

ONGOING SCHEMES:

A. Plan Developmental Schemes:

The schematic breakup of proposed requisition of funds is as follows:-

Rehabilitation of Degraded Forests

This is the major Plan Scheme and aims at rehabilitation of degraded forests in the State. It is estimated that more than 10 lakh hectares of Forest area is degraded in the State. Through this scheme efforts are afoot to rehabilitate the degraded and denuded Forest land on scientific lines by way of plantation, construction of check-dams, water harvesting structures and regulating natural regeneration. An amount of Rs. 182.00 lakh has been approved for 2009-10 under state sector and an amount of Rs. 270.25 lakh been approved under District Sector for rehabilitation of Degraded Forests. For the next year 2010-11 an amount of Rs. 208.00 lakh is being proposed for the said scheme @ Rs. 8.00 lakh per Division under State Sector. And Rs. 297.28 lakh has been proposed under District Sector.

Research Education and Training: -

This scheme aims at providing requisite training to the field staff of Forest Department and provides for filling up of infrastructural gaps in respect of three training schools viz KFT School Chitternar, SC Training School, Miransahib and Forest guards Training School Doomi. A provision of Rs. 7.99 lakh has been kept for 2009-10 for conducting of workshops, extensive Training programmes etc besides supplementing for infrastructural facilities. For the next year 2010-11 an amount of Rs. 8.50 lakh has been proposed for the said scheme

Working Plan and Research.

Activities of five divisions, including three Working Plan Divisions, one Photo interpretation Division and One Resources Survey Division, are covered

under this scheme. The main activities of all these divisions are concerned for preparation of Working Plans of the forest areas which indicative of overall Forest health of the state. The working plans are useful for researcher's policy makers and academicians etc. The GIS Lab. established two years back has become functional now. There is therefore a requirement of equipping it with necessary hardware and software for which liberal funding is the requirement. However keeping the approved ceiling in view only an amount of Rs. 8.00 lakh could be earmarked under this scheme for 2009-10, for the next year 2010-11 an amount of Rs. 8.00 lakh has been proposed for the said scheme.

Consolidation and Demarcation: -

Forest area is being lost due to lack of proper demarcation of its boundaries on ground. To ensure protection of existing forest areas, the department through three demarcation divisions, one in Kashmir and two in Jammu conducts surveys and demarcates the existing forests by putting up the permanent boundary pillars along the fringe lines and prepare records pertaining to forest land by mutation in the revenue records. An amount of Rs. 15.00 lakh has been kept for this activity for 2009-10. During 2010-11 An amount of Rs. 20.00 lakh has been proposed for the implementation of the scheme.

Development of Minor Forest Produce including Medicinal Plants (M.F.P)

It has been felt that timber production has received much attention and development of other Minor Forest produce has virtually been neglected so far. Mistreatment of Minor Forest Produce continued at an alarming rate and the conservation efforts were not apace with it with the result it received a setback. The forest resources in J&K have a tremendous potential of Minor Forest Produce for becoming an independent industry

provided adequate funding is made available. The cultivation of medicinal plants and its conservation is another area that needs focussed attention. In order to give necessary impetus to the development of Minor Forest Produce including medicinal plants as a full-fledged industry and to see that marketability of the produce is ensured, a provision of Rs. 30.00 lakh has been approved for 2009-10 for the purpose. An amount of Rs. 32.00 lakh has been proposed for the next financial year 2010-11.

Eco Task Force

The Eco Task Force Project (E.T.F) is a joint venture of J&K Forest Department and Territorial Army. Initially, it was launched in the year 1988 to rehabilitate the Rui Catchments in Samba Town of Jammu province. The Territorial Army provides the man power by hiring the services of ex-Army personnel and the funds for the purpose to them are provided by Ministry of Environment & Forests. The Forest Department provides the expert guidance's and the planting materials. Due to inadequate financial resources the project received a setback though it stands awarded 1994 Indira Priyadarshani Vriksha Mitra Award by Government of India. The project was approved for implementation up to 10th plan period viz; 03/2007. However on the insistence of the Army and the locals the extension of the project has been approved till end of 11th Five Year Plan. As per the approved Work Plan 300 Ha of area is required to be treated every year, the estimated cost for afforestation is 1500 Ha, Rs. 465.00 lakh (Every year afforestation of 300 Ha). In view of the revised wage rates cost of implementation at present shall be much more than what has been approved earlier. Since a part of the working season is already over it is estimated that the department will be in a position to incur Rs. 99.00 lakh only. It is because of this reason an amount of Rs. 99.00 lakh has been anticipated to be incurred during 2009-10. The revision is proposed as per the directives of Administrative Department

conveyed vide No: FST/Plan-36/95 dated 04.01.2008 where-under extension of the project against the Action Plan has been approved. Rs. 110.00 lakh has been proposed for the next year 2010-11.

Buildings and Check Posts.

a) Construction of Buildings / Check posts

Proper infrastructure, in the shape of Rest Houses, Office accommodations, Check posts, staff quarters and guard huts is a must for protection and rehabilitation of forests. The funds provided under this ongoing scheme are spent for developing these facilities. The department is dire need of accommodation for officer / offices for recently created posts of CCFs in the Direction Office. It is in this context that an amount of Rs. 90.00 lakh has been proposed to be incurred during current financial year (2009-10) and for the next financial year, an amount of Rs. 100.00 lakh has been proposed.

b) Construction of Office complexes at Srinagar and Jammu

To forge improved working, efficiency and coordination amongst all wings of the Forest Department and convenience of public, it is envisaged to construct two multi-storied forest complexes one each at Srinagar and Jammu. Each complex is proposed to have office accommodation at one place to cater to the requirement of following offices.

- 1) Forest Department Territorial (PCCF, CCF Jammu and CCF Kashmir).
- 2) Department of Wildlife.
- 3) Department of Social Forestry.
- 4) Department of Soil Conservation.
- 5) Department of Environment and Remote Sensing.

- 6) Project Director IWDP.
- 7) Department of Forest Protection Force.

The issue regarding construction of composite office buildings both at Srinagar and Jammu also came up for discussions in the Plan Budget Meeting held under the Chairmanship of PCCF, Jammu and Kashmir at Van Bhawan on 01.12.2009, which was attended by representatives of the Administrative Department and all HODs of sister wings of Forest Department. The proposal was endorsed by all the participants of the Meeting.

The land for the purpose has been identified at P.C. Depot (SFC) in Srinagar and at Bachan Depot (SFC) in Jammu. The tentative estimates for the two complexes work out to be Rs. 40.00 crores, i.e., Rs. 18.00 crores for Jammu and Rs. 22.00 crores for Srinagar Complex. The project is proposed to be completed over a period of three years with the following year-wise break-up:-

1) 2009-10	=	Rs. 06.00 crore.
2) 2010-11	=	Rs. 20.00 crore.
3) 2011-12	=	<u>Rs. 14.00 crore.</u>
Total	=	<u>Rs. 40.00 crore.</u>

Gutted Buildings

Assets of the Forest Department like Rest Houses, Guard/ Chowkidar Huts, Residential Quarters, Check posts and Office Buildings have been the soft targets during the militancy period in the valley. More than 135 such establishments were reported to have been gutted / damaged out of which only a small number have been restored / being renovated. The reconstruction programme will continue till all gutted structures are reconstructed. An amount of Rs. 45.00 lakh is approved outlay for the current financial year 2009-10. The anticipated expenditure is to the extent of Rs. 50.00 lakh during the current financial year 2009-10. An amount of Rs. 60 lakh has been proposed for the year 2010-11.

Urban Forestry

The rapid urbanization has witnessed exploitation of natural resources especially the forests and as an offshoot, plantation on the private lands suffered to a great extent. Need is being felt to green the urban areas by mass plantation of vacant lands, Road sides, Highways and Parks. The plantation of ornamental plants on the private lands, and alongside the residential areas is also encouraged. The funds under urban Forestry schemes are therefore, being provided for achieving the desired results especially in two cities of Jammu & Srinagar. An amount of Rs. 15.00 lakh has been earmarked for 2009-10. The same amount has been proposed for the year 2010-11 also.

Pasture and Fodder Development

The shortage of fodder adversely affects livestock and its productivity in the state. The vast pastures in grazing lands in the state are under heavy pressure due to increase in cattle population. This problem needs to be addressed to at the right earnest for greening pastures across the state to ensure supply of adequate fodder in future. An allocation of Rs. 71.19 lakh has been approved for the year 2009-10 including tied up grant of Rs. 21.19 lakh. An amount of Rs. 78.00 lakh has been proposed for the year 2010-11.

Stabilization of Slip Areas on National Highway (1A)

Srinagar Jammu National Highway 1-A passes through an unstable mountain range and river Chenab flows alongside the Highway from Batote area upto Ramsu. This peculiar situation of the Highway makes it prone to landslides and natural disintegration. The problem of landslides has become acute in the recent past.

It is a fact that the work undertaken by the Forest Department in stabilization of slips on the National Highway yielded outstanding dividends

in the form of that most of the major slips have been made stabilized. However there are certain SORE points on National Highway which still needs to be treated so that they does not develop into major slips, if left unattended to. Already a composite proposal for Rs. 625.00 lakh has been prepared with a proposed expenditure of Rs. 139.00 lakh for the first year of the Project. Since the proposal is still being processed, it is proposed that in the first instance an amount of Rs. 82.00 lakh be allocated for the next financial year, balance amount will be projected at the revised estimates stages ascertaining the progress of implementation. For the current financial year, the anticipated expenditure is proposed as Rs. 50.00 lakh

Development of Conifer Forests

In the state of Jammu & Kashmir, conifer forests crops occupy 31.80 % of the forest area. There are four main species of conifers viz. Deodar (Cedus deodara), Kail (Pinus wallichiana), Fur (Abies pinodrow), Chir (Pinus roxbughii). All the four species are economically very important for the state. Deodar, kail and Fir are the principle species and much sought after for constructions of Houses and furniture in the state. Chir is important as it yields resin which is used as raw material for turpentine oil and there is large number of by products which are used in a number of medicines, cosmetic, perfumery, confectionary and toiletries. Apart from this chir timber is also used in construction work in sub-tropical areas of state where other conifer species are not available. On an average all the conifers species take 100-170 years to mature. Since more than 2/3rd of the total geographical area falls in temperate zone of the state, and are covered with coniferous which meet the requirement of timber, firewood & grazing etc. As a result the coniferous have got degraded over the years. These coniferous forests need focus for up-gradation and development with the help of various silvi-cultural operations assisted natural regeneration and plantation. For this purpose good quality plantation are also required to be produced. This can be done through high-tech nurseries as it takes long time to produce coniferous seedlings. During the current financial year a modest amount of

Rs. 15.00 lakh has been earmarked for taking up of this scheme. The same amount has been proposed for the next financial year 2010-11.

CM's Participatory Afforestation Scheme

In order to involve people in the regeneration of degraded forests and increasing the tree coverage on vacant lands, the scheme "**Chief Ministers Participatory Afforestation Programme**" has been launched from the year 2004-05 on pilot basis. The objective of the scheme is to make tree plantation on open forest lands, vacant lands and other Government lands by giving its full benefits to the beneficiaries involved in the programme.

The Forest Department provide the infrastructural support viz. planting materials, fencing materials and expert guidance to the beneficiaries. The scheme is being implemented in 40 forest divisions including 12 divisions of Social Forestry Department. An amount of Rs. 4.00 lakh per division is provided to each division for implementation of the scheme. Accordingly an allocation of Rs. 160.00 lakh has been approved for 2009-10. An amount of Rs. 180.00 lakh has been proposed for the next financial year 2010-11 @ Rs. 4.50 lakh for 40 Division including 12 Division of Social Forestry Department.

Forest Protection: -

Protection of forests assumes highest priority and therefore adequate resources are needed to see that the forest and biodiversity is protected from all ills. The protection of existing forests is cost effective as compared to forest plantations. This scheme aims at taking preventive measures to control forest fires besides providing for infrastructural facilities to achieve the objectives of eradicating illicit timber trade and damage caused due to livestock. From 10th five-year plan, the scheme is being implemented only

under District Plan and allowed to continue as such for 11th five year plan as well. An amount of Rs. 74.75 lakh has been approved for 2009-10. During 2010-11 an amount of Rs. 82.22 lakh has been proposed for the said scheme.

Monitoring & Evaluation.

Since there is a need to establish a mechanism to monitor the progress of various schemes and also to have surveys and studies conducted, the requirement of funds under this scheme has been proposed to take care of these studies. A provision of Rs. 4.00 lakh has been kept in the current financial year 2009-10. Same amount has been proposed for the next financial year 2010-11.

Planning Coordination and Publicity

Under this head an amount of Rs. 20.00 lakh has been kept during the current financial year 2009-10. The same amount is proposed for the next financial year 2010-11.

Participatory Grazing land Development programme

The pressure of cattle population on the forests is very high due to large number of cattle which is almost equal to the population of the human souls in the state. The nomadic grazers move in winter in the warm areas of Jammu especially in Jammu, Kathua and Udhampur Districts. Maximum pressure is on Jammu and Kathua forests. There is need to regenerate these forests and grazing areas on participatory basis and on the principle of rotational grazing. Similarly, during summer months these grazers move to cooler alpine / sub alpine regions of the state. The Alpine and sub-alpine forests are subjected to heavy grazing during these months. These areas also need similar treatment on the principle of rotational grazing. A provision of Rs.20.00 lakh has been approved during current fiscal year

2009-10. Same amount has been proposed for the next financial year 2010-11.

Maintenance of Capital Assets.

Forest Department has created huge assets in the shape of plantations, Office buildings residential complex, Forest Rest houses, Guard Huts/ Range Offices, Check Posts etc and Forest roads. The department has not adequate resources to carry out the maintenance of these large numbers of assets. With the result many of these structures have fallen disuse. To ensure better maintenance of these assets it is proposed that an amount of Rs. 130.00 lakh be approved for the next financial year 2010-11. During the current financial year a token amount of Rs. 80.00 lakh has been proposed.

Others (Vehicles).

For effective supervision of the field works, which quite often are situated in the far-flung mountainous area and prevention of smuggling of forest goods, regular mobility of staff is required. New divisions have been created, field activities have increased manifold, but dearth of mobility is a constraint. A token provision of 20.00 lakh has been proposed in the revised estimates for 2009-10. For the next financial year 2010-11 an amount of Rs. 50.00 lakh has been proposed under this head.

B. Centrally Sponsored Schemes

Moreover, state share for ongoing Centrally Sponsored Scheme for 2009-10 is needed to be earmarked for. If we go by the work plans submitted to Government of India under Centrally Sponsored Scheme, there is a higher requirement of state matching contribution in almost all the schemes. Since we have to go by the ceiling fixed for 2009-10, it is therefore, not possible to provide for full amount as state share. Therefore only an amount of Rs. 100.00 lakh, Rs. 30.00 lakh and Rs. 15.00 lakh shown against each scheme has been earmarked for 2010-11.

1. Eco-restoration of Degraded Catchments	Rs. 100.00 lakh
2. River valley Project / Flood Prone Area	Rs. 30.00 lakh
3. Integrated Forest Protection Scheme	Rs. 15.00 lakh

Eco-restoration of Degraded Catchments – PM’s package.

Introduction:-

Jehlum Basin, Batote-Ragi-Neeru-Desa, Ans, Rad & Anji of Chenab Basin and Komad Ujh (Shivaliks) inter-alia are classified / identified as most problematic catchments and critically degraded and flood prone in the state of Jammu and Kashmir. The Centrally Sponsored Scheme of soil conservation in catchments of River Valley Project was launched during 3rd Five year Plan in the country for mounting a concerted efforts at prevention of catchments deterioration. However, it has been extended to the State of J&K as a part of development package announced by the Hon’ble Prime Minister during his visit to the State in May 2002 and the programme was titled as “**Eco-restoration of Degraded Catchments of Jehlum, Chenab and Shivaliks**”.

Under the scheme an area of one lakh hectare at an estimated cost of Rs. 100.00 crore was to be treated during 10th Five Year Plan. The scheme has been approved by the Ministry of Agriculture Government of India in March, 2003 and the J&K State was asked to get the rapid reconnaissance survey done by the Project Implementing Agency. As such J&K Forest Department took up the matter of identification and prioritization of Micro-watersheds in right earnest thereby enabling PIA to start field operations during the year 2003-04.

In all, four catchments were identified for inclusion of RVP/FPR (ERDC) in J&K for treatment of 1555 Micro-watersheds identified by the All India Soil and Land Use Survey (AISLUS). Out of the total treatable area of 1,22,000 hectares an area of Only **102550 hectors** could be treated by end of March 2009 by spending an amount of Rs. 8983.803 crore since its inception i.e. 2002-03 to 2008-09 thereby **leaving an area of 19500 hectors** still to be treated. The rate structure in case of Jehlum and Chenab is Rs. 10,000/ per ha whereas in case of Shivalik (Ujh) the rate is Rs. 6000/-per ha. (in the interior of the catchment having slope more than 8%) and Rs. 4500/- per ha for remaining areas. With this rate structure, and proposed allocation of Rs. 20.00 Crore the target area to be covered for Shivalik (Ujh) would be about 35,000 ha.

Since the early years from 2002-03 to 2004-05 have been spent in preparation and completion of basic preliminaries and as a direct corollary the scheme could not take off as was anticipated with the result the targets set could not be achieved in the initial years of its implementation. The project period came to an end in March 2007. The scheme was however been extended for another two years till March 2010.

The programme is being implemented as per the Guidelines of on going Centrally Sponsored scheme of Soil Conservation for Enhancing Productivity of Degraded Lands in the catchments of Jehlum, Chenab under River Valley Project / Flood Prone Area (RVP/FPR). However the Shivaliks project area is governed by the guidelines of National Watershed Development Project for Rainfed Areas (NWDPA) which is being funded through Macro Management of Agriculture.

Objectives of the programme:

The main objectives of the programme are as follows:-

- 1) Prevention of land degradation by adoption of a multi – **disciplinary integrated approach** of soil conservation & watershed management in the catchment areas.
- 2) Improvement of land capacity and moisture regime.
- 3) Prevention of soil erosion from the catchments to reduce siltation of multipurpose reservoirs and enhance the in-situ moisture conservation as well as surface rainwater storages in the catchments to reduce volume of runoff during peaks flood season.
- 4) Eco Restoration of Degraded Catchments of Jehlum, Chenab and Shivaliks by treating the area using Participatory Approach.
- 5) Optimization of land resources for socio-economic upliftment of the beneficiaries.
- 6) Employment generation in the remote rural areas of the catchments.

Strategy:

The strategy inter-alia comprises of:-

- Adoption of a Project approach to the treatment of catchment.
- Integration of sectorial measures for comprehensive watershed development and maintenance.
- Consolidation of treatment effort through projectization approach and proper choice of work areas.
- Emphasis on sustainability of treatment measures.

Components of the Programme:

In this programme all type of Lands viz. Agriculture, Waste and Forest are treated in an integrated manner with a suitable package of treatment such as construction of Contour Vegetative Hedge, Contour/ Graded Bunding, Horticulture Plantation, Contour/ Stagger Trenching, Sowing and Planting, Silvi-Pasture Development, Pasture Development, Afforestation, Farm Pond, Percolation Tank, Drainage Line Treatment (Earthen Loose Boulders, Water Harvesting Structure, Check Bund, Spill-way, Sediment Detention Structure, etc.).

Financing Pattern:

The financing pattern of the programme after amalgamation under Macro Management of Agriculture is in the ratio of 90:10 between Central & State Governments where 100.00 crores accounts for 90% (CS) and Rs. 11.11 (SS) crores as 10%. The funds are provided to State Government as 80% grant and 20% loan.

Catchment – wise details.

Number of Micro – watersheds identified by the All India Soil and Land Use Survey (AISLUS) viz-a-viz number of Project reports prepared and approved by the Ministry of Agriculture, Government of India are tabulated hereunder :-

(Units in No's)						
S.No.	Item	Chenab Basin	North Jehlum	South Jehlum	Shivaliks (Ujh)	Total
1.	Micro-watersheds identified by AISLUS	847	343	203	162	1555
2.	Project Reports of Micro – watersheds prepared by the project	94	66	68	110	338
3.	Project Reports of Micro-watersheds approved by the Ministry	94	66	68	110	338

Cumulative physical and financial achievements of the total project (Jehlum, Chenab & Shivaliks (Ujh) taken together) from 2002-03 to 2008-09 is given in the table below:-

Unit (Rs. in lakh, Area in Hactt)										
S.No	Project / Catchment	Targets 2002-09		Funds released			Achievements ending 03/2009.			
		Financial	Physical	Central Share	State Share	Total releases	Physical	Financial		
							Area	C.S	S.S	Total
1	North Jehlum	2500.00	25000	2141.41	194.04	2335.451	23614	2231.85	194.04	2425.891
2	South Jehlum	2500.00	25000	2142.47	171.98	2314.449	23802	2205.316	171.10	2376.42
3	Chenab Basin	3500.00	30000	2334.16	217.49	2551.65	24705	2223.868	215.73	2439.593
4	Shivalik (Ujh)	1500.00	35000	1616.98	146.25	1763.23	30429	1583.796	146.25	1730.041
5	Head-quarter	0.00	0.000	20.58	3.10	23.68	0	8.76	3.10	11.86
	Total =	10000.00	115000	8255.60	732.86	8988.46	102550	8253.59	730.22	8983.81

Year-wise physical (Area) achievements made in respect of Jehlum, Chenab & Shivalik (Ujh).

(Area in Hectors)

S.No	Name of the Catchment	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Total
1.	North Jehlum	2084	2471	4151	4917	4521	5470	23614
2.	South Jehlum	1967	2876	4377	4276	5112	5194	23802
3.	Chenab Basin	1133	5440	3608	3999	4623	5902	24705
4.	Shivaliks (Ujh)	0	4714	6021	5726	6358	7610	30429
	Total =	5184	15501	18157	18918	20614	24176	102550

The target and achievements 2009-10 are given as under

S.No	Project / Catchment	Targets 2009-10		Funds released			Achievements ending 12/2009.			
		Financial	Physical	Central Share	State Share	Total releases	Physical	Financial		
							Area	C.S	S.S	Total
1	North Jehlum	500.00	4307	224.50	25.00	249.50	2231	202.013	25.00	227.013
2	South Jehlum	500.00	4190	224.50	25.00	249.50	2249	189.690	25.00	214.690
3	Chenab Basin	600.00	5125	269.40	30.00	299.40	2645	231.059	20.106	251.165
4	Shivalik (Ujh)	400.00	4172	183.61	20.00	203.61	1719	105.12	20.00	125.120
	Total =	2000.00	17794	902.01	100.00	1002.01	8844	727.882	90.106	817.988

Note on River Valley Project – Flood Prone Area

Introduction:-

Pohru is the name of a Nallah in Kupwara / Baramulla in Kashmir valley which drops in to the River Jehlum. Two main Nallah namely Kehmil and Lolab join at Kupwara to form Pohru Nallah. The other important tributaries are Hamal, Mawar and Dangarwara passing through the valley plains. The Nallah Pohru joins River Jehlum at “DOABGAH” nearly 6 Kms from Wullar Lake. Historically it has been a big menace as its changing courses has created devastation to the valley and crop along its run up to river Jehlum. It is devastating in its catchment and has been carrying enormous silt load and depositing in the river Jehlum leading to its sedimentation and consequent floods. Therefore characteristics of Pohru have put it on the list of River Valley Project that need intensive soil and water conservation treatment in its catchment and along its course. The total area of the catchment is about **1.83 lakh hectares**; the catchment and along it's a broad valley with steeply rising hills on its Northern and Eastern sides. The major portion of precipitation is in the form of winter snow and spring rains.

In so far as Thein Dam FD-II is concerned it falls in the states viz, J&K Himachal Pradesh and Punjab and is spread over 87706 hectares which is about 16.30% of the total catchment area. The work for treatment of the catchment area in J&K State was taken up in the year 1993-94 and the total work started in the year 1994-95.

River valley Project Pohru:

On the behest of committee the resurvey of Pohru catchment was undertaken by the All India Soil and Land use Survey Department (AISLUS). It has furnished the findings vide AHGRI Report No: 1249 of May 2002, the report is outcome of rapid reconnaissance survey both by “Satellite Remote Sensing” Technique and subsequent ground truth in the field. The status of the catchment is prioritized ground truth in the field.

The main objectives are:-

1. Prevention of land degradations by adoption of multi-disciplinary integrated approach in the catchment area of River Valley Project, the Pohru.
2. Improvement of land use to match land capability:
3. Prevention of Soil loss from the catchment to reduce siltation of the River Jehlum:
4. People's involvement in the management of catchment;
5. Up-gradation of the skills in planning and execution of land degradation restoration programmes.

Land Use:

Amongst the major land uses, forestry and agriculture are the main important in the area. Nearly 55% of the area is under reserved forests, 29% under agriculture use 6% under pastures and remaining 10% under protective forests and other miscellaneous land use.

The status of the catchment as prioritized is given hereunder:-

S. No	Priority Category	No of Micro Watersheds	Area in hectare
1	Very High	12	12818
2	High	26	27831
3	Medium	34	36569
4	Low	37	37450
5	Very Low	70	68809
	Total	179	183477

Evidently the catchment area is reckoned to **183477 ha** and has been delineated in 179 Micro Watersheds, out of it **38 Micro Watersheds (Very High and High priority Only)** covering an area of 40649 Ha consisting 22.15% of total area spread over is only demarcated and delineated on **Relative Sediment Field Index**. The Micro watersheds are recommended for immediate treatment to sustain the positive results of project. However, **up to 1999-2000, 37 High & Very High priority Micro Watersheds have been saturated** by treating an area of 47358 ha. (Refer Statement “P” enclosed).

From 2002-03 up to March 2009 eight **(8) new watersheds** have been identified and approved by the Union Ministry constituting an area of **11396 ha** to be treated. **under Pohru (RVP/Flood Prone Area)**. Against this, an area of **12005 ha** with a total expenditure of Rs. 14.15crore has been treated ending March-2009.

RVP Thein Dam Catchment

Location:

The work for treatment of the catchment area in the state was taken up in the year 1993-94, however, actual work started in the year 1994-95.

The catchment area falls between 30⁰ – 20’ N latitude to 30⁰ – 55’ N latitude and 75⁰– 33’ E Longitude to 75⁰ – 50’ E longitude. In the said catchment fall 73 villages of Basholi tehsil and 5 villages of Kathua Tehsil under District Kathua. This coincides with area of Basholi and Bani Ranges of Billawar Forest Division and a small portion of Kathua Forest Division.

The area comprises of outer Himalayas and the upper Shivaliks. The slopes vary , moderate in the lower region of the Shivalik as to very steep and even precipitous in upper hilly areas of the Himalayas. The entire tract particularly the area falling under Shivalik region is very badly cut up in gullies and deep gorges and is drained in various tributaries of River Ravi viz SEWA, Chiril, Gurnool and Bani Nallah.

Project Area:

The Project area in J&K State extends over 71731 Ha comprising of 55 Sub-watersheds which are classified into very high, high medium and low priorities on the basis of silt yield index as per survey report of All India Soil and Land-use survey Organization as detailed below:

S. No	Priority	No of watersheds			Area (Hectares)		
		DD-I	DD-II	Total	DD-I	DD-II	Total
1	Very High	-	21	21	0	37119	37119
2	High	03	06	09	4720	12180	16900
3	Medium	09	15	24	11255	20932	32187
4	Low	-	01	01	0	1500	1500
	Total	12	43	55	15975	71731	87706

Out of total 55 sub-watersheds, 12 sub-watersheds are directly draining in Their catchment and the remaining 43 sub-watersheds are freely draining. In order, therefore to treat 12 direct drained sub-watersheds a separate Project officer was posted during 1996-97 and designated as P.O-I while the one dealing with 43 free draining sub-watersheds was designated as P.O-II. **As a direct consequence, the Their Dam FD-II to treat an area of 49299 ha (High & Very High) is being covered under (RVP/FPR).** Against this an area of 11964 ha with total expenditure of Rs. 13.84 Crore has been treated ending March-2009 thereby leaving still an area of 37335 ha to be treated.

List of Saturated Sub-watersheds:

Till 2005-06, 23 sub-watersheds of Very High and High priority have been saturated. The details are given in Statement (“Q”) as enclosed herewith

The year-wise financial and physical achievements made under RVP / FPR during (2002-03 to 2008-09) are given here under:-

Units Area in Hectares, Structure in Nos & Financial: Rs in lakh.

S. No	Year	Pohru			Their Dam FD-II			Total		
		Str. (Nos)	Phy (Ha)	Fin (Lakh)	Str. (Nos)	Phy (Ha)	Fin (Lakh)	Str. (Nos)	Phy (Ha)	Fin (Lakh)
1	2002-03	1034	1427	113.00	1006	1352	157.23	2040	2779	270.23
2	2003-04	1018	713	100.50	577	1043	92.50	1595	1756	193.00
3	2004-05	1311	1592	227.35	911	1501	222.22	2222	3093	449.57
4	2005-06	1111	1758	231.29	1424	2158	220.75	2535	3916	452.04
5	2006-07	1399	1719	214.60	1084	2311	235.475	2483	4030	450.075
6	2007-08	1027	1986	217.50	380	1450	166.36	1407	3436	383.86
7	2008-09	1544	2810	310.88	1247	2149	289.65	2791	4959	600.53
Grand Total=		8444	12005	1415.12	6629	11964	1384.185	15073	23969	2799.305

The year-wise financial and physical achievements made under RVP / FPR during 2009-10 are given here under:-

Units Area in Hectares, Structure in Nos & Financial: Rs in lakh.

S.No	Year	Pohru			Their Dam FD-II			Total		
		Str. (Nos)	Phy (Ha)	Fin (Lakh)	Str. (Nos)	Phy (Ha)	Fin (Lakh)	Str. (Nos)	Phy (Ha)	Fin (Lakh)
1.	2009-10	832	1095	165.82	931	1261	123.47	1763	2356	289.29

Statement (“P”)

S. No	Name of the Watershed	Code	Priority	Total Geographical Area (Ha.)	Total (Treatable Area) Treated up to 1999-2000	Saturation
1	Right Bank of Mawar	Pa3a	High	1275	391	Saturated
2	Left bank of Mawar	Pa4d	High	1850	1320	Saturated
3	Yamberzalwan	Pbie	Very high	1150	1055	Saturated
4	Hyhama	Pda	Medium	3250	1487	Saturated
5	Magam	Pc2b	Medium	2900	516	Saturated
6	Moori	Pe2g	Low	14650	6646	Saturated
7	Moon II	Pe2f	Medium			Saturated
8	Kalaroose	Pc2a	High	2825	1650	Saturated
9	Check-Sodal	Pc2c	Very high	1900	1150	Saturated
10	Krolpoai	Pd3b	High	1700	1150	Saturated
11	Dorushpora	Pclb	Very high	1925	1020	Saturated
12	Khaipora	Pcie	Very high	1975	815	Saturated
13	Bakhipora	Paic	Very high	2050	1115	Saturated
14	Nutnoosa	Pb2b	High	3650	2114	Saturated
15	Badrikali	Peld	Very high	1700	1517	Saturated
16	Nilchahuma	Pe1j	Very high	1775	1521	Saturated
17	Dedikooote	Pd2a	High	3100	1400	Saturated
18	Kaledoger	Pc2a	High	1950	836	Saturated
19	Nowgam	Pa4b	High	1850	875	Saturated
20	Pazipora	Pa1d	High	1800	1180	Saturated
21	Dardhaji	Pc1k	High	1575	965	Saturated
22	Kauri	Pa4c	Very high	1900	1200	Saturated
23	Harii	Pa3b	Very high	2000	1200	Saturated
24	Wader	Pchi	High	2100	1200	Saturated
25	Dalor	Pa2c	Very high	2000	1150	Saturated
26	Bawan	Pc1f	Very high	1950	1525	Saturated
27	Dogerpora	Pcig	Very high	1775	1300	Saturated
28	Woghbali	Pc2b	Very high	2150	1625	Saturated
29	Tulwari	Pc2d	High	1900	950	Saturated
30	Halfrada	Pd2d	High	2275	1360	Saturated
31	Hajan	Pa2d	Very high	3400	1275	Saturated
32	Kanihama	Pc2f	Very high	1600	1075	Saturated
33	Kakamabad	Pa4a	Very high	1625	925	Saturated
34	Langate	Pc1a	Very high	1150	850	Saturated
35	Vijay	Pa1b	Very high	975	750	Saturated
36	Safawali	Pc1c	Very high	1725	1150	Saturated
37	Kiterdaji	Pa1f	Very high	1600	1100	Saturated
Total				84975	47358	

Statement – “Q”

S. No	Code of the Watershed	Priority	Nallah	Total Area	Treated Area	Period of Treatment	Remarks
1	Ta3f (DD)	High	Telaid	1925	528	1993-94 to 1995-96	Saturated
2	Ta3b (DD)	High	Gurnol	1575	1080	1994-95 to 1997-98	Saturated
3	Ta3c (DD)	High	Gurnol	1250	900	1995-96 to 1998-99	Saturated
4	Tc2f (FD)	Very high	Sewa	2250	725	1993-94 to 1995-96	Saturated
5	Ta4d (FD)	High	Chiril	2850	1890	1994-95 to 1997-98	Saturated
6	Ta1m (FD)	High	Biani	1325	890	1995-96 to 1998-99	Saturated
7	Ta1c (FD)	High	Sewa/Joura	1800	1320	1994-95 to 1998-99	Saturated
8	Tc3a (FD)	High	Khade	1350	1000	1994-95 to 1998-99	Saturated
9	Tc3b (FD)	Very high	Khade	1625	1200	1996-97 to 2000-01	Saturated
10	Tc3c (FD)	Very high	Khade	1600	1150	1996-97 to 2000-01	Saturated
11	Tc4a (FD)	Very high	Sewa	1400	1000	1996-97 to 1999-00	Saturated
12	Tc4b (FD)	Very high	Sewa	1200	910	1996-97 to 1999-00	Saturated
13	Tc5a (FD)	Very high	Sewa	3850	2200	1996-97 to 2000-01	Saturated
14	Tc1a (FD)	High	Sewa	1075	870	1998-99 to 2000-01	Saturated
15	Tc5b (FD)	High	Sewa	2425	1850	1998-99 to 2000-01	Saturated
16	Tc2c (FD)	Very high	Behal/ Sewa	850	621	1999-00 to 2001-02	Saturated
17	Tc5c (FD)	Very high	Sewa / Pahal	800	405	1999-00 to 2001-02	Saturated
18	Tc6a (FD)	Very high	Khourie/ Sewa	1425	1020	1999-00 to 2002-03	Saturated
19	Tc6c (FD)	Very high	Sewa	3100	1780	1999-00 to 2002-03	Saturated
20	Tc2d (FD)	Very high	Sewa	988	462	2001-02 to 2003-04	Saturated
21	Tc5d (FD)	Very high	Dolaka	1653.6	821	2001-02 to 2003-04	Saturated
22	Tc5f (FD)	Very high	Sanjwal	2480	705	2001-02 to 2003-04	Saturated
23	Tc6b (FD)	Very high	Sapnagri	2227	1054	2002-03 to 2004-05	Saturated
Total				41024	24381		

Integrated Forest Protection Scheme

INTRODUCTION:

The State of Jammu & Kashmir is very rich in bio diversity because of its distinct and unique geo-agro climatic conditions. The State has four distinct climatic and ecological zones because of varying altitudes and distance from the equator manifesting in different temperature and rainfall patterns.

Due to rapid increase in the population of the state coupled with corresponding rise in livestock population, pressure on the forests has increased manifold resulting in degradation of the forests. The reasons for degradation inter-alia are illicit felling, occurrence of fire, lack of demarcation of forest on ground resulting in encroachments, poor survey and demarcation records lack of infrastructure at all levels, apart. Since the density of forest is very low in half of the forest lands large parts of these areas have therefore become completely open and degraded.

Forest area as a %age of the geographical area of the state is given in the following table:-

Division	Geographical area (Sq. Kms)	Forest area (Sq. Kms)	Forest area as % Age of Geographical area
Kashmir	15948.00	8128	50.97
Jammu	26293.00	12066.00	45.89
Ladakh	59146.00	66	00.06
		Total =	19.95 excluding the area under POK

Sensing the alarming degree, the Integrated Forest Protection Scheme was launched for implementation during 10th Five Year Plan on 90:10 basis between the Centre and the State respectively to address the issue and achieve following objectives in a much meaningful way:-

1. To prevent and promptly control the forest fires so as to save the fauna and flora.
2. To reduce financial loss caused by forest fires.
3. To protect and conserve bio – diversity.
4. To reduce the ill effects of gases and smoke produced by forest fires.

The main causes for break out of forest fires in J&K are listed below:

- **The nature of crop:** The Jammu & Kashmir State because of its unique geographical location has typical forests predominantly coniferous in nature. The coniferous species have an essential ingredient in the form of resins which are very

combustible in nature and catch fire easily Chir; Pine predominates in sub tropical region as well as in Shivaliks hills.

- **Very Substantial areas** of our forests are under Chir, Pine, Blue pine and scrubby vegetation. The dry needles constitute a complete carpet in the subtropical and temperate forests of the state. These needles are highly combustible.
- **The forests of J&K** have about 10% area as alpine pastures. These pastures are regularly visited by nomads (Bakarwals), Gaddies, Gujjars and the local shepherds who migrate from one place to another in search of green pastures for grazing their cattle. Most of the forests come on their migratory route.
- **There is** belief that if the under growth and the carpet of coniferous needled is burnt it forms ash which acts as fertilizer and gives luxuriant growth of grasses on advent of monsoon rains.
- **The Sub-tropical forests** of Jammu & Kashmir suffer a lot of variation in temperature with mercury touching 45 degrees during May and June.
- **The Temperate forests** of Kashmir valley suffer from lone dry spells and are susceptible to fires because of availability of dry bio mass in the form of dry leaves and conifers needles.
- **The fires** can be intentional or accidental.
- **Using** of firewood for cooking, lighting of cigarettes in the forest by communities migrating from one place to another can also ignite fires in the forest.
- **The intentional fires** are lit by some mischievous people for burning, to create conducive for growth of grass.
- **The** smuggler sometimes also indulges in setting fires for covering the forest damages / offences.

Amount released and expenditure made under Integrated Forest Protection Scheme (CSS) since the years, 2002-03 to 2006-07 is given hereunder:-

S.No	Year	Amount released			Expenditure (Rs. in lakh)			USB
		Centre Share	State Share	Total	Centre Share	State Share	Total	
1.	2002-03	50.00	0.00	50.00	37.07	0.00	37.00	6.38
2.	2003-04	24.25	0.00	24.25	30.80	0.00	30.80	
3.	2004-05	0.00	46.34	46.34	0.00	46.25	46.25	
4.	2005-06	193.84	5.00	198.84	182.85	5.00	187.85	10.99
5	2006-07	109.78	5.00	114.78	127.15	5.00	132.15	
6.	2007-08	0.00	5.00	5.00	0.00	5.00	5.00	
7.	2008-09	0.00	5.00	5.00	0.00	5.00	5.00	
8.	2009-10	0.00	0.00	0.00	0.00	0.00	0.00	
	Total =	377.87	66.34	444.21	377.87	66.25	444.05	

Physical and financial achievements made under Integrated Forest Protection for the year 2006-07

State: Jammu & Kashmir

Component: Forest Fire Control & Management

S.No	Item	Unit cost			(Rs. in lakh)	
			Physical	Financial	Achievements	
			No of units	Funds released	Physical	Financial
1	Fire lines creation	0.025 kms	1440	41.00	1528	41.00
	Fireline Counter Inspection	0.0825 / kms	0	0.00	0	0.00
2	Firelines Maintenance	0.01 /Km.	378	6.70	378	6.70
3	Watch Tower	3.04 / No.	1	3.04	1	3.04
4	Fire watcher	2100/1800 pm	157	8.85	157	8.85
5	Assistance to JFMCs	0.05	0	0.00	0	0.00
6	Construction of Water storage	0.60 / Nos.	10	6.00	10	6.00
7	Fire Fighting Cells	0.50	7	3.50	7	3.50
8	Fire Fighting Equip.	0.20	52	10.40	52	10.40
9	Inspection path	0.096 / kms	309	28.15	309	28.15
10	Training & awareness	0.25	0	0.00	0	0.00
	Component Total - I =			107.64		107.64

Component: Strengthening of infrastructure for Forest protection.

1	Building					
	a) Guard hut	Rs. 2.00/PH	10	7.50	10	7.50
	b) Range hut	Rs. 6.00/PH	6	4.51	6	4.51
2	Contingencies	Lump sum	0	0.00	0	0.00
3	Purchase of vehicle		0	0.00	0	0.00
	Component Total - II =			12.01		12.01

Component: Preparation of working plans / survey & demarcation

1	Demarcation / field survey		1383	10.00	1383	10.00
2	Computers / Photostat Machine		4	2.50	4	2.50
	Component Total - III =			12.50		12.50
	Component Total I + II + III =			132.15		132.15

National Afforestation Programme (Forest Development Agency)

Encouraged by the success of the pilot phase of the approach, National Afforestation Programme was approved by Ministry of Environment & Forests, Government of India during 10th FYP to cover all the (28) Territorial Forest Divisions. The scheme is implemented in a participatory mode, involving two-tier set up viz Forest Development Agencies (FDAs) and Village Forest Committee (VFC). Village is reckoned as a unit of planning & implementation and all the activities are conceptualized at the village level.

Watersheds / catchments area approach is followed in implementation of this scheme. However, cluster of compact blocks can also be taken up for treatment if the local situation so demands. Minimum area of compact block is not prescribed, though projects aim at compactness and blocks of less than ha are not normally considered except in cases of exceptional circumstances.

10th Five Year Plan under NAP.

869 JFMCs have been formed in **27** Forest Development Agency. A total of **42797 ha** was targeted to be achieved from (2002 to 2007) with a financial support of **Rs. 69.2594** (For five years) crore released directly to the Forest Development Agencies. Of this only an amount of **Rs. 31.6691 crore** was released ending March 2007 against which an area of **21137 Ha** has been registered to have been achieved with an expenditure of **Rs. 26.70 crore** during the corresponding period.

In all a total of **20, 23,814** (Twenty lakh twenty three thousand eight hundred and fourteen labour man days have been generated

during 10th Five Year Plan. Forest Development Agency wise physical and financial details ending March 2007 are enclosed.

11th Five Year Plan under NAP.

The plan proposals for 11th Five Year Plan (2007-08 to 2011-12) in respect of 27 Forest Development Agencies stand formulated and submitted to Government of India for accord of necessary sanction & subsequent release of funds. **1107JFMCs** have been formed in **27** Forest Development Agency. A total of **53157 ha** was targeted to be achieved from (2007-12) with a financial support of **Rs. 114.88 crore**. Of this only an amount of **Rs. 1916.17 lakh** was released during 2007-8 and 2008-09 ending March 2009 against which an area of **14161 Ha** has been registered to have been achieved with an expenditure of **Rs. 14.10 crore** during the corresponding period.

During the current financial year 2009-10 the Works Programme of the following nine FDAs has been forwarded to the concerned Ministry, for approval and subsequent release of funds.

(Rs. In lakh)

S.No	Name of the FDAs	Work Plan 2009-10	Balance amount	Expenditure incurred so far	Remarks Ending
1.	Kishtwar	136.68	72.24	103.35	08/09
2.	Ramnagar	170.68	10.45	192.74	-do-
3.	Marwah	-	61.41	38.26	06/09
4.	Leh	31.18.	11.60	0.05	03/09
5.	Reasi	-	33.79	131.55	03/09
6.	Batote	141.87		81.41	08/09
7.	Bhaderwah	186.09	-	68.13	03/09
8.	Billawar	122.81	29.24	88.04	07./09
9.	Doda	151.24	39.24	127.97	03/09