanda	ha.	6	UF-Batsari	ha.	10
	UF-Kamru	ha.	6	UF-159 Chitkul	ha.	5
	Sangla Kanda	ha.	6	UF-159 Rakcham	ha.	5
	UF-153	ha.	6	UF-Batsari Demno	ha.	10
	Sangla Kanda II	ha.	5	UF-159 Rakchham Kanda	ha.	10
	Kamru Kanda II	ha.	5	UF-159 Janpa	ha.	5
	TOTAL NTFP		34			45

ANNEXURE-XIV						
INDICATIVE LIST OF AREAS IDENTIFIED FOR TREATMENT OF CULTURALABLE WASTELAND						
Component	Name of Divisions					
	Kinnaur			WL		
	Name of Area	Unit	Ha.	Name of Area	Unit	Ha.
Treatment of Culturable Wasteland	Kamru Sangla	ha	10	UF-Nagasti	ha	10
	UF-Kamru	ha	8	UF-Chhitkul	ha	10
	Burcha-Zalaring	ha	4	UF-Panpo	ha	15
	UF-Kaitra	ha	4	UF-Rackcham	ha	5
	UF-Tongtongcha	ha	4			
	TOTAL TCW		30			40

ANNEXURE-XV						
INDICATIVE LIST OF AREAS IDENTIFIED FOR TREATMENT OF ALPINE PASTURE						
Component	Name of Divisions					
	Kinnaur			WL		
	Name of Area	Unit	Ha.	Name of Area	Unit	Ha.
Improvement of Alpine Pastures	Dewar Kanda	ha.	10	Batsen Denmo Kanda	ha.	30
	Dhumer Kanda	ha.	15	Nardo Chitkul Kanda	ha.	40
	Dewar Kanda		10	Rakcham Kanda	ha.	30
	Sangla Kanda		15	Mugaling Chitkul Kanda		40
	Sangla Kanda	ha.	10	Jorya Rani Kanda		40
	Dewar Kanda	ha.	10	Danmo Batsen Kanda		45
				Dewar Kanda (R Bank)	ha.	40
				Bathori Thach Chitkul	ha.	60
				UF-159 Batcheri Kanda	ha.	30
				Chitkul Janpa Kanda	ha.	35
				Nagasti Kanda	ha.	35
	TOTAL ALPINE PASTURE					425
			70			

Annexure XVI

List of area for treatment of land slides/slips

Sr. No.	Name of Division	Name of slip	Area	Approx. Amount
1	Kinnaur	Tongtongcha	5Ha	2240000
2		Rukti	15Ha	5780000
3		Hurba	9Ha	3740000
4		Palika slip	1Ha	300000
5		Kimmo slip	1Ha	300000
6		Ruturang R. Bank slip	5Ha	2300000
7		Ruturang L. Bank slip	2Ha	800000
8		Ruturang slip (below barrage)	4Ha	1500000
		Total Kinnaur	42Ha	16960000
9	Wildlife	Shushang slip	4Ha	1500000
10	Sarahan	Shoney slip	3Ha	1200000
11		Saringche slip	3Ha	1300000
12		Chispan slip	1Ha	100000
13		Khargola slip	5Ha	2000000
14		Chitkul slip	7Ha	2900000
15		Batsert slip	5Ha	2000000
16		Kutange slip	5Ha	2000000
17		GorangGarang	3Ha	1200000
18		Rachham slip	1Ha	600000
19		Nagasti slip	1Ha	600000
		Total Sarahan	38Ha	15400000
		G. Total slips	80Ha	32360000

Annexure XVII

Treatment of Nalla				
Sr. No.	Name of Division	Name of slip	Length	Approx. Amount
1	Kinnaur	Tongtongche Nalla	3.5Km	3050000
2		Hurba Nalla	7Km	6550000
3		Rukh Nalla	6.5Km	6000000
4		Gotkhalang Nalla	1Km	1000000
5		Khayo Nallang	1.20Km	1200000
6		Gangrang Nalla	1.5Km	1500000
7		Shong Nalla	2Km	2000000
		Total Kinnaur	22.7Km	21300000
1	Wildlife Sarahan	Chitkul Nalla	1Km	1000000
2		Shilpa Nalla Chitkul	1Km	1000000
3		Batsen Nalla	3Km	3000000
4		Shoney Nalla	2.80Km	2800000
5		Kutange Garang	0.80Km	900000
6		Bossoring Garang	1.90Km	1900000
7		Gor Garang	0.90Km	800000
8		Janpa Garang Nalla	1.5Km	1400000
9		Shushang Nalla	1km	800000
10		Rasrang Nalla	0.80 Km	1000000
11		Jorya garang Nalla	2.50KmKm	2000000
12		Nardo Garang	2.50Km	2000000
13		Mangsa Garang	0.50Km	500000
14		Khargola Nalla	2Km	2000000
15		Noshing Khad	1Km	1000000
16		Karu Garang	2Km	2000000
17		Saringche Nalla	0.90Km	800000
18		Hugru garang	1KM	1000000
19		Jabtiya garang	1Km	1000000
20		Shanchya garang	1.20Km	1200000
		Total Sarahan		28100000
		G. Total Nalla	52Km	49400000

Annexure XVIII

River bank stabilization				
Sr. No.	Name of Division	Name of slip	Length	Approx. Amount
1	Kinnaur	Zotaring Gangaran (R. Bank)	3Km	4500000
2		Zotaring Rukti (L. Bank)	2Km	3000000
3		Kashmir-Hurba (L. Bank)	2Km	2000000
4		Chiddo	1Km	1000000
5		Rukti	2.5Km	2500000
6		Changsaring	1.40Km	1500000
7		Ruturang	1Km	1000000
8		Palingcha ruturang (L. Bank)	2Km	2000000
9		Palingcha ruturang (R. Bank)	2Km	2000000
		Total Kinnaur		19600000
1	Wildlife Sarahan	Singan to Batseni	2.20Km	2000000
2		Batseni to Kharogla	3Km	2400000
3		Rachham to Mastrang	2Km	2000000
4		Chitkul to Nagasti	1Km	500000
5		Nagasti to Mulling	2Km	1200000
6		Mulling to Joryagarang	1.5Km	900000
7		Hurba to Singan	0.5Km	500000
8		Kharogla to Dungdungche	1.20Km	1200000
9		Dungdungche to Rachham	1.40Km	1400000
10		Mast rang to Yak Farm	1.50Km	1200000
11		Yak Farm to Chitkul	2.20Km	2000000
12		Jorya to Rani Kanda	1Km	1000000
		Total Sarahan		16300000
		G. Total River	35.9Km	35900000

Annexure XIX

Road side stabilization				
Sr. No.	Name of Division	Name of slip	Area	Approx. Amount
1	Kinnaur	Ruturang to Hurba	5 Kms	500000
		Pallingcha to Sangla	6 Kms	600000
		Sangla to Sangla Kanda	3.5 Kms	350000
	Wildlife Saran	Batseri to Rachham	11 Kms	1100000
		Rachham to Chikul	10 Kms	1000000
		G. Total R. side stabilisation.		3550000
		G. Total Road side Soil		3550000

Rural Infrastructure Development					Annexure XX
Sr. No.	Name of Division	Name of Building	Name of site	No	Approx. Amount
1	Kinnaur	a) Village pond & Tank	Sangla	2	400000
			Chansu	1	200000
			Kupa	1	200000
		Total Kinnaur		4	800000
	Wildlife Sarahan	a) Village pond & Tank	Chitkul	1	200000
			Rachham	1	200000
			Batsari	1	200000
		Total Sarahan		3	600000
		G. Total Pond & Tanks		7	1400000
2	Kinnaur	b) Soil & water cons.	Kashmir	1	225000
			Sangla	1	225000
			Chansu	1	225000
			Kamru	1	225000
			Thapa Saring	1	225000
		Total Kinnaur		5	1125000
	Wildlife Sarahan	b) Soil & water cons.	Batsari	1	225000
			Chispan	1	225000
			Chitkul	1	225000
		Total Sarahan		3	675000
		G. Total Soil & water cons.		8	1800000
3	Kinnaur	c) Repair of spring bawari, Kuhl & other water sources	Sangla	1	150000
			Kamru	1	150000
			Kupa	1	150000
			Chansu	1	150000
			Kashmir	1	150000
			Bawari at Sangla	1	200000
		Total Kinnaur		6	950000
4	Wildlife Sarahan	c) Repair of spring bawari, Kuhl & other water sources	Chitkul	2	300000
			Mastrang	1	150000
			Rachham	1	150000
			Kharogla	1	150000
			Batsari	1	150000
			Boeningsaring	1	150000
		Total Sarahan		7	1050000
		G. Total Bawari/Kuhl		13	2000000
5	Kinnaur	d) Village road & path	Ruturang to Chansu	4 Kms	200000
			Sangla to Kamru	3 Kms	150000
			Shong to Ruturang	5 Kms	250000
			FRH Sangla to Hurba Khad	2 Kms	100000
			Hurba to Dewar Kanda	5 Kms	250000
		Total Kinnaur	14 Kms		950000

6	Wildlife Sarahan	d) Village road & path	Themgrang to Batseri	2 Kms	100000
			Batseri to Rachham	5 Kms	250000
			Chitkul to Lalanti	10 Kms	500000
		Total Sarahan		17 Kms	850000
		G. Total village road/path		31 Kms	1800000
7	Kinnaur	e) Construction of foot bridges	Over Rukli Khad (Contd.)	1	400000
			over Shong Khad	1	300000
			over Gangrang Khad	2	800000
		Total Kinnaur		4	1500000
	Wildlife Sarahan	e) Construction of foot bridges	over Saringche Nalla Themgrang	1	400000
			Over Batseri Nalla	1	400000
			Over Rasrang	1	400000
			Over Shoney Khad	1	400000
			Over Rimgrang Nalla	1	400000
		Total Sarahan		5	2000000
		G. Total Foot bridge		9	3500000
		G. Total Rural Inf. S. Dev.			10500000

Forest Infrastructure Development					Annexure XXI
Sr. No.	Name of Division	Name of Building	Name of site	No	Approx. Amount
1	Kinnaur	a) Construction/repair of operational building (New)	Const. of Type-II Qtr. At R/Peo (Condt. Work)	2 No.	700000
			Const. of Type-III Qtr. At R/Peo	1 No.	700000
			Const. of DFO Residence/compound at R/Peo (Condt. Work)	1 No.	369000
			Const. of store in Range H/Qtr.	1 No.	100000
			Const. of Community center at Sangla (Condt. Work)	1 No.	700000
			Development of compound for community center at Sangla	1 No.	500000
		Total New Kinnaur			3069000
		Maint.	Maint. Of Divisional Office building at Nichar	1 No.	500000
			DFO Residence at Nichar	1 No.	300000
			Division office compound at Nichar		350000
			Type-I, II & III at Nichar	7 No.	700000
			Maint. Of Range office cum Residence at Kilba	1 No.	200000
			Fgd. Hut at Kupa and Sangla	2 No.	60000
			FRH Sangla	1 No.	100000
			Trakker hut at Chansu Kanda	1 No.	100000
		Total Maint. Kinnaur			2310000
	Wildlife Sarahan	Maint.	Fgd. Hut Chitkul, Rachham, Batsari & Sangla	4 No.	100000
			Maint. Of Range office Sangla	1 No.	100000
		Total Main. Sarahan			200000
		G. Total Building New & Maint.			5579000
	Kinnaur	b) Repair/Construction of inspection path/B/Path	Shong Khad to Ruturang	3 Kms.	150000
			Sangla to Hurba	3 Kms.	150000

		Thapa Saring to Kamru	3 Kms	150000
	Total Kinnaur			
Wildlife Sarahan		Chitkul to Tulta L. Bank	3 Kms	150000
		Chitkul to Shipya L. Bank L. Bank	3 Kms	150000
		Dangdangshe to Rakchham Kanda	3 Kms	150000
	Total Wild Life			
	G. Total I/Path & B/Path			450000
Kinnaur	c) Construction of bridges	Over Hurba Khad	1 No	700000
	Total Kinnaur		1 No	700000
Wildlife Sarahan		Const. of Themrang to Batsari over Baspa River	1 No.	800000
	Total Wild Life			
	G. Total Bridges			800000
	G. Total Forest Inf. S			1500000
				7979000

6. Avenue Plantation & Land scaping					Annexure XXII
Sr. No.	Name of Division	Name of Building	Name of site	No	Approx. Amount
1	Kinnaur	6. Avenue Plantation & Land scaping	Beautification of Lake at Kupa	1No.	500000
			Planting of Tall Plants	1000	100000
	Wildlife Sarahan		Planting of Tall Plants	1000	100000
			Beautification of land scaping at Chitkul		500000
		G. Total Avenue & Land scaping			1200000

Annexure XXIII				
7. Treatment of Private Land				
Sr. No.	Name of Division	Name of Building	Name of site	Approx. Amount
2.	Kinnaur	7. Treatment of Private Land	Kamru village	5 ha. 250000
			Sangla village	7 ha. 350000
	Wildlife		Batsen	2 ha. 100000
	Sarahan		Themgrang	6ha. 300000
			Boeningsaring	6 ha. 300000
			Rachhem Rank	2 ha. 100000
			Chitkul	2 ha. 100000
		G. Total Private Land		1500000

9. Wildlife Management					Annexure XXIV
Sr. No.	Name of Division	Name of Building	Name of site	No.	Approx. Amount
		A) Intensive management of W.L. sanctuary			
		i) Fire Protection			
			a) Fire watcher for six month (three years)	5 No.	240000
			b) Equipments	L/S	50000
			c) Fire index board & publicity	L/S	100000
			d) Workshop on fire control technique	L/S	50000
			Total Fire Pro.		440000
		ii) Habitat improvement			
			a) Creation of Musk deer farm for ex-situ conservation Musk deer at Kharagla	L/S	750000
			b) Const. of water pond & saltlick	L/S	350000
			Total Habitat		785000
		iii) Antipoaching activities			
			a) Engagement of antipoacher for six month (Three years)	2	120000
			Total Antipoaching		120000
		iv) Reward & incentive to informer	in sanctuary area	L/S	150000
			Total Reward & incentive		150000
		v) Census operation		L/S	120000
			Total Census		120000
		vi) Demarcation of boundary pillar		L/S	50000
		vii) Salogan & Sign board		L/S	80000
			G. Total A		8810000
		B) Eco-development activities			
			i) Vaccination of domestic cattle	L/S	300000
			ii) Purchase of equipments & Med.	L/S	200000
		iii) Income generation activities	Vermi composting	L/S	200000
			iv) Provision for compensation against WL depredation	L/S	500000

			v) Distribution of GI Pipes for installation of religious flag	500 No. Saraha	250000
				1300 No. Kinnaur	650000
		vi) Const. of Crematoria	Chitkul	6 No.	100000
			Rachham		100000
			Dangdangche		100000
			Batsari		100000
			Themrang		100000
			Bongsaning		100000
			vii) Const. of Tracker hut	1 No.	150000
		Installation of street solar light	Chitkul	2 No.	30000
			Rachham	3 No.	45000
			Batsari	2 No.	30000
		Sulabh Shochalya	Rachham	2 No.	200000
			Batsari	1 No.	100000
			Chitkul	1 No.	100000
			G. Total B		3355000
			G. Total Wildlife Management		12165000

10. Training, awareness & Publicity					Annexure XXV
Sr. No.	Name of Division	Name of Building	Name of site	No	Approx. Amount
1	Kinnaur	Training, awareness & Publicity			1000000
	Wildlife Sarahan				1000000

ANNEXURE XXVI

LIST OF AREA TREATED DURING PHASE-I

ANNEXURE XXVI

LIST OF AREA TREATED DURING PHASE-I					
Sr.No.	year	Component	Name of area	Quantity	
1.a	1999-2000	Afforestation of Degraded Forest Lands	UF- Kamru-I	10	
				UF-Kamru-II	5
				Kamru Kanda	5
				C-154 (C)	10
	2001-02		C-155 (I)	5	
			C-155 (ii)	5	
			UF-Ruturang	5	
			UF-Wadang	5	
			C-153	5	
			C-152 (b)	5	
	2002-03		C-154 (b)	5	
			C-155	10	
			C-156	5	
			C-153	10	
			UF-Ruturang	7	
	2003-04		C-154(a)	5	
	2004-05		UF - Batsen	10	
			UF - Rakchham	10	
			UF-Pallingcha	10	
			C-154 (b)	5	
	2005-06		UF - Palingcha	5	
			UF-Rangsthang	5	
			C-153	5	
			UF-Wadang	5	
			C-165	5	
			C-152 (b)	5	
			UF-Rackcham	8	
		UF-Mastrang	5		
			Total	180	
1.b		1999-2000	Assisted Natural Regeneration	C-153 Chhidoo	15
			C-151 (b) Shong	5	
	2002-03		C-157	5	
			C-158	10	
	2005-06		C.No.-159	10	
				45	
1.c	2005-06	Raising of NTFP Plantation	UF-Chhitkul		
				5	
			UF-Rackcham	10	
				15	
1.d	2002-03	Treatment of Culturable Wasteland	Kamru-Sangla		
				10	
			Saringcha -	5	
	2004-05		Dungdangshee		

Sr.No.	year	Component	Name of area	Quantity
				20
2	2001-02	Improvement of Alpine Pastures	Sangla Kanda	10
	2002-03		Sangla Kanda	5
			Dever Kanda	10
	2004-05		Dever Kanda	10
			Sangla Kanda	5
			Kamru Kanda	5
				45

ANNEXURE XXVII

LIST OF AREA TREATED DURING PHASE-I

Soil & Moisture Conservation Works			
Sr.No.	Year	Component	Name of Area
a)	2001-02	Treatment of land slips/slides	Tongtongcha Nallah
	2002-03		Tongtongcha
			Rukti Khad
			Hurba Khad
			Chhidoo
			Shushang Nallah
			Shoney Khad
			Rakchham Khad
	2003-04		Rukti
			Hurba
			Chhidoo
	2004-05		Tongtongcha
			Rukti Khad
			Hurba Khad
			Shoney Khad
			Rakchham Khad
			Seringcha Nallah
			Chhidoo
			Baturi slip
			Barua slip
			Tongtongcha Nallah
			Seringcha Nallah
b)	1999-2000	Treatment of Nallah	Rukti Khad
			Tongtongcha nallah
	2000-01		Rukti Khad
			Tongtongcha nallah
	2001-02		Rukti Khad
			Tongtongcha nallah
	2002-03		Gangrang nallah
			Tongtongcha
			Gangarang Nallah
			Hurba Khad
			Rukti Khad
			Nagasti Nallah
			Chhitkul Nallah
	2004-05		Noshang Khad
			Seringcha Nallah
			Tongtongcha Nallah
			Gangarang Nallah
			Hurba Khad
			Rukti Khad
			Nagasti Nallah
			Chhitkul Nallah

Sr.No.	Year	Component	Name of Area
			Seringcha Nallah
			Batseri Nallah
			Khumsungarang
			Shoney Khad
	2005-06		Tongtongcha
			Raidang/Dharcho
			Gotkhalang (Kamroo) Kharia to
			Zalaring
			Khiyonalang
			Hurba Khad
			Rukti Khad
			Batseri Nallah
c	2001-02	River bank stabilization	Hurba to Sangla
	2002-03		Ruturang to Batseri
			Ruturang to Power House
			Power House to Batseri
			Hurba to Singan Khad
	2004-05		Ruturang to Zalaring (R bank)
			Chhido (L bank)
			Zalaring to Burcho (R bank)
			Ruturang to Chhido(L Bank)
			Chhido to Sangla (L bank)
			Sangla to Hurba (L bank)
			Singan Khad to Batseri (L bank)
			Batseri to Khrogla and Kharogla to
			Dungdangshee
	2005-06		Ruturang to Zalaring (R. Bank)
			Sangla to Hurba (L Bank)
			Sangla to Gangarang (R Bank)
			Batseri to Rakcham (L Bank)
			Khrogla to Dangdangshee (L Bank)

PHASE I

Divisionwise and Yearwise Physical and Financial Outlay Achieved during Phase-I

S.No.	Name of component	1994-98				1998-2000				2000-01				2001-02				2002-03				
		Kinnaur		Wildlife		Kinnaur		Wildlife		Kinnaur		Wildlife		Kinnaur		Wildlife		Kinnaur		Wildlife		
		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	
1 Forest Establishment & Improvement																						
a)	Afforestation of Degraded Forest	0	0	0	0	453000	0	0	0	80000	0	0	0	0	0	0	0	0	554000	0		
						New				Main									50 man			
b)	Assisted Natural Regeneration	0	0	0	0	112500	0	0	0	16000	0	0	0	0	0	0	0	0	15000	15	150000	
						New				Main									None			
c)	Raising of NTFP Plantation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
d)	Treatment of Culturable Wasteland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125000	0	0	
e)	Raising of Nursery	1	250877	0	0	4	835000	0	0	0	0	0	0	0	0	0	0	1	153000	1	300000	
2 Rejuvenation of Alpine Pasture																						
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130100	0	0	
																			15 New/ 10 man			
3 Soil & Moisture Conservation works																						
a)	Treatment of land slope slides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46.7	2281172	19	13350000
b)	Treatment of Nallah	0	0	0	0	68	450000	0	0	26	270000	0	0	0	0	0	0	0	1650000		1200000	
c)	River bank stabilization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1450000		770000	

S.No.	Name of component	1994-98			1999-2000			2000-01			2001-02			2002-03		
		Kinnaur		Wildlife	Kinnaur		Wildlife	Kinnaur		Wildlife	Kinnaur		Wildlife	Kinnaur		Wildlife
		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.
d)	Road side stabilization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4) Rural Infrastructure Development															
a)	Village pond/ tank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
b)	Soil & water conservation structures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c)	Repair of spring, bawties	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d)	Repair of Village road and path	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
e)	Construction of foot bridges	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5) Forest Infrastructure Development															
a)	Construction/ Repair of operational buildings	0	0	0	10000	0	0	0	0	0	200000	0	0	551244	0	80000
b)	Construction/repair of inspection path/ bode paths and roads	0	0	0	411050	0	0	0	0	0	0	0	0	0	0	0
c)	Construction of bridges	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6) Avenue plantation and land scaping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7) Treatment of Private lands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

S.No.	Name of component	1994-95			1995-2000			2000-01			2001-02			2002-03		
		Kincaur Pay. Fin.	Wildlife Phy. Fin.	Wildlife Phy. Fin.	Kincaur Pay. Fin.	Wildlife Phy. Fin.	Wildlife Phy. Fin.	Kincaur Pay. Fin.	Wildlife Phy. Fin.	Wildlife Phy. Fin.	Kincaur Pay. Fin.	Wildlife Phy. Fin.	Wildlife Phy. Fin.	Kincaur Pay. Fin.	Wildlife Phy. Fin.	Wildlife Phy. Fin.
B	Distribution of seedlings to people	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A	Wildlife Management															
	Intensive Management of WL Sanctuary															
i)	Fire Protection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ii)	Habitat improvement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
iii)	Antipoaching activities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
iv)	Research & Incentive to Informer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v)	Census operation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
vi)	Delineation of boundaries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
vii)	Purchase of Medicines & Equipment	0	0	0	0	0	0	0	0	0	0	0	250000	0	0	0
viii)	Sign boards	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ix)	Wildlife compensation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	Eco Development activities															
i)	Vaccination of domestic cattle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ii)	Purchase of Equipment & Med.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
iii)	Income Generation activities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

S.No.	Name of component	1994-98			1999-2000			2000-01			2001-02			2002-03		
		Phy.	Fin.	Wildlife	Phy.	Fin.	Wildlife	Phy.	Fin.	Wildlife	Phy.	Fin.	Wildlife	Phy.	Fin.	Wildlife
(iv)	Nature awareness exposure visit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Training, Awareness, Extension & Publicity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Research & Study	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Operational Support	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
a)	Establishment Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
b)	Office Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c)	Travelling Allowance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d)	Office Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
e)	Motor Vehicle & P.O.L	0	279548	0	0	0	0	0	273152	0	0	0	0	0	0	0
f)	Allowances to Staff and labour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
g)	Purchase of Antelope Car	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Agriculture and Horticulture Support	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Annual Husbandry Support	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Revenue of State	0	239123	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Contingencies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		779648	0	0	307560	0	0	625152	0	0	4451975	250000	0	9436232	3820000	0

S.No.	Name of component	2003-04				2004-05				2005-06				Total	
		Phy.	Fin.	Wildlife	Kinnaur	Phy.	Fin.	Wildlife	Kinnaur	Phy.	Fin.	Wildlife	Kinnaur	Phy.	Fin.
1	Forest Establishment & Improvement														
a)	Afforestation of Degraded Forest	5 New/ 97 main	365650	0	0.15 New/ 102 main	505600	20 New	25387.10 New/ 107 main	859900	33 New	548778			4123000	
b)	Assisted Natural Regeneration	20 main	10000	15 main	11250	20 main	10000	15 main	15000	0.10 New/ 15 main	111000			467750	
c)	Raising of NTFP Plantation	0	0	0	0	0	0	2	355000	0.15 New	376500			731500	
d)	Treatment of Culturable Wapiland	10 New	40000	0	0.10 main	30000	10 New	142830	10 main	30000	10 main	99176		472000	
e)	Raising of Nursery	1	25500	1	82750	0	0	0	0	0	0			1460127	
2	Improvement of Alpine Pasture	15 New	12000	0	0.20 New/ 15 main	153800	0	0.20 main	16000	0	0			387400	
3	Soil & Moisture Conservation works														
a)	Treatment of land along sides	4	30544	0	0	3369190	410000		500000		70000			900000	
b)	Treatment of Nahan		43066	0	0	4008636	4094500		3300000		274000			16624625	
c)	River bank stabilization		7831	0	0	4088294	1365500		2086000		855000			10815625	
d)	Road side stabilization	0	0	0	0	0	0	0	0	0	0			0	

S.No.	Name of component	2003-04			2004-05			2005-06			Total	
		Phy.	Fin.	Wildlife	Phy.	Fin.	Kinnaur	Phy.	Fin.	Wildlife	Phy.	Fin.
4	Rural Infrastructure Development											
a)	Village pond tank	0	0	0	0	0	0	0	0	0	0	0
b)	Soil & water conservation structures	0	0	0	0	0	0	0	0	0	0	0
c)	Repair of spring, bawlies	0	0	0	0	0	0	0	0	0	0	0
d)	Repair of Village road and path	0	0	0	0	0	0	0	0	0	0	0
e)	Construction of foot bridges	0	0	0	0	0	0	0	600000	0	0	600000
5	Forest Infrastructure Development											
a)	Construction/Repair of operational buildings	966503		0	1618530	175000		2648100		0		6249777
b)	Construction/Repair of inspection pathy track paths and roads	0	0	0	0	200000		0	0	100000		711000
c)	Construction of bridges		0	0	0	0	0	0	0	0	0	0
d)	Avenue plantation and land scaping	0	0	0	0	0	0	0	0	0	0	0
7	Treatment of Private Lands	0	0	0	0	0	0	0	160000	0	0	160000

S.No.	Name of component	2003-04			2004-05			2005-06			Total		
		Phy.	Fin.	Kinnaur	Phy.	Fin.	Kinnaur	Phy.	Fin.	Kinnaur	Phy.	Fin.	Total
	8 Distribution of seedlings to people		0	0	0	0	0	0	0	0	0	0	0
	9 Wildlife Management												
A	Initiative Management of WIL Sanctuary												
i)	Fire Protection		0	0	0	0	90000	0	0	0	20000	0	110000
ii)	Habitat improvement		0	0	0	0	215000	0	0	0	0	0	215000
iii)	Anti-poaching activities		0	0	0	0	70000	0	0	0	0	0	70000
iv)	Reward & Incentive to informer		0	0	0	0	0	0	0	0	0	0	0
v)	Census operation		0	0	0	0	0	0	0	0	0	0	0
vi)	Demarcation of boundaries		0	0	0	0	0	0	0	0	0	0	0
vii)	Purchase of Medicines & Equipment		0	0	0	0	0	0	0	0	0	0	250000
viii)	Sign boards		0	0	0	0	0	0	0	0	0	0	0
ix)	Wildlife compensation		0	0	0	0	0	0	0	0	0	0	0
B	Eco Development activities												
i)	Vaccination of domestic cattle		0	0	0	0	0	0	0	0	0	0	0
ii)	Purchase of Equipment & Maint.		0	0	0	0	0	0	0	0	0	0	0

S.No.	Name of component	2003-04			2004-05			2005-06			Total		
		Phy.	Fin.	Wildlife	Phy.	Fin.	Wildlife	Phy.	Fin.	Wildlife	Phy.	Fin.	Total
iii)	Income Generation activities		0	0		0							0
iv)	Nature Awareness exposure visit		0	0		0							0
													107578
10	Training Awareness Extension & Publicity		0	0		0							0
						82155							82155
11	Research & Study		52981	0		0							52981
12	Operational Support												
a)	Establishment Cost		47200	0		1619434							1619434
b)	Office Expenses		114450	0		180314							294764
c)	Traveling Allowance		29764	0		162958							192722
d)	Office Equipment		0	0		0							0
e)	Motor Vehicle & POL		120620	0		109544							230164
f)	Amenities to Staff and labour		860	0		0							860
g)	Purchase of Ambassador Car		0	0		0							0
13	Agriculture and Horticulture support		0	0		0							0
14	Animal Husbandry Support		0	0		0							0
15	Revenue of State		0	0		200000							200000
16	Contingencies		0	0		0							0
													230123
Total		1886432		94090		16141458		7454279		12684201		2250440	42209223

Divisionwise and Yearwise Consolidated Physical and Financial Outlay (Phase-II) Targets														ANNEXURE XXIX	
Sl. No.	Component	2006-07				2007-08				2008-09				2009-10	
		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.		
1	Forest establishment & improvement														
a)	Afforestation of Degraded Forest Lands	38 New / 117 man	14.1200	33 New / 53 man	1347900.45 New / 123 man	1580702.35 New / 63 man	1394100.44 New / 120 man	1762600.37 New / 98 man	1307200	168	503700	130	394300		
b)	Assured Natural Regeneration	8 New	138000.00 New / 26 man	138000.00 New / 26 man	568000.00 New / 8 man	103000.15 New / 45 man	313000.12 New / 15 man	222500.10 New / 45 man	226600	26	36500	56	88000		
c)	Raising of NTFP Plantation	12 New	446000.00 New / 11 man	446000.00 New / 11 man	876100.12 New / 12 man	551400.20 New / 26 man	556000.18 New / 24 man	556600.51 New / 18 man	428800	34	126100	48	117700		
d)	Treatment of Culturable Wasteland	10 New	303000.00 New / 20 man	303000.00 New / 20 man	612000.12 New / 20 man	411300.15 New / 30 man	551750.00 New / 20 man	322200.00 New / 45 man	311200	30	116000	30	171000		
	Total		231560		2907160		3423900		3811790		782300		146800		
2	Improvement of Alpine Pastures	25 New	375750.00 New / 20 man	375750.00 New / 20 man	1056000.28 New / 25 man	291200.13 New / 100 man	1428102.20 New / 50 man	211100.130 New / 205 man	1500000	45	370000	170 New / 205 man	356500		
3	Soil & Moisture Conservation Works														
a)	Treatment of anti-erosion		4400000		3000000		3200000		3200000		4000000		3500000		
b)	Treatment of slope		4850000		5400000		4400000		5400000		4700000		8100000		
c)	River bank stabilization		13000000		9500000		9500000		8600000		8600000		3700000		
d)	Flood risk mitigation		3000000		5000000		5000000		3000000		4000000		3500000		
4	Rural Infrastructure Development														
a)	Village institutions		200000		1800000		400000		200000		200000		200000		
b)	SC & ST Village Conservation Societies		225000		225000		225000		225000		225000		225000		
c)	Repair of aging, damaged, old & new water sources		150000		300000		130000		130000		130000		130000		
d)	Repair of village road & petty bridge		200000		190000		400000		250000		250000		250000		
e)	Construction of foot bridges		400000		400000		300000		400000		400000		400000		
5	Forest Infrastructure Development														
a)	Grant support of equipment		3235000		1000000		1000000		1000000		1000000		1000000		
b)	Grant support of staff and		150000		100000		100000		100000		100000		100000		

Sl. No.	Component	2006-07		2007-08		2008-09		2009-10	
		Kinshasa	Visible	Kinshasa	Visible	Kinshasa	Visible	Kinshasa	Visible
d)	Construction of bridges		800000		100000				
e	Avenue plantation & land reclamation	20000	25000	20000	525000	25000	25000	525000	25000
f	Treatment of Private Lands	100000	100000	300000	300000	200000	300000		100000
g	Distribution of seedlings to people	8000	8000	8000	8000	8000	8000	8000	8000
h	Wastu Management								
A	Intensive management of								
	AI Initiative management of								
	i) Fire Protection	0	83000	0	130000	0	83000	0	83000
	ii) Habitat improvement	0	100000	0	1000000	0	330000	0	300000
	iii) Antiquating activities	0	30000	0	30000	0	30000	0	30000
	iv) Research & monitor to inform	0	30000	0	30000	0	30000	0	30000
	v) Census operation	0	0	0	40000	0	0	0	40000
	vi) Demarcation of boundary pillar	0	0	0	50000	0	0	0	50000
	vii) Bogon & Sign board	0	20000	0	25000	0	30000	0	0
	viii) Eco-development activities	0	0	0	0	0	0	0	0
	ix) Vaccination of domestic cattle	0	80000	0	80000	0	80000	0	80000
	x) Purchase of equipments & Mat	0	40000	0	40000	0	40000	0	40000
	xi) Income generation activities	0	50000	0	50000	0	50000	0	50000
	xii) Provision for compensation against fire, degradation	0	100000	0	100000	0	100000	0	100000
	xiii) Distribution of GI Pipes for installation of religious flag	300000	150000	300000	150000	0	0	0	0
	xiv) Control of Crematorium	0	200000	0	100000	0	200000	0	100000
	xv) Control of Tractor fuel	0	0	0	0	0	0	0	0
	xvi) Installation of street side light	0	45000	0	45000	0	15000	0	0
	xvii) Sustain Stockpiles	0	100000	0	100000	0	100000	0	100000
10	Training, Awareness, Extension & Policy	200000	200000	200000	200000	200000	200000	200000	200000

Sl. No.	Component	2006-07		2007-08		2008-09		2009-10	
		Kinara	Waste	Kinara	Waste	Kinara	Waste	Kinara	Waste
11	Research & studies	50000	50000	100000	100000	50000	50000	50000	50000
12	Operational support								
a)	Establishment cost	2400000		2400000	80000	2400000	50000	400000	50000
b)	Office expenses	250000	100000	250000	100000	250000	100000	250000	50000
c)	Travelling allowance	200000	100000	200000	50000	200000	100000	200000	50000
d)	Office equipment	100000	20000	100000	0	100000	0	100000	20000
e)	Motor vehicle & PCL	300000	80000	300000	80000	300000	80000	300000	80000
f)	Utilities to staff & labour	100000	20000	100000	20000	100000	20000	100000	20000
g)	Purchase of computer and accessories	0	100000	0	0	0	0	0	0
13	Agricultural & Horticultural support	300000	300000	300000	300000	300000	300000	300000	300000
14	Animal Husbandary support	150000	150000	150000	150000	150000	150000	150000	150000
15	Revenue of State	0	0	0	0	0	0	0	0
16	Total Component	3430125	2271515	3430125	2271515	3430125	2271515	3430125	2271515
	Grand Total	3430125	2271515	3430125	2271515	3430125	2271515	3430125	2271515
	Total	37918870	24328866	37918870	24328866	37918870	24328866	37918870	24328866

Sl. Component No.	2010-11				2011-12				2012-13				2013-14			
	Forest		Wildlife		Forest		Wildlife		Forest		Wildlife		Forest		Wildlife	
	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.
1 Forest establishment & improvement																
a) Afforestation of Degraded Forest Lands	15.0	375000	11.0	274000	1.25	220250	9.7	180500	64	142800	27	113800	44	74800	32	54400
b) Assisted Natural Regeneration	25	22500	50	42500	35	18825	45	30000	17	10200	25	15000	12	7200	12	8000
c) Rearing of NTFP Plantation	32	41600	25	35500	10	13000	5	6500	8		0		5		0	4119000
d) Treatment of Cultivable Wasteland	30	84000	40	115500	30	70750	40	90750	20	45000	20	45000	8	18000	5	11250
Total	533400		474000		347800		337940		188000		173800		100000		71800	1927900
2 Improvement of Alpine Pastures	20	12000	200	150000	0	0	70	42500	0		0		0		0	6075750
3 Soil & Waters Conservation Works																
a) Treatment of land slides	2100000		300000		0		0		0		0		0		0	32580000
b) Treatment of landslides	2400000		400000		0		0		0		0		0		0	48400000
c) River bank stabilization	1300000		0		0		0		0		0		0		0	31800000
d) Road side stabilization	0		600000		0		0		0		0		0		0	2500000
4 Rural Infrastructure Development																
a) Village panchayat	0		0		0		0		0		0		0		0	1400000
b) Soil & Water Conservation Structures	225000		0		0		0		0		0		0		0	1800000
c) Repair of spring, borewell, well & other water sources	150000		15000		200000		150000									2000000
d) Repair of village road & path/bridge Construction of foot bridge	0		0		0		0		0		0		0		0	1800000
e) Construction of foot bridge	0		400000		0		0		0		0		0		0	3500000
5 Forest Infrastructure Development																
a) Construction of operational building near	300000		0		0		0		0		0		0		0	5579000
b) Construction repair of path and	0		0		0		0		0		0		0		0	300000
c) Construction of bridges	0		0		0		0		0		0		0		0	1100000

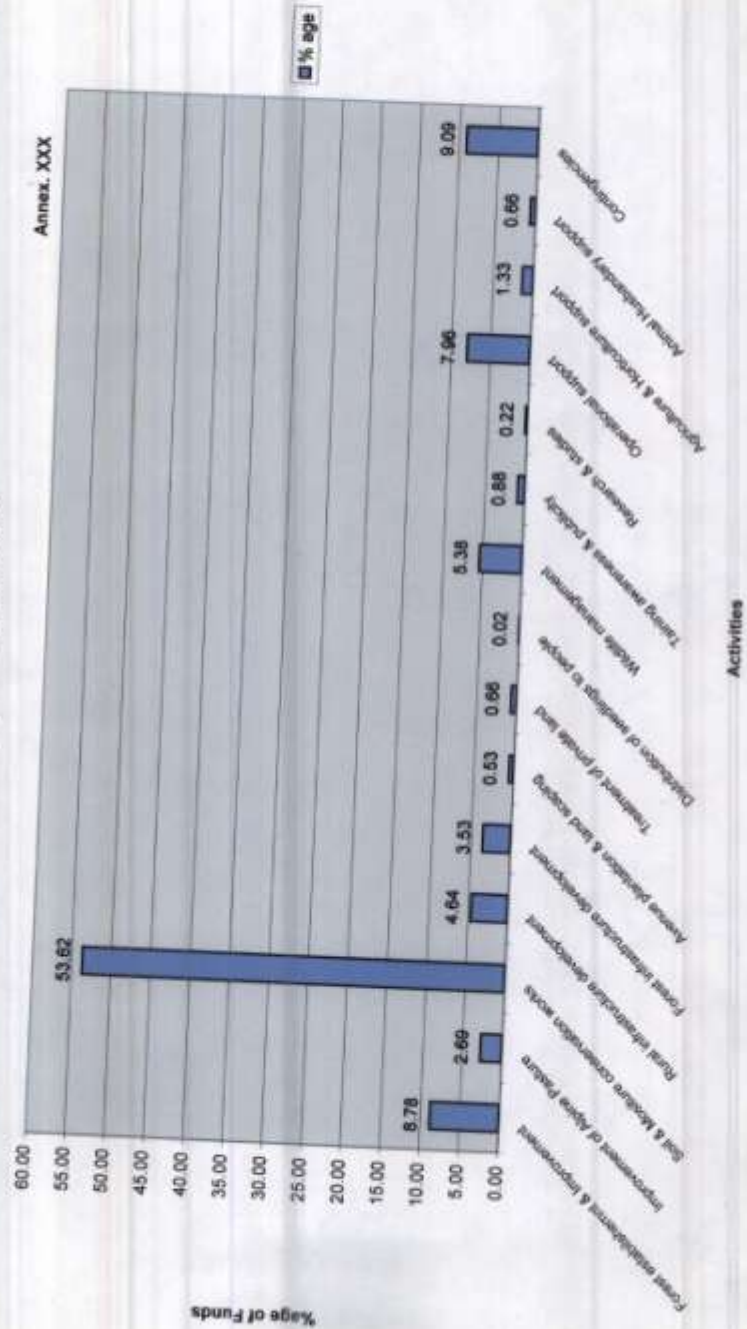
Sl. No.	Component	2010-11		2011-12		2012-13		2013-14		Total
		Kinmar	Wildlife	Kinmar	Wildlife	Kinmar	Wildlife	Kinmar	Wildlife	
6	Avenue plantation & land greening									1200000
7	Treatment of Private Lands		1000000							1500000
8	Distribution of seedlings to people	5000	8000							90000
9	Wildlife Management									
A	Intensive management of									
	i) Fire Protection		98000							440000
	ii) Habitat improvement									750000
	iii) Antipoaching activities									120000
	iv) Reward & incentive to informer		20000							150000
	v) Census operation									
	vi) Characterisation of biodiversity value									120000
	vii) Snagging & Sign board									90000
	iii) Eco-development activities									
	i) Vaccination of domestic cattle		50000		90000					310000
	ii) Purchase of equipments & fuel		40000							200000
	iii) Income generation activities									
	iv) Provision for compensation		100000							200000
	v) Organise M. Unemployment									900000
	vi) Distribution of GI Pipes for									900000
	irrigation of paddy fields									900000
	vii) Grant of Certificates									150000
	viii) Grant of Tractor fuel									150000
	ix) Installation of street solar sign									100000
	x) Bushy Shrubbery									400000
10	Training, Awareness, Extension & Publicity									2000000
11	Research & studies									500000

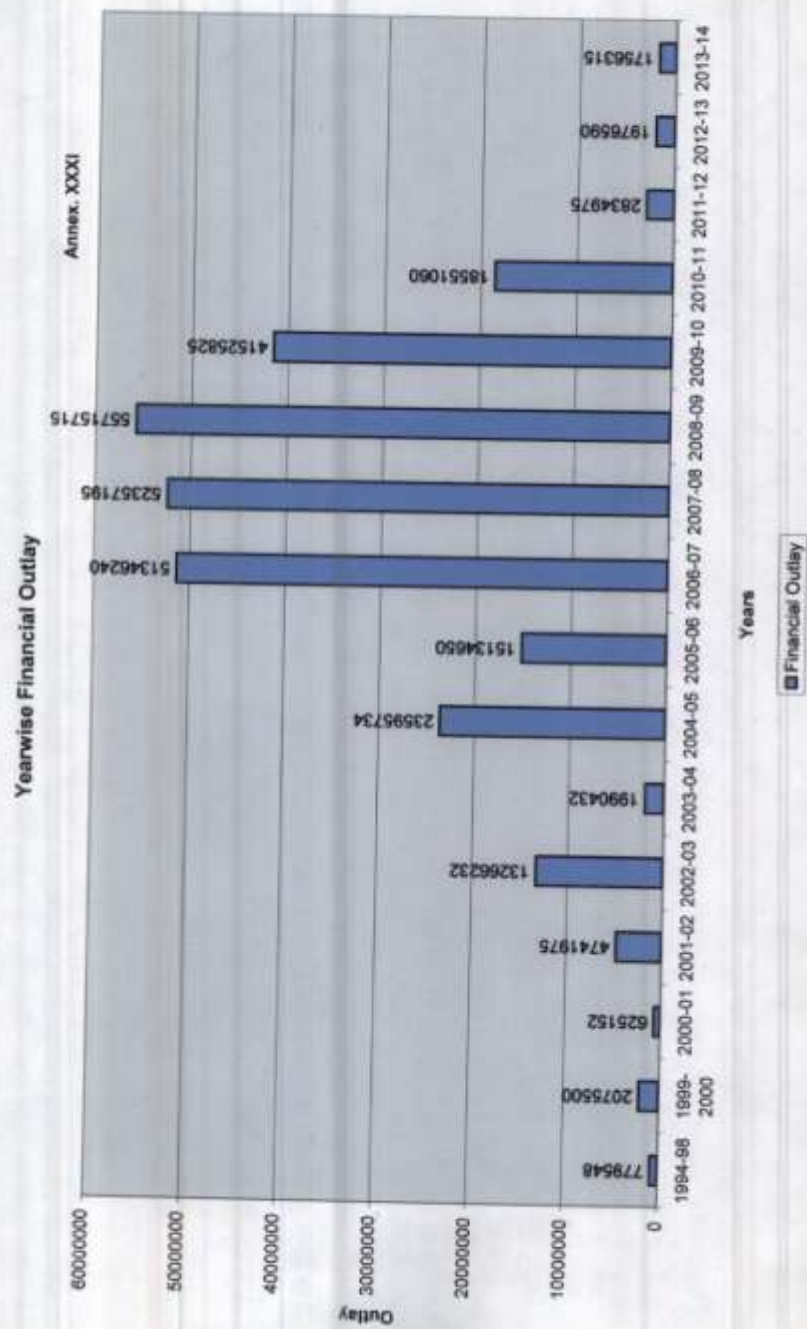
Sl. No.	Component	2010-11		2011-12		2012-13		2013-14	
		Grant	Grants	Grant	Grants	Grant	Grants	Grant	Grants
12	Operational support								
a)	Expenditure cost	400000	500000	400000	500000	400000	500000	400000	500000
b)	Office expenses	250000	300000	250000	300000	250000	300000	250000	300000
c)	Traveling allowance	200000	200000	200000	200000	200000	200000	200000	200000
d)	Office equipment	0	0	0	0	0	0	0	0
e)	Minor Vehicle & P.O.L.	300000	400000	300000	400000	300000	400000	300000	400000
f)	Stipends to staff & labour	100000	100000	100000	100000	100000	100000	100000	100000
g)	Purchase of computer with accessories	0	0	0	0	0	0	0	0
13	Agricultural & Horticultural support	300000	300000	0	0	0	0	0	0
14	Animal Husbandary support	100000	100000	0	0	0	0	0	0
15	Revenue of State	877600	877600	1755200	1755200	1448000	1448000	1300000	1300000
16	Contingencies	877600	809600	1755200	1755200	1448000	1448000	1300000	1300000
	Total	9432600	8879600	1877200	857720	1582800	363760	1485000	271216
									226062816

Project Officer USVWDS-cym
Divisional Forest Officer
CAT P.W. Division Nish 10

Conservation of Forests
Karnataka forest circle (11P)

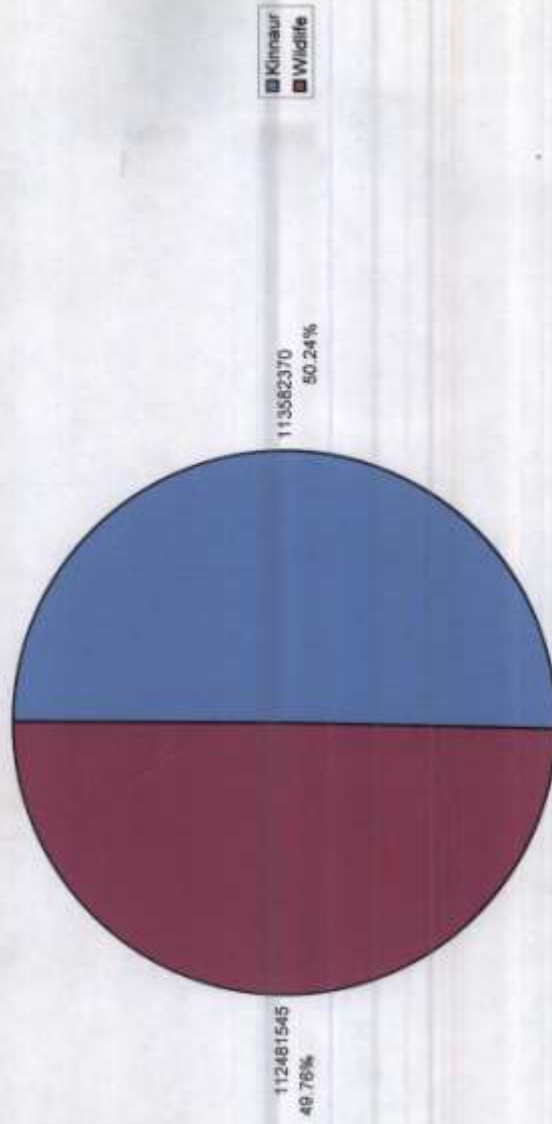
Percentage wise Financial Outlay





Divisionwise Financial Outlay of Phase-II

Annex. XXXII



CATCHMENT AREA TREATMENT PLAN OF BASPA

SCALE 1:125000



KALPA



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D.D.
BASTI, PUNJAB