INTEGRATED WATERSHED MANAGEMENT PROGRAMME
PRELIMINARY PROJECT REPORT
STATE OF UTTARAKHAND
2012-2013

WATERSHED MANAGEMENT DIRECTORATE, DEHRADUN

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EXECUTIVE SUMMARY

Uttarakhand is located between 28º 43' – 31º 27' N latitudes and 77º 34' – 81º 02' E longitudes. The river Tons separates the state from Himachal Pradesh in the north-west, whereas the river Kali separates it from Nepal in the east. The greater Himalaya is the northern boundary of the state and is also the international border with China (Tibet). Foot-hills in the south are bound by Uttar Pradesh. The region, being situated centrally in the long sweep of the Himalaya, forms a transitional zone between the per-humid eastern and the dry to sub-humid western Himalaya. Uttarakhand became the 27th state of the Republic of India on 9 November 2000.

The population of the state primarily depends on agriculture for livelihood; about 70% of the population is engaged in agriculture. Out of total reported area, only 14.02% is under cultivation. More than 55.0% of the cultivated land in the State is rainfed. The cropping intensity is 160.6%. The landholdings are small and scattered. The average land holding is around 0.68 ha (that too is divided into many patches) in the hills and 1.77 ha in the plains.

About 70% of hills population is engaged in agriculture. There is hardly any other major source of livelihood deriving from the secondary or tertiary sectors. These sectors are very poorly developed primarily because of inaccessibility and vulnerability of mountain regions. Although almost 70% of the population is dependent of the primary sectors, the contribution of this sector of the GDP/NDDP is only 37.5. As a result, it does not provide sufficient income levels to the people. This subsistence nature, which leads to low incomes and unstable incomes, which in turn lead to a sizeable out-migration of male members that leads to only women headed families behind, and the role of women in the household economy becomes more important.

After attaining statehood in 2000, the economic progress of Uttarakhand has been rapid, with its economic growth rate increasing from just over 3% per annum to 11% per annum. However, this rapid growth has been accompanied by adverse impacts on the local ecology, thus making the incorporation of sustainable development practices into the State's overall development strategy an imperative. Water, agriculture, forestry and energy, among other issues, are central to the State's inclusive strategy for future growth. Most of the people of this state are dependent on their natural environment, with over three-fourths of the total population dependent on agriculture for their livelihood. Also, with over fifteen important rivers and over a dozen glaciers in the State, Uttarakhand is a valuable fresh water reserve. There are also about 200 large and medium sized hydro-projects and therefore hydroelectricity continues to be a prime source of capital for the local economy. Forests cover a large percentage of the land area with many industries being forest based.

The Himalayan watersheds are under constant threat of mass wasting and erosion caused by depletion of forest cover, unscientific agronomic practices and hydrologic imbalances. The ever increasing population, the need to provide a better quality of life to the people and the pressure on natural resources is further compounding the problem. The total of 7.66 lakh ha. cultivated area in the State 4.21 lakh ha. area is rainfed. An insight into the rainfed regions reveals a grim picture of poverty, water scarcity and fragile ecosystem. Land degradation due to soil erosion by low rainwater use efficiency, high population pressure, acute fodder shortage, poor livestock productivity, under investment in water use efficiency, lack of assured and remunerative marketing opportunities and poor infrastructure are important concerns of enabling policies. The challenge in rainfed areas, therefore, is to improve rural livelihoods through participatory watershed development with focus on integrated farming system for enhancing income, productivity and livelihood security in a sustainable manner.

The main objective of the proposed project is to increase the productivity and income of the rural inhabitants in the Rainfed Micro-watersheds of the State on priority basis area through sustainable management of the natural resources. Since agriculture and related activities are the main source of livelihood for the proposed target area, land based activities and livestock will play a significant role in achieving the project objectives. The project will reduce the emphasis on traditional crops and will increase prominence on high value crop and value addition through grading, packaging, processing and encouraging organic farming. Further, to ensure the sustainability of the proposed activities and ensuring cost sharing by participants for capital investments and also the recurrent costs associated with maintenance of the assets.

A number of watershed management projects are being executed in the state under different schemes; the Micro watersheds where these schemes are being implemented have been selected more on the grounds of suitability of working areas to the Project Implementing Agency (PIA) than on the basis of any priority made in an objective manner. There are a number of projects/ schemes operational in the State which is implementing MWS treatments the details of which are being given in the Preliminary Project Report. Keeping these schemes in view only the untreated MWS were shortlisted for the above project.

In the State 1110 MWS have been delineated leaving Haridwar District. In the untreated MWS which are 537, 124 micro watersheds have been identified above 3200 mt. altitude comprising a total area of 14, 25,750 ha. These are areas with little to no human habitations, snow bound glaciers, rocky and forest covered areas. The status of this land is mainly Reserve Forest which is under the jurisdiction of the State Forest department. Micro watersheds in this zone are land slide prone having slopes greater than 30 degrees gradient. Besides, these areas are also facing tremendous pressure and degradation of their natural resource due to high tourist and pilgrim inflow. Any watershed treatment required in this zone (> 3200mt) will be undertaken as convergence projects requiring special interventions by the concerned departments.

Within the 537 untreated MWS, 409 micro watersheds have been identified which are below 3200 mt. altitude comprising a total area of 18,11, 887 ha. And additionally 1,20,000 ha. of area from Haridwar district have been prioritized for treatment (MWS have not been delineated in Haridwar district). A total of 121MWS across the State and 20,000 ha. area of Haridwar district covering a gross area of about 2,85,804 ha. is proposed to be treated in the previous phases of the Integrated Watershed Management Programme (IWMP). The total area available for treatment under the plans has also been calculated for every district. The criteria and weightage for selection of MWS has been done on the basis of criteria provided by Department of Land Resource Ministry of Rural Development, Govt. of India.

The MWS selected could also be taken up for treatment under various convergence schemes. Amongst the various schemes specific projects designed by various Line Departments like Forest, Agriculture, Rural Development can be taken up. Any Externally Aided Project working on Watershed Guidelines could also prove to be a good convergence project. Within these projects also NREGS could also be used as an effective convergence tool.

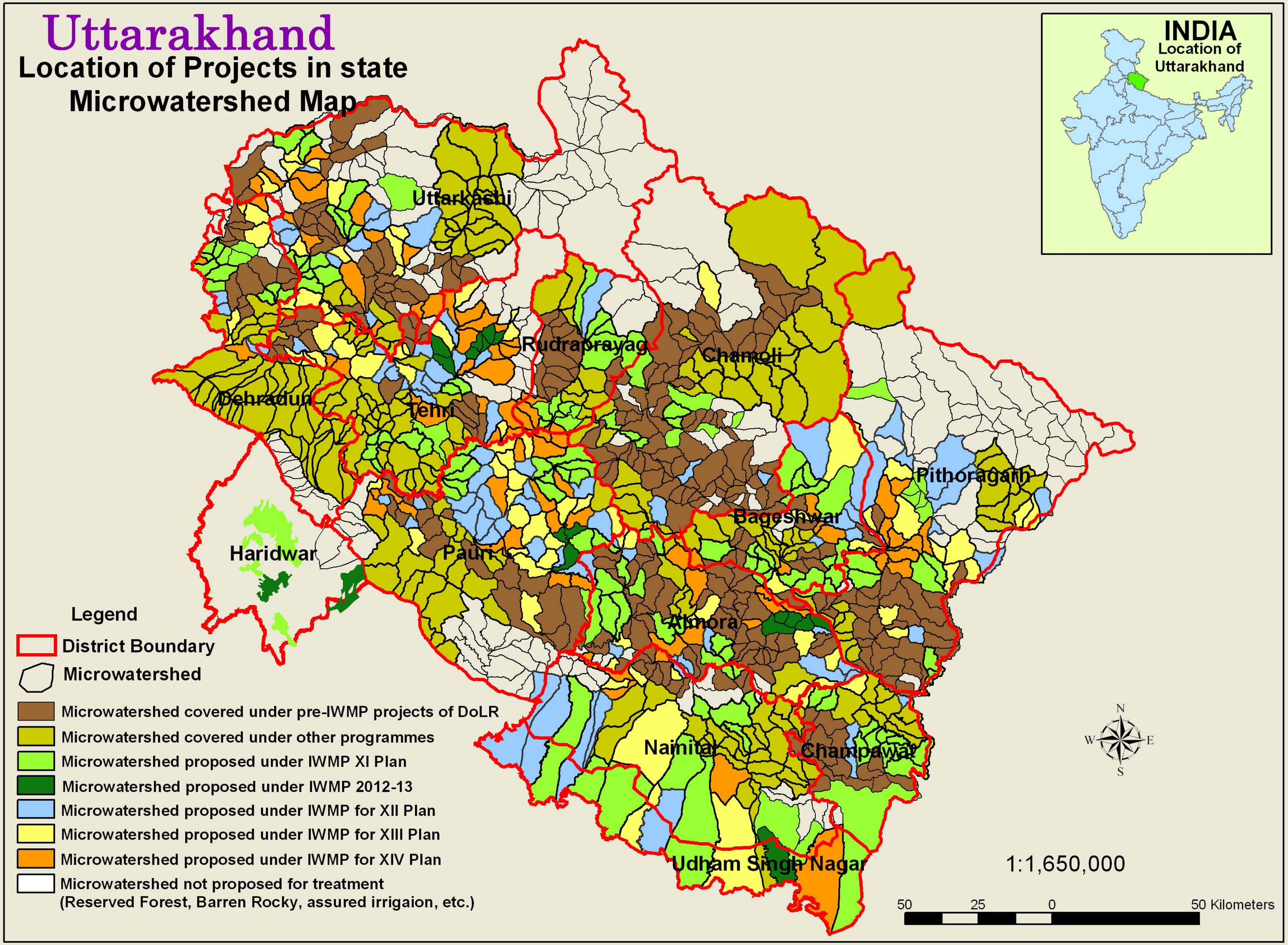
Of the 537 untreated MWS 409 have been shortlisted for the Integrated Watershed Management Project (IWMP). 121 MWS covering an area of 2.86 lakh ha. have been taken up for treatment in the year 2010-11 and 2011-12 in all the districts of the State. In the previous phases Rs. 418.75 crores financial outlay was proposed. For the year 2012-13 16 MWS and 2 development blocks of Haridwar covering an area of 0.39531 lakh ha. in 5 districts is being proposed for treatment . The budgetary outlay expected from Department of Land Resources, Ministry of Rural Development for the administrative expenses of State Level Nodal Agency (SLNA), State Level Data Cell (SLDC) and District Watershed Development Units (DWDUs) had been depicted in PPR- 2, 3 and 4.

Uttarakhand State being predominantly a hill state with difficult terrain a financial outlay of Rs. 15000 per ha. has been proposed for the hill districts and for the plain districts of Udhamsingh Nagar, Haridwar and some part of Nainital districts financial outlay of Rs. 12000 per ha. has been proposed. Thus a total outlay of Rs. 2742.52 crores has been projected for a period of 18 years. The financial provision required for the 11th plan is Rs. 621 crores for the 12th Plan, it is Rs. 624 crores, for the 13th Plan Rs. 660 crores and for the 14th Plan it is 858.52 crores.

Watershed Management works entail considerable amount of budget and hence a proper monitoring and impact evaluation is desired to assess the benefits accrued out of the expenditure incurred. Thus, to monitor the achievement of our defined project objectives certain output indicators have been designed which will help in quantifying the objectives any change in achievement of objectives will help in flagging our procedural shortcomings like ineffective community mobilization, poor PRA process improper prioritization of natural resource management objectives etc.

Uttarakhand

Location of Projects in state Microwatershed Map



CHAPTER I
INSTITUTIONAL STRUCTURES

I. A. State Level Nodal Agencies (SLNAs):

Table-PPR 1: Details of SLNA

1	2	3	4	5	6	7	
S. No.	State	Type of SLNA#	Date of Notification	Date of MoU with DoLR	Total no. of members of SLNA	Chairperson	
						Name	Designation
1	Uttarakhand	Department (Watershed Management Directorate, Uttarakhand, Dehradun)	11, September 2008		27	Ms Vineeta Kumar	Principal Secretary / Forest & Rural Development

It is a Department.

8					
CEO					
Name	Designation	Date of Appointment	Nature of appointment	Tenure (No. of years)	Contact Ph. No./ Fax/ E-mail
Mr. Bhaskaranand	Chief Project Director Watershed Management	18.10.2012	Deputation	As per Deputation rules	0135-2768712 Fax. 0135-2762839 Email uttarakhandslna@gmail.com

Table-PPR 2: Details of functionaries in the SLNAs

S.N	Total working in the SLNA	Names & Designation	Qualification**	Work allocation	Monthly remuneration (Rs.)	Total budget of SLNA (Rs.) (Annual)		Funding expected from DoLR (Rs.) (Annual)	
						R	NR	R	NR
1	19	Smt Neena Grewal, Addl.CEO	Indian Forest Service	Technical Cell	70000	840000		840000	
2		Deputy Director (Agri./ Horti)	As per Departmental Norms		45000	540000		540000	
3		Senior Finance Officer		Finance	45000	540000		540000	
4		Statistical Assistant	As per Deptt. norms	Planning	30000	360000		360000	
5		Accountant		Account	25000	300000		300000	
6		Upper Assistant (2)		Gen. Admin.	32000	384000		384000	
7		Junior Assistant (2)		Gen. Admin.	28000	336000		336000	
8		Computer Operator*(2)	Dip. in Com. /equi	Com. Oper.	16000	192000		192000	
		Total			**291000**	**3492000**		**3492000**	

*** On contract– qualification or eligibility will be decided by the SLNA (will be contracted if budget provided by the DoLR)**
*** At present the permanent staff is posted in Watershed Management Directorate, Dehradun and is being remunerated by the State Govt.**

Table-PPR 3: Details of State Level Data Cell (SLDC) Functionaries (As per DoLR Guidelines)

S.No	Names & Designation	No. required	Qualification & Experience	Work allocation	Monthly remuneration (Rs.)	Total Annual budget of SLDC (Rs.)	Funding expected from DoLR (Rs.) Annual
1	Technical Expert (Agriculture/Agricultural Engineering)	1	As per GOI MoRD Norms	Technical cell	50000	600000	600000
2	Technical Expert on Livelihood (micro-Enterprises/Rural Management)	1		Technical cell	50000	600000	600000
3	Assistant technical expert - NRM	1		Technical cell	25000	300000	300000
4	Assistant technical expert - IEC	1		Technical cell	25000	300000	300000
5	GIS expert	1		GIS	40000	480000	480000
6	Programmer	1		GIS/MIS	25000	300000	300000
7	Data Entry Operator	2		Data Entry	7500	180000	180000
	T.A.					400000	400000
	Office Expenses					800000	800000
	Total	**08**				**3960000**	**3960000**

I. B. District Level Watershed Units:

Table-PPR 4: Details of functionaries in the District Watershed Units / Data Cells (As per DoLR Guidelines)

S.No.	Name of the District	Name of the post	Total no. of persons working for Watershed programme	Qualification & Experience	Work allocation	Monthly remuneration (Rs.)	Total Annual budget of DLDC (Rs.)	Funding expected from DoLR (Rs.)
1	Almora	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000
		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
2	Bageshwar	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000
		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
3	Chamoli	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000
		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
4	Rudraprayag	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000
		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
5	Champawat	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000

		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
6	Dehradun	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000
		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
7	Haridwar	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000
		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
8	Nainital	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000
		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
9	Pauri Garhwal	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000
		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
10	Pithoragarh	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000
		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
11	Tehri Garhwal	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000

		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
12	U S Nagar	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000
		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
13	Uttarkashi	Technical Expert	1	As per GOI MoRD Norms	Technical Expert	25000	300000	300000
		Account Assistant	1		Account Assistant	10000	120000	120000
		Data Entry Operator	1		Data Entry Operator	7500	90000	90000
	Total	**Technical Expert**	**13**	**As per GOI MoRD Norms**	**Technical Expert**	**325000**	**3900000**	**3900000**
		Account Assistant	**13**		**Account Assistant**	**130000**	**1560000**	**1560000**
		Data Entry Operator	**13**		**Data Entry Operator**	**97500**	**1170000**	**1170000**
		T.A. for all offices					**1300000**	**1300000**
		Office Expenses for all offices					**3640000**	**3640000**
	Grand Total						**11570000**	**11570000**

CHAPTER II

SELECTION OF WATERSHED PROJECTS

Table -PPR 5: Status of District-wise area covered under the Watershed Programmes (MIS Table-M (SP) 2)

Names of Districts	Total micro-watersheds in the District		Micro-watersheds covered so far										Net watersheds to be covered	
			Dept. of Land Resources		Other Ministries/ Depts.		Dept. of Land Resources		Dept. of Land Resources		Total watersheds covered			
			Pre-IWMP projects (DPAP+DDP+IWDP)		Any other watershed project		IWMP 2010-11		IWMP 2011-12					
	No.	Area (ha.)	No.	Area (ha.)	No.	Area (ha.)	No.	Area (ha.)	No.	Area (ha.)	No.	Area (ha.)	No.	Area (ha.)
Almora	101	319309	171+0+5	111126	5	26101	13	36904	2	11556	72	185687	29	116649
Bageshwar	61	275378	38+0+2	28835	15	45593	14	40762	1	6325	44	121515	17	149860
Chamoli	138	822225	127+0+6	101107	44	419934	5	21072	2	5058	98	547171	7	43193
Rudraprayag	40	182223	0+0+1	11571	17	81384	7	16854	0	0	26	109809	8	37608
Champawat	41	166072	57+0+2	39418	9	37214	8	28753	3	5869	38	111254	3	31765
Dehradun	96	314792	0+0+3	15930	53	206931	12	20954	0	0	82	243815	13	33554
Haridwar	NA	231110	0+0+5	27104	NA	NA	2 Dev. Bl	10000	2 Dev. Bl	10000	NA	47104	NA	100000
Nainital	70	384914	0+0+5	27546	25	10425	7	39448	1	5222	54	82641	16	186862
Pauri Garhwal	129	540360	302+0+6	185109	22	123875	11	37060	3	11492	72	357536	57	195235
Pithoragarh	129	708486	66+0+7	75294.4	20	62067	5	25019	1	5000	46	167380.4	36	171763
Tehri Garhwal	130	400111	85+0+3	72184	46	111768	0	0	8	17088	60	201040	60	156926
U Singh Nagar	8	177780	0+0+2	11220	1	11000	2	44647	2	10675	5	77542	3	111458
Uttarkashi	167	794526	0+0+4	21082.5	26	128404	10	28686	4	11702	63	189874.5	39	135356
	1110	**5317286**	**846+0+51**	**727527**	**283**	**1264696**	**94+2 dev.**	**350159**	**27+2 dev.**	**99987**	**660**	**2442369**	**288**	**1470229**

Table –PPR 6(a): Prioritization list of projects proposed for sanction during the FY 2012-13

S.No.	Project Name	No. of Micro Watersheds	Proposed Project Area (Ha.)	Type of project (Hilly / Desert/ Others)	Proposed Cost (Rs. in lakhs)	Average Weight-age under the criteria
1	2	3	4	5	6	7
1.	Almora IWMP- VII/12-13	2	4195	Hilly	629.25	76.5
2.	Almora IWMP- VIII/12-13	3	4318	Hilly	647.70	71.0
3.	Pauri IWMP- VII/12-13	3	5278	Hilly	791.70	79.7
4.	US Nagar IWMP- VII/12-13	1	5585	Others	670.20	62.5
5.	Haridwar IWMP- V/12-13	1(Dev. Block)	5000	Others	600.00	57.5
6.	Haridwar IWMP- VI/12-13	1(Dev. Block)	5000	Others	600.00	57.5
7.	Tehri IWMP- VII/12-13	5	5161	Hilly	774.15	53.9
8.	Tehri IWMP- VIII/12-13	2	4994	Hilly	749.10	68.0

Table-PPR 6(b): Prioritization List of MWS taken under the various Projects Proposed for Sanction during the FY 2012-13

Sl.No.	Project Name	Name of MWS	Weight-age under the Criteria													Total weightage
			I	II	III	IV	V*	VI	VII	VIII	IX	X	XI	XII	XIII	
1	Almora IWMP-VII	Phalalgad	5	3	0	10		10	10	7.50	10	10	0	0	5	**70.5**
		Thatgad	5	5	0	10		10	10	7.50	10	10	10	0	5	**82.5**
2	Almora IWMP-VIII	Kali gad	5	5	0	10		10	10	7.50	10	10	0	0	5	**72.5**
		Salyani Gad	5	3	0	10		10	10	5.00	10	10	0	0	5	**68.0**
		Ghuniyoligad	5	5	0	10		10	10	7.50	10	10	0	0	5	**72.5**
3	Pauri IWMP-VII	Chanchariya Gad	5	3	0	10		10	10	7.50	10	10	10	0	5	**80.5**
		Jiwai	5	3	0	10		10	10	5.00	15	10	10	0	5	**83.0**
		Machhigad	5	3	0	10		10	10	7.50	10	10	5	0	5	**75.5**
4	US Nagar IWMP-VII	Khakra Nadi	2.5	10	0	5		0	5	5.00	5	15	10	5	0	**62.5**
5	Haridwar IWMP-V	Laksar	2.5	5	0	5		0	5	5.00	5	15	10	5	0	**57.5**
6	Haridwar IWMP-VI	Bahadarabad	2.5	5	0	5		0	5	5.00	5	15	10	5	0	**57.5**
7	Tehri IWMP-VII	Sankri	7.5	3	0	10		0	10	7.50	10	10	0	0	10	**68.0**
		Chakar Gaon	7.5	3	0	10		0	10	7.50	10	10	0	0	10	**68.0**
		Gairgad	7.5	3	0	10		0	10	7.50	10	10	0	0	10	**68.0**
		Bajiya	7.5	3	0	10		0	10	5.00	10	10	0	0	10	**65.5**
		Saur	7.5	3	0	10		0	10	7.50	10	10	0	0	10	**68.0**
8	Tehri IWMP-VIII	Aragad	7.5	3	0	10		0	10	7.50	10	10	0	0	5	**63.0**
		Tungri	7.5	3	0	10		0	10	7.50	10	10	10	0	5	**73.0**

*Category NA

CHAPTER III
PROFILE OF THE EACH SELECTED WATERSHED PROJECT

Table-PPR 7 : Projects at a Glance (8 Projects - District wise)

Table PPR 7.a : District : Almora Project No. Almora IWMP- VII/12-13

1	**Name of the State**	**Uttarakhand**
2	Name & Type# (Hilly/Desert/Others) of the project	Hilly
3	Name of the District	**Almora**
4	Name of the Blocks	Bhasiyachana
5	Name of Gram Panchayats	Attached in Annexure 1
6	Name & Census Code of Villages Covered	Attached in Annexure 1
7	Name & Codes of the micro-watersheds	Phalalgad Thatgad
8	Four major reason for selection of watershed	I-Acuteness of drinking water scarcity.
		ii-Preponderance of wastelands/degraded lands.
		iii-Proportion of scheduled castes/scheduled tribes.
		iv-Productivity potential of the land.
9	Area of the Project (ha.)	6025
10	Area proposed to be treated (ha.)	4195
11	Project Cost (Rs.in Lakhs)	629.29 lakhs
12	Name and Address of proposed PIA	Proposed Forest deptt.
13	Any other (please specify)	

Annexure 1 - Almora IWMP VII: List of Gram Panchayat and Names and Census Code of Villages

S.No.	SWS	MWS	Dev_Block	Village	Village Code Census 2001
1	Suyal	Thatgad	Bhasiyachana	Alai Supyal	250700400193
2	Suyal	Thatgad	Bhasiyachana	Anarsa	250700400200
3	Jaigan Nadi	Phalalgad	Bhasiyachana	Baburiya Nayal	250700300891
4	Suyal	Thatgad	Bhasiyachana	Baman Tilari	250700400194
5	Jaigan Nadi	Phalalgad	Bhasiyachana	Belawalgaon	250700300889
6	Jaigan Nadi	Phalalgad	Bhasiyachana	Bunga	250700300892
7	Suyal	Thatgad	Bhasiyachana	Chhani	250700400196
8	Suyal	Thatgad	Bhasiyachana	Chirala	250700400165
9	Suyal	Thatgad	Bhasiyachana	Deora	250700400164
10	Suyal	Thatgad	Bhasiyachana	Dhari	250700400166
11	Suyal	Thatgad	Bhasiyachana	Diyari	250700400205
12	Jaigan Nadi	Phalalgad	Bhasiyachana	Diyari Kuna	250700400190
13	Suyal	Thatgad	Bhasiyachana	Dugari	250700400174
14	Jaigan Nadi	Phalalgad	Bhasiyachana	Jamrari	250700300888
15	Suyal	Thatgad	Bhasiyachana	Kali Kotuli	250700400203
16	Jaigan Nadi	Phalalgad	Bhasiyachana	Kalon	250700400191
17	Suyal	Thatgad	Bhasiyachana	Kanchula	250700400204
18	Jaigan Nadi	Phalalgad	Bhasiyachana	Khankari Khalsa	250700400210
19	Suyal	Thatgad	Bhasiyachana	Khas Tilari	250700400195

20	Suyal	Thatgad	Bhasiyachana	Khaspar	250700400694
21	Suyal	Thatgad	Bhasiyachana	Kumoli May Gunth	250700400198
22	Suyal	Thatgad	Bhasiyachana	Kunj Gunth	250700400710
23	Suyal	Thatgad	Bhasiyachana	Kwarali	250700400692
24	Suyal	Thatgad	Bhasiyachana	Laxchana Gunth	250700400708
25	Suyal	Thatgad	Bhasiyachana	Maichune	250700400691
26	Suyal	Thatgad	Bhasiyachana	Malli Dhauni Gunth	250700400206
27	Suyal	Thatgad	Bhasiyachana	Mirtola	250700400693
28	Suyal	Thatgad	Bhasiyachana	Nauli	250700400171
29	Suyal	Thatgad	Bhasiyachana	Palyun May Chak	250700400192
30	Suyal	Thatgad	Bhasiyachana	Pandetoli	250700400180
31	Suyal	Thatgad	Bhasiyachana	Pateshal	250700400172
32	Suyal	Thatgad	Bhasiyachana	Seal	250700400175
33	Suyal	Thatgad	Bhasiyachana	Simkhalya	250700400199
34	Suyal	Thatgad	Bhasiyachana	Supai Supyal	250700400202
35	Suyal	Thatgad	Bhasiyachana	Supai Tilari	250700400197
36	Suyal	Thatgad	Bhasiyachana	Taura	250700400161
37	Suyal	Thatgad	Bhasiyachana	Udal Gaon	250700400173
38	Suyal	Thatgad	Bhasiyachana	Utyan	250700400201

Table PPR 7.b : District : Almora **Project No. Almora IWMP- VIII/12-13**

1	**Name of the State**	**Uttarakhand**
2	Name & Type# (Hilly/Desert/Others) of the project	Hilly
3	Name of the District	**Almora**
4	Name of the Blocks	Bhaisyachana
5	Name of Gram Panchayats	Attached in Annexure 2
6	Name & Census Code of Villages Covered	Attached in Annexure 2
7	Name & Codes of the micro-watersheds	Kali gad, Salyani Gad, Ghuniyoligad
8	Four major reason for selection of watershed	I-Acuteness of drinking water scarcity.
		ii-Preponderance of wastelands/degraded lands.
		iii-Proportion of scheduled castes/scheduled tribes.
		iv-Productivity potential of the land.
9	Area of the Project (ha.)	6556
10	Area proposed to be treated (ha.)	4318
11	Project Cost (Rs.in Lakhs)	647.70lakhs
12	Name and Address of proposed PIA	Proposed Agri. deptt.
13	Any other (please specify)	

Annexure 2 - Almora IWMP VI: List of Gram Panchayat and Names and Census Code of Villages

S.No.	SWS	MWS	Dev_Block	Village	Village Code Census 2001
1	Jaigan Nadi	Kali gad	Bhasiyachana	Airi Khan	250700400211
2	Jaigan Nadi	Salyani Gad	Bhasiyachana	Badoli Sera Gunth	250600400097
3	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Baisiya Chhana	250700400218
4	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Baura	250700400223
5	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Bhanjar	250700400215
6	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Dhaul Naili	250700400226
7	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Dhunduli	250700400219
8	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Dungar Lekh	250700400217
9	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Fulai Gunth	250700400709
10	Jaigan Nadi	Salyani Gad	Bhasiyachana	Harara	250700400246
11	Jaigan Nadi	Kali gad	Bhasiyachana	Hatoli	250700400207
12	Jaigan Nadi	Salyani Gad	Bhasiyachana	Jaduri Gunth	250700400242
13	Jaigan Nadi	Kali gad	Bhasiyachana	Kasan	250700400208
14	Jaigan Nadi	Salyani Gad	Bhasiyachana	Katogiya Mai Gunth	250700400229
15	Jaigan Nadi	Kali gad	Bhasiyachana	Khankari Gunth	250700400209
16	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Khudiyari	250700400216
17	Jaigan Nadi	Salyani Gad	Bhasiyachana	Kota	250700400228
18	Jaigan Nadi	Salyani Gad	Bhasiyachana	Kotyura Khalsa	250700400230
19	Jaigan Nadi	Kali gad	Bhasiyachana	Ligurata	250700400214

20	Jaigan Nadi	Salyani Gad	Bhasiyachana	Lweta	250700400233
21	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Magrdubhanari	250700400222
22	Jaigan Nadi	Salyani Gad	Bhasiyachana	Naini Gunth	250700400241
23	Jaigan Nadi	Salyani Gad	Bhasiyachana	Nali Malli	250700400238
24	Jaigan Nadi	Salyani Gad	Bhasiyachana	Nali Talli	250700400237
25	Jaigan Nadi	Kali gad	Bhasiyachana	Naugaon	250700300887
26	Jaigan Nadi	Salyani Gad	Bhasiyachana	Nayal	250700400240
27	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Nayal Gunth	250700400213
28	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Nisnaili	250700400224
29	Jaigan Nadi	Salyani Gad	Bhasiyachana	Pabhya	250700400232
30	Jaigan Nadi	Salyani Gad	Bhasiyachana	Padoli	250700400236
31	Jaigan Nadi	Salyani Gad	Bhasiyachana	Salla Bhatkote	250700400235
32	Jaigan Nadi	Salyani Gad	Bhasiyachana	Saluri	250700400234
33	Jaigan Nadi	Kali gad	Bhasiyachana	Sanri	250700400221
34	Jaigan Nadi	Kali gad	Bhasiyachana	Saruwa Tana	250700400220
35	Jaigan Nadi	Salyani Gad	Bhasiyachana	Sera Ghara	250600400288
36	Jaigan Nadi	Salyani Gad	Bhasiyachana	Sera Urf Badoli	250600400096
37	Jaigan Nadi	Salyani Gad	Bhasiyachana	Sukna	250700400231
38	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Thala Gunth	250700400225
39	Jaigan Nadi	Kali gad	Bhasiyachana	Thiklana	250700400212
40	Jaigan Nadi	Ghuniyoligad	Bhasiyachana	Tirnaili	250700400227
41	Jaigan Nadi	Salyani Gad	Bhasiyachana	Umer	250700400239

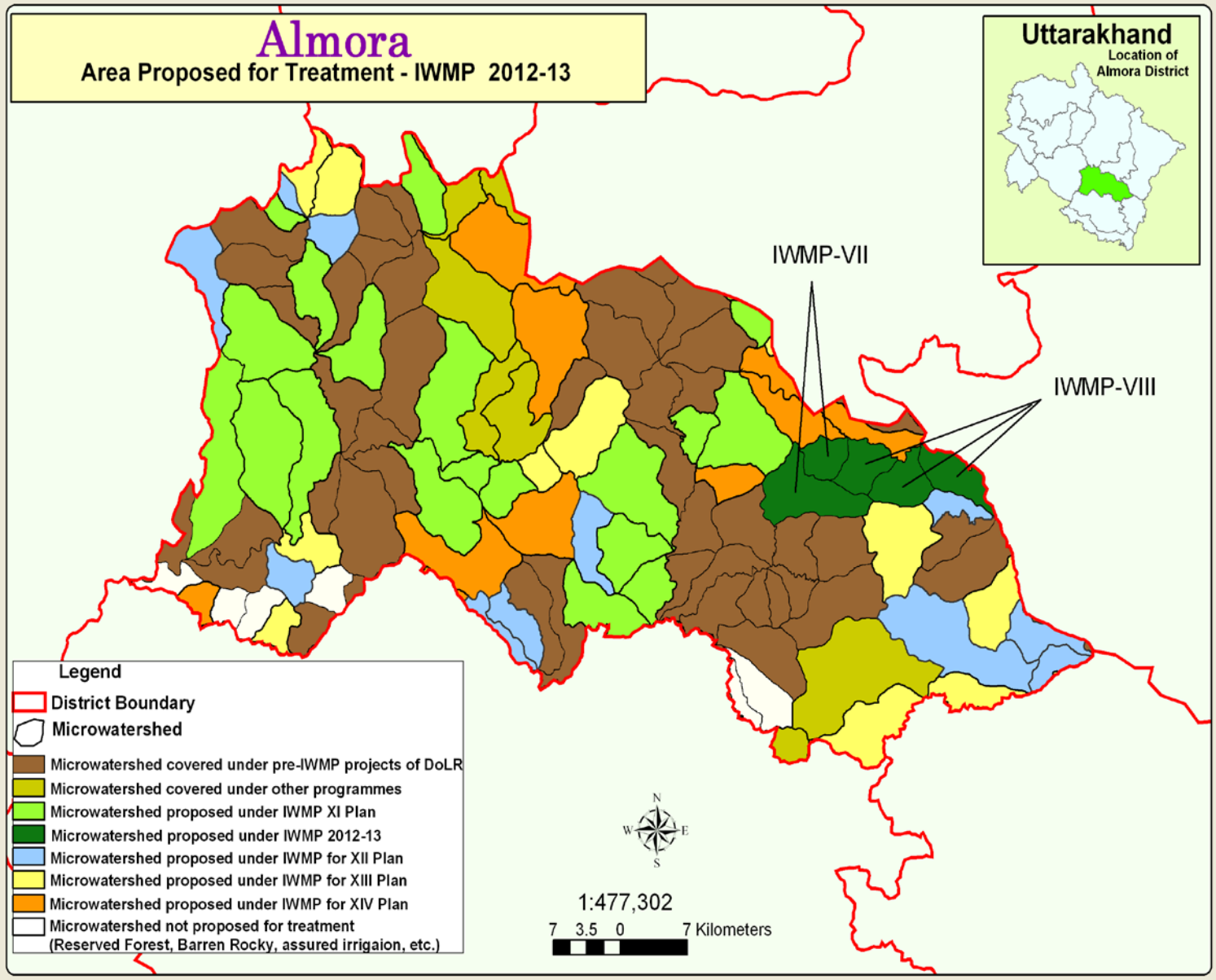

Almora
Area Proposed for Treatment - IWMP 2012-13
Uttarakhand
Location of Almora District
IWMP-VII
IWMP-VIII
Legend
District Boundary
Microwatershed
Microwatershed covered under pre-IWMP projects of DoLR
Microwatershed covered under other programmes
Microwatershed proposed under IWMP XI Plan
Microwatershed proposed under IWMP 2012-13
Microwatershed proposed under IWMP for XII Plan
Microwatershed proposed under IWMP for XIII Plan
Microwatershed proposed under IWMP for XIV Plan
Microwatershed not proposed for treatment
(Reserved Forest, Barren Rocky, assured irrigaion, etc.)
N
W
E
S
1:477,302
7 3.5 0 7 Kilometers

Table PPR 7.c: District: Pauri Garhwal **Project No. – Pauri IWMP VII/12-13**

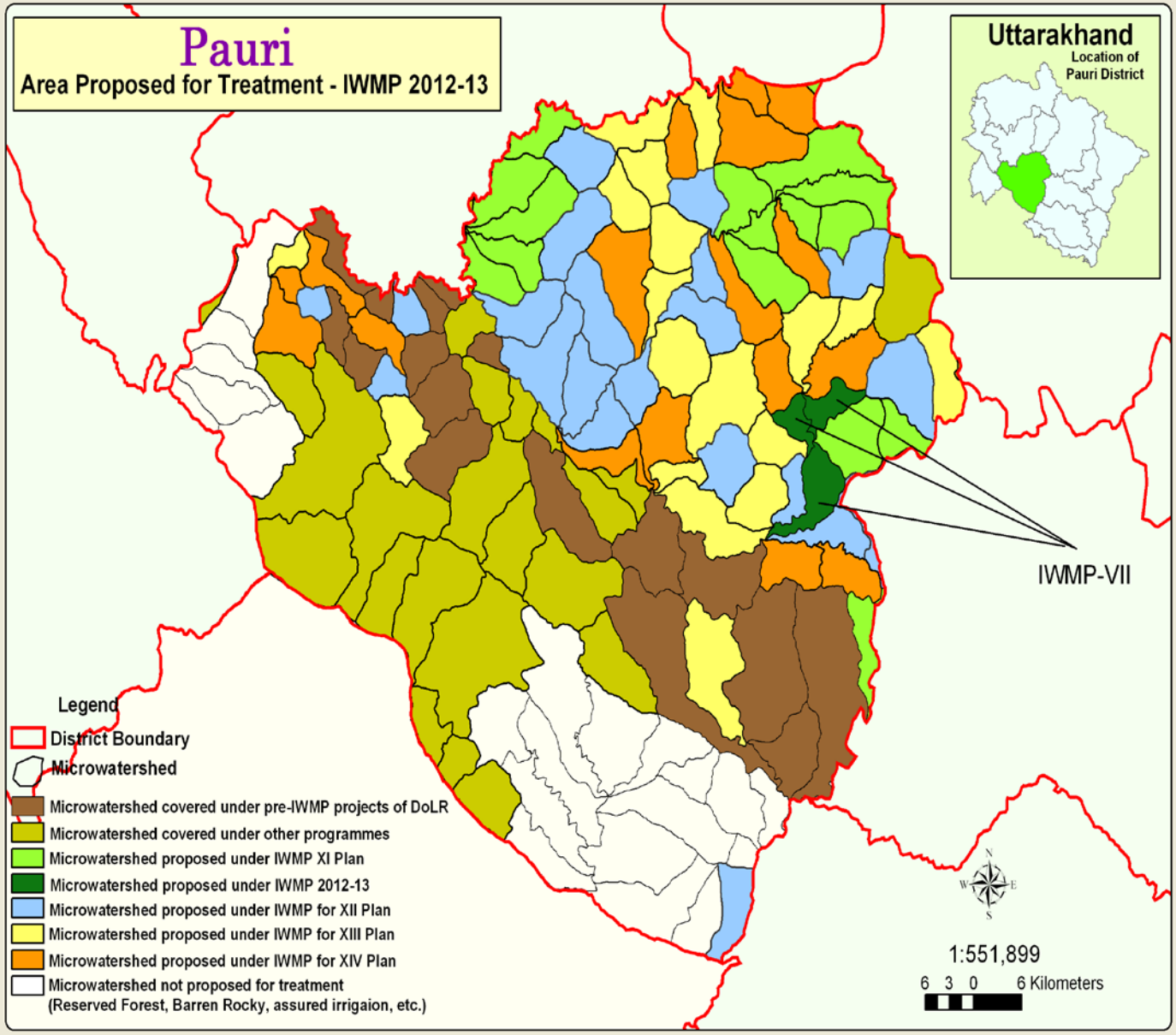
1	**Name of the State**	**Uttarakhand**
2	Name & Type (Hilly/Desert/Others) of the project	Hilly
3	Name of the District	**Pauri**
4	Name of the Blocks	Birokhal
5	Name of Gram Panchayats	Attached in Annexure 3
6	Name & Census Code of Villages Covered	Attached in Annexure 3
7	Name & Codes of the micro-watersheds	Chanchariya Gad, Jiwai, Machhigad
8	Four major reason for selection of watershed	i-Acuteness of drinking water scarcity. ii-Preponderance of wastelands/degraded lands. iii-Proportion of scheduled castes/scheduled tribes. iv-Productivity potential of the land.
9	Area of the Project (ha.)	7209
10	Area proposed to be treated (ha.)	5278
11	Project Cost (Rs.in Lakhs)	791.67 lakhs
12	Name and Address of proposed PIA	Proposed WMD
13	Any other (please specify)	

Annexure 3 - Pauri IWMP VII: List of Gram Panchayat and Names and Census Code of Villages

S.No.	SWS	MWS	Dev_Block	Village	Village Code Census 2001
1	Purvi Nayar	Machhigad	Bironkhal	Amkulaou Or Amkumaou	250500200338
2	Purvi Nayar	Machhigad	Bironkhal	Badanu	250500200319
3	Purvi Nayar	Chanchariya Gad	Bironkhal	Bairgradh	250500200230
4	Purvi Nayar	Jiwai	Bironkhal	Bajwad	250500200246
5	Purvi Nayar	Machhigad	Bironkhal	Bamradi	250500200332
6	Purvi Nayar	Chanchariya Gad	Bironkhal	Bansi	250500200233
7	Purvi Nayar	Chanchariya Gad	Bironkhal	Bapta Malla	250500200236
8	Purvi Nayar	Jiwai	Bironkhal	Bapta Talla	250500200237
9	Purvi Nayar	Machhigad	Bironkhal	Bhaiswada	250500200335
10	Purvi Nayar	Machhigad	Bironkhal	Bheswada	250500200308
11	Purvi Nayar	Machhigad	Bironkhal	Bhrouli Malli	250500200349
12	Purvi Nayar	Machhigad	Bironkhal	Bhrouli Talli	250500200348
13	Purvi Nayar	Chanchariya Gad	Bironkhal	Chanchriya	250500200234
14	Purvi Nayar	Machhigad	Bironkhal	Chaor Kot Malla	250500200299
15	Purvi Nayar	Machhigad	Bironkhal	Choupdiyou	250500200251
16	Purvi Nayar	Machhigad	Bironkhal	Chundliya	250500200320
17	Purvi Nayar	Chanchariya Gad	Bironkhal	Daulou	250500200254
18	Purvi Nayar	Machhigad	Bironkhal	Degoli	250500200330
19	Purvi Nayar	Machhigad	Bironkhal	Dhopighat	250500200321

20	Purvi Nayar	Machhigad	Bironkhal	Dumaila Malla	250500200352
21	Purvi Nayar	Machhigad	Bironkhal	Dumaila Talla	250500200350
22	Purvi Nayar	Chanchariya Gad	Bironkhal	Eeda	250500200238
23	Purvi Nayar	Machhigad	Bironkhal	Fakir Khola	250500200351
24	Purvi Nayar	Jiwai	Bironkhal	Gadigad Or Gudgad Laga Sukeyee	250500200242
25	Purvi Nayar	Chanchariya Gad	Bironkhal	Gadoli	250500200265
26	Purvi Nayar	Chanchariya Gad	Bironkhal	Gawni Bagicha	250500200253
27	Purvi Nayar	Machhigad	Bironkhal	Gundinda	250500200390
28	Purvi Nayar	Chanchariya Gad	Bironkhal	Jaspur	250500200232
29	Purvi Nayar	Jiwai	Bironkhal	Jiwaye	250500200243
30	Purvi Nayar	Machhigad	Bironkhal	Kakroda	250500200346
31	Purvi Nayar	Jiwai	Bironkhal	Karndhar	250500200244
32	Purvi Nayar	Chanchariya Gad	Bironkhal	Kathado	250500200229
33	Purvi Nayar	Machhigad	Bironkhal	Kimoli	250500200339
34	Purvi Nayar	Chanchariya Gad	Bironkhal	Kolinda Malla	250500200227
35	Purvi Nayar	Machhigad	Bironkhal	Kot (Chyur Kot)	250500200331
36	Purvi Nayar	Jiwai	Bironkhal	Kund Lagga Sukeyee	250500200248
37	Purvi Nayar	Machhigad	Bironkhal	Lachi	250500200323
38	Purvi Nayar	Chanchariya Gad	Bironkhal	Langura	250500200240
39	Purvi Nayar	Machhigad	Bironkhal	Magro Malla	250500200333
40	Purvi Nayar	Jiwai	Bironkhal	Mataila	250500200247
41	Purvi Nayar	Machhigad	Bironkhal	Mataila	250500200325

42	Purvi Nayar	Machhigad	Bironkhal	Matkunda	250500200322
43	Purvi Nayar	Machhigad	Bironkhal	Nawasu Or Banasu	250500200329
44	Purvi Nayar	Machhigad	Bironkhal	Nawgaon	250500200327
45	Purvi Nayar	Machhigad	Bironkhal	Okhliyou	250500200250
46	Purvi Nayar	Machhigad	Bironkhal	Padinda	250500200389
47	Purvi Nayar	Machhigad	Bironkhal	Pakhersain	250500200337
48	Purvi Nayar	Machhigad	Bironkhal	Ragdigad	250500200354
49	Purvi Nayar	Machhigad	Bironkhal	Ranghra Or Ranghera	250500200318
50	Purvi Nayar	Machhigad	Bironkhal	Rikhad Or Rikha	250500200347
51	Purvi Nayar	Machhigad	Bironkhal	Sain Gaon	250500200324
52	Purvi Nayar	Machhigad	Bironkhal	Sera Talla	250500200388
53	Purvi Nayar	Machhigad	Bironkhal	Sila Malla	250500200334
54	Purvi Nayar	Machhigad	Bironkhal	Sila Talla	250500200336
55	Purvi Nayar	Chanchariya Gad	Bironkhal	Sinkholi Or Simkholi	250500200239
56	Purvi Nayar	Chanchariya Gad	Bironkhal	Soukyani	250500200231
57	Purvi Nayar	Jiwai	Bironkhal	Sukayee	250500200245
58	Purvi Nayar	Machhigad	Bironkhal	Syunsi	250500200328
59	Purvi Nayar	Machhigad	Bironkhal	Tankila	250500200298
60	Purvi Nayar	Machhigad	Bironkhal	Tatiya / Baijrow Or Dhariya	250500200252
61	Purvi Nayar	Chanchariya Gad	Bironkhal	Thapla	250500200255
62	Purvi Nayar	Jiwai	Bironkhal	Toliyo Lagga Jawaee	250500200235
63	Purvi Nayar	Jiwai	Bironkhal	Toliyou Laga Sukeyee	250500200249


Pauri
Area Proposed for Treatment - IWMP 2012-13
Uttarakhand
Location of Pauri District
IWMP-VII
Legend
District Boundary
Microwatershed
Microwatershed covered under pre-IWMP projects of DoLR
Microwatershed covered under other programmes
Microwatershed proposed under IWMP XI Plan
Microwatershed proposed under IWMP 2012-13
Microwatershed proposed under IWMP for XII Plan
Microwatershed proposed under IWMP for XIII Plan
Microwatershed proposed under IWMP for XIV Plan
Microwatershed not proposed for treatment
(Reserved Forest, Barren Rocky, assured irrigaion, etc.)
1:551,899
6 3 0 6 Kilometers

`Table PPR 7.d : District : US Nagar Project No. US Nagar IWMP- VII/2012-13

1	**Name of the State**	**Uttarakhand**
2	Name & Type# (Hilly/Desert/Others) of the project	Others
3	Name of the District	**US Nagar**
4	Name of the Blocks	Sitarganj
5	Name of Gram Panchayats	Attached in Annexure 4
6	Name & Census Code of Villages Covered	Attached in Annexure 4
7	Name & Codes of the micro-watersheds	Khakra Nadi
8	Four major reason for selection of watershed	i-Acuteness of drinking water scarcity.
		ii-Preponderance of wastelands/degraded lands.
		iii-Proportion of scheduled castes/scheduled tribes.
		iv-Productivity potential of the land.
9	Area of the Project (ha.)	5585
10	Area proposed to be treated (ha.)	5585
11	Project Cost (Rs.in Lakhs)	670.20 lakhs
12	Name and Address of proposed PIA	Proposed Forest deptt.
13	Any other (please specify)	

Annexure 4 - USNagar IWMP – VII: List of Gram Panchayat and Names and Census Code of Villages

S.No.	SWS	MWS	Dev_Block	Village	Village Code Census 2001
1	Lebar	Khakra Nadi	Sitarganj	Navi Nagar	250800700120
2	Lebar	Khakra Nadi	Sitarganj	Deyori	250800700114
3	Lebar	Khakra Nadi	Sitarganj	Salmata	250800700115
4	Lebar	Khakra Nadi	Sitarganj	Dusari	250800700108
5	Lebar	Khakra Nadi	Sitarganj	Bidauri	250800700092
6	Lebar	Khakra Nadi	Sitarganj	Mohammadganj	250800700105
7	Lebar	Khakra Nadi	Sitarganj	Khempur	250800700107
8	Lebar	Khakra Nadi	Sitarganj	Purangarh	250800700106
9	Lebar	Khakra Nadi	Sitarganj	Kalyanpur	250800700102
10	Lebar	Khakra Nadi	Sitarganj	Pachpera	250800700095
11	Lebar	Khakra Nadi	Sitarganj	Bidaura	250800700091
12	Lebar	Khakra Nadi	Sitarganj	Islam Nagar	250800700093
13	Lebar	Khakra Nadi	Sitarganj	Jhankat	250800700094
14	Lebar	Khakra Nadi	Sitarganj	Bhikampur	250800700100
15	Lebar	Khakra Nadi	Sitarganj	Dhum Khera	250800700090
16	Lebar	Khakra Nadi	Sitarganj	Kaundha Khera	250800700086
17	Lebar	Khakra Nadi	Sitarganj	Bereya	250800700087
18	Lebar	Khakra Nadi	Sitarganj	Dohari	250800700088
19	Lebar	Khakra Nadi	Sitarganj	Nagala	250800700083

20	Lebar	Khakra Nadi	Sitarganj	Audala	250800700081
21	Lebar	Khakra Nadi	Sitarganj	Magarsara	250800700082
22	Lebar	Khakra Nadi	Sitarganj	Bharauni	250800700080
23	Lebar	Khakra Nadi	Sitarganj	Lamba Khera	250800700079
24	Lebar	Khakra Nadi	Sitarganj	Pahsheni	250800700077
25	Lebar	Khakra Nadi	Sitarganj	Sadhu Nagar	250800700078
26	Lebar	Khakra Nadi	Sitarganj	Ranshali	250800700069
27	Lebar	Khakra Nadi	Sitarganj	Nalai	250800700068

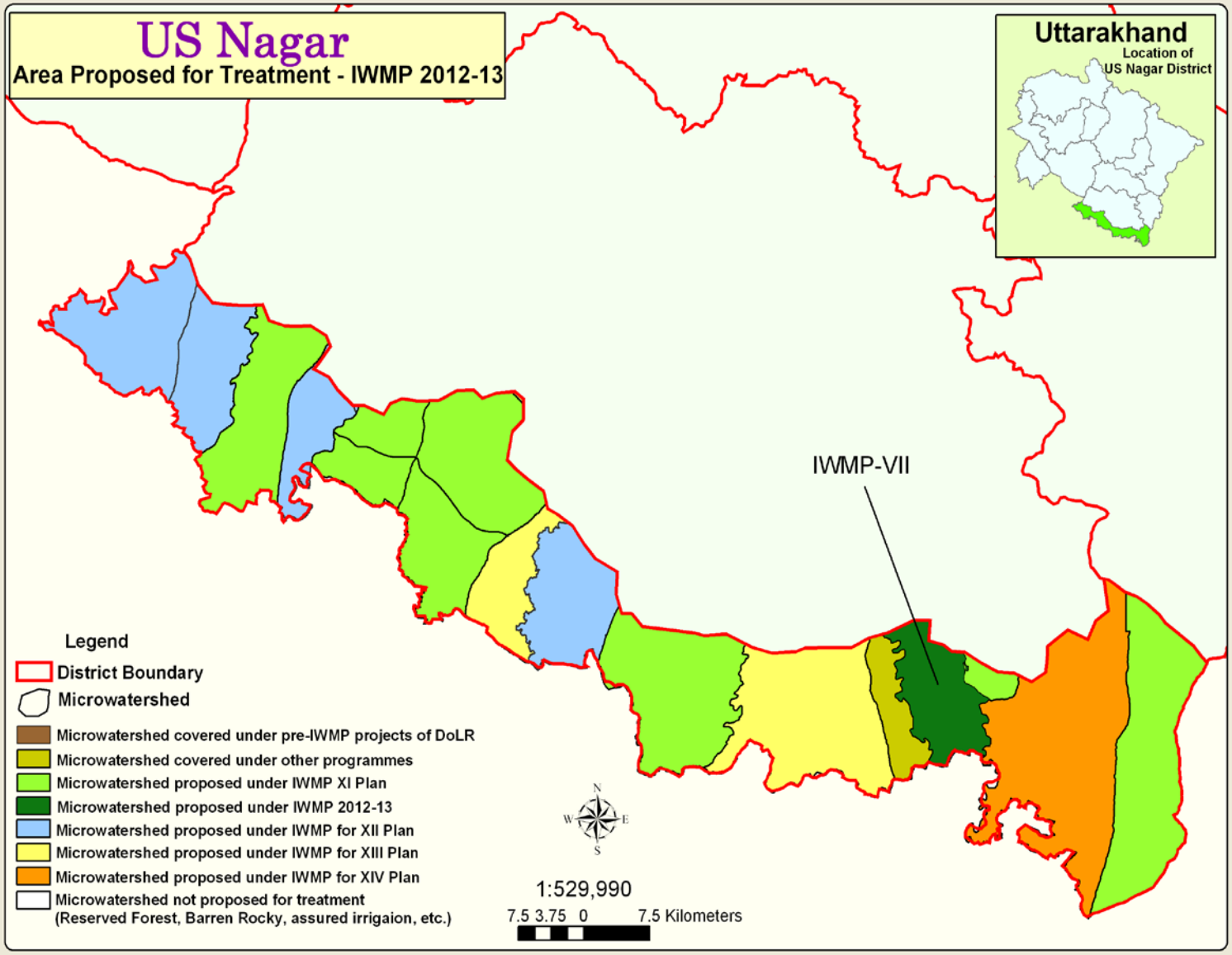

US Nagar
Area Proposed for Treatment - IWMP 2012-13
Uttarakhand
Location of
US Nagar District
IWMP-VII
Legend
District Boundary
Microwatershed
Microwatershed covered under pre-IWMP projects of DoLR
Microwatershed covered under other programmes
Microwatershed proposed under IWMP XI Plan
Microwatershed proposed under IWMP 2012-13
Microwatershed proposed under IWMP for XII Plan
Microwatershed proposed under IWMP for XIII Plan
Microwatershed proposed under IWMP for XIV Plan
Microwatershed not proposed for treatment
(Reserved Forest, Barren Rocky, assured irrigaion, etc.)
N
W
E
S
1:529,990
7.5 3.75 0 7.5 Kilometers

Table PPR 7.e : District : Haridwar **Project No. Haridwar IWMP- V/2012-13**

1	**Name of the State**	**Uttarakhand**
2	Name & Type (Hilly/Desert/Others) of the project	Plain
3	Name of the District	**Haridwar**
4	Name of the Blocks	Laksar
5	Name of Gram Panchayats	Attached in Annexure 5
6	Name & Census Code of Villages Covered	Attached in Annexure 5
7	Name & Codes of the micro-watersheds	MWS not delineated
8	Four major reason for selection of watershed	i-Acuteness of drinking water scarcity.
		ii-Preponderance of wastelands/degraded lands.
		iii-Proportion of scheduled castes/scheduled tribes.
		iv-Productivity potential of the land.
9	Area of the Project (ha.)	6410
10	Area proposed to be treated (ha.)	5000
11	Project Cost (Rs.in Lakhs)	600.00 lakhs
12	Name and Address of proposed PIA	Proposed Agri deptt.
13	Any other (please specify)	

Annexure 5 - Haridwar IWMP –V: List of Gram Panchayat and Names and Census Code of Villages

S.No.	SWS	MWS	Dev_Block	Village	Village Code Census 2001
1	Laksar Development Block		Laksar	Bahadurpur Khadar	251300300034
2	Laksar Development Block		Laksar	Basera Khadar	251300300033
3	Laksar Development Block		Laksar	Bhurni Khatirpur	251300300020
4	Laksar Development Block		Laksar	Bukkanpur	251300300027
5	Laksar Development Block		Laksar	Chiryapur	251300300031
6	Laksar Development Block		Laksar	Deekal Bazurg	251300300026
7	Laksar Development Block		Laksar	Dhadheki Dhanamjhld Must	251300300024
8	Laksar Development Block		Laksar	Dhadhekidhana Majahidpur Aht	251300300025
9	Laksar Development Block		Laksar	Dousni	251300300011
10	Laksar Development Block		Laksar	Hussainpur	251300300012
11	Laksar Development Block		Laksar	Jainpur Khurd Aht	251300300008
12	Laksar Development Block		Laksar	Jainpur Khurd Must	251300300007
13	Laksar Development Block		Laksar	Kasampur Nawada Aht	251300300005
14	Laksar Development Block		Laksar	Kasampur Nawpds Must	251300300006
15	Laksar Development Block		Laksar	Kuwa Khera Aht	251300300019
16	Laksar Development Block		Laksar	Kuwan Khera Must	251300300018
17	Laksar Development Block		Laksar	Ladpur Kalan Aht	251300300002
18	Laksar Development Block		Laksar	Ladpur Kalan Must	251300300001
19	Laksar Development Block		Laksar	Majri Akbarpur	251300300009
20	Laksar Development Block		Laksar	Mohd Pur Bazug Aht	251300300016

21	Laksar Development Block		Laksar	Mohd Pur Bazurg Must	251300300010
22	Laksar Development Block		Laksar	Mubarakpur Alipur	251300300004
23	Laksar Development Block		Laksar	Mukhyali Khurd	251300300003
24	Laksar Development Block		Laksar	Mukhyaliklan	251300300032
25	Laksar Development Block		Laksar	Muktarabad	251300300013
26	Laksar Development Block		Laksar	Nourzpur	251300300021
27	Laksar Development Block		Laksar	Rajabpur	251300300014
28	Laksar Development Block		Laksar	Rasoolpur Bakal Aht	251300300017
29	Laksar Development Block		Laksar	Rasoolpur Baral Must	251300300015
30	Laksar Development Block		Laksar	Seedhroo	251300300030

Table PPR 7.f : District : Haridwar **Project No. Haridwar IWMP- VI/2012-13**

1	Name of the State	Uttarakhand
2	Name & Type# (Hilly/Desert/Others) of the project	Plain
3	Name of the District	**Haridwar**
4	Name of the Blocks	Bahadrabad
5	Name of Gram Panchayats	Attached in Annexure 6
6	Name & Census Code of Villages Covered	Attached in Annexure 6
7	Name & Codes of the micro-watersheds	MWS not delineated
8	Four major reason for selection of watershed	i-Acuteness of drinking water scarcity.
		ii-Preponderance of wastelands/degraded lands.
		iii-Proportion of scheduled castes/scheduled tribes.
		iv-Productivity potential of the land.
9	Area of the Project (ha.)	6691
10	Area proposed to be treated (ha.)	5000
11	Project Cost (Rs.in Lakhs)	600.00 Lakhs
12	Name and Address of proposed PIA	Proposed RD deptt.
13	Any other (please specify)	

Annexure 6 - Haridwar IWMP- VI: List of Gram Panchayat and Names and Census Code of Villages

S.No.	SWS	MWS	Dev_Block	Village	Village Code Census 2001
1	Bahadarabad Development Block		Bahadarabad	Ahamadpur Chiriya	251300200123
2	Bahadarabad Development Block		Bahadarabad	Baso Chandpur	251300200122
3	Bahadarabad Development Block		Bahadarabad	Boxowali	251300200124
4	Bahadarabad Development Block		Bahadarabad	Gaindikhata	251300200119
5	Bahadarabad Development Block		Bahadarabad	Jaspur Chamaria	251300200128
6	Bahadarabad Development Block		Bahadarabad	Laharpur	251300200127
7	Bahadarabad Development Block		Bahadarabad	Laldhang	251300200113
8	Bahadarabad Development Block		Bahadarabad	Nalo Wala	251300200117
9	Bahadarabad Development Block		Bahadarabad	Naurangabad	251300200120
10	Bahadarabad Development Block		Bahadarabad	Samaspur Katabarh	251300200114
11	Bahadarabad Development Block		Bahadarabad	Shyampur Gairabad	251300200125
12	Bahadarabad Development Block		Bahadarabad	Taparhowali	251300200116

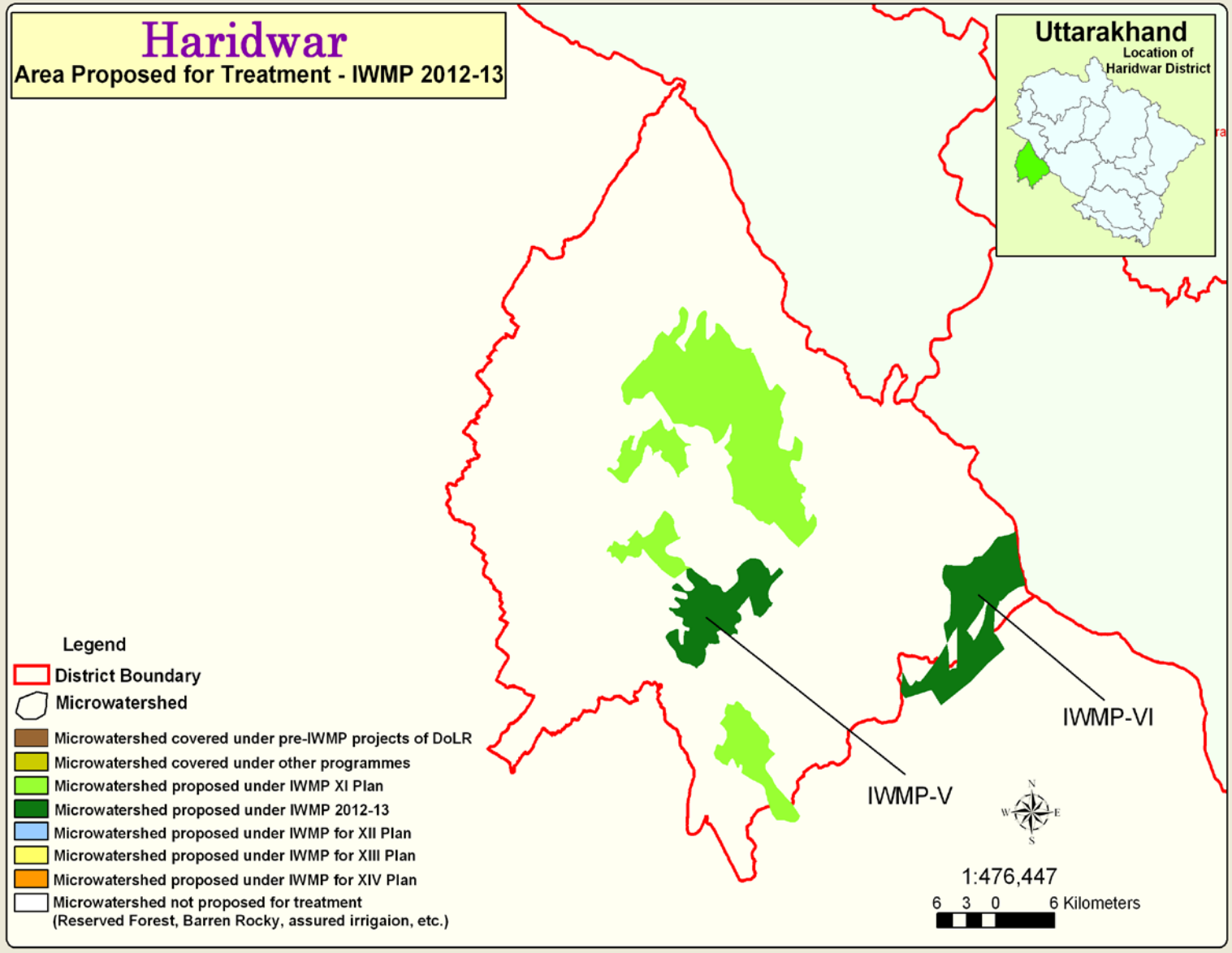

Haridwar
Area Proposed for Treatment - IWMP 2012-13
Uttarakhand
Location of Haridwar District
IWMP-V
IWMP-VI
Legend
District Boundary
Microwatershed
Microwatershed covered under pre-IWMP projects of DoLR
Microwatershed covered under other programmes
Microwatershed proposed under IWMP XI Plan
Microwatershed proposed under IWMP 2012-13
Microwatershed proposed under IWMP for XII Plan
Microwatershed proposed under IWMP for XIII Plan
Microwatershed proposed under IWMP for XIV Plan
Microwatershed not proposed for treatment
(Reserved Forest, Barren Rocky, assured irrigaion, etc.)
1:476,447
6 3 0 6 Kilometers

Table PPR 7.g : District : Tehri **Project No. Tehri IWMP- VII/2012-13**

1	**Name of the State**	**Uttarakhand**
2	Name & Type# (Hilly/Desert/Others) of the project	Hilly
3	Name of the District	**Tehri**
4	Name of the Blocks	Bhilangana
5	Name of Gram Panchayats	Attached in Annexure 7
6	Name & Census Code of Villages Covered	Attached in Annexure 7
7	Name & Codes of the micro-watersheds	Sankri, Chakar Gaon, Gairgad, Bajiya, Saur
8	Four major reason for selection of watershed	i-Acuteness of drinking water scarcity.
		ii-Preponderance of wastelands/degraded lands.
		iii-Proportion of scheduled castes/scheduled tribes.
		iv-Productivity potential of the land.
9	Area of the Project (ha.)	6726
10	Area proposed to be treated (ha.)	5161
11	Project Cost (Rs.in Lakhs)	774.12 Lakhs
12	Name and Address of proposed PIA	Proposed Agri deptt.
13	Any other (please specify)	

Annexure 6 - Tehri IWMP- VII: List of Gram Panchayat and Names and Census Code of Villages

S.No.	SWS	MWS	Dev_Block	Village	Village Code Census 2001
1	Bhilangna Upper	Chakar Gaon	Bhilangna	Ankwan Gaon	250300100227
2	Bhilangna Upper	Gairgad	Bhilangna	Bajinga	250300100233
3	Bhilangna Upper	Bajiya	Bhilangna	Bhat Gaon	250300100216
4	Bhilangna Upper	Bajiya	Bhilangna	Bhelunta	250300100236
5	Bhilangna Upper	Saur	Bhilangna	Budhwan	250300100258
6	Bhilangna Upper	Chakar Gaon	Bhilangna	Chakar Gaon	250300100242
7	Bhilangna Upper	Sankri	Bhilangna	Chandla	250300100219
8	Bhilangna Upper	Saur	Bhilangna	Dewat	250300100260
9	Bhilangna Upper	Bajiya	Bhilangna	Dhar Gaon	250300100235
10	Bhilangna Upper	Chakar Gaon	Bhilangna	Dyulang	250300100220
11	Bhilangna Upper	Chakar Gaon	Bhilangna	Gangeri Urf Paneri	250300100229
12	Bhilangna Upper	Chakar Gaon	Bhilangna	Gawana Malla	250300100225
13	Bhilangna Upper	Chakar Gaon	Bhilangna	Ghanati	250300100247
14	Bhilangna Upper	Bajiya	Bhilangna	Jandoli	250300100232
15	Bhilangna Upper	Chakar Gaon	Bhilangna	Jogiyara	250300100240
16	Bhilangna Upper	Saur	Bhilangna	Leini	250300100259
17	Bhilangna Upper	Sankri	Bhilangna	Lom	250300100217
18	Bhilangna Upper	Bajiya	Bhilangna	Maindu	250300100215
19	Bhilangna Upper	Bajiya	Bhilangna	Maletha	250300100230
20	Bhilangna Upper	Chakar Gaon	Bhilangna	Nagar Kothiyara	250300100221

21	Bhilangna Upper	Chakar Gaon	Bhilangna	Niswalibhat Gaon	250300100228
22	Bhilangna Upper	Gairgad	Bhilangna	Panyakoti	250300100234
23	Bhilangna Upper	Bajiya	Bhilangna	Ragdi Maya Sankari	250300100231
24	Bhilangna Upper	Chakar Gaon	Bhilangna	Rait Gaon	250300100226
25	Bhilangna Upper	Bajiya	Bhilangna	Saman Gaon	250300100237
26	Bhilangna Upper	Saur	Bhilangna	Saur	250300100261
27	Bhilangna Upper	Chakar Gaon	Bhilangna	Sunar Gaon Urf Bagar	250300100241
28	Bhilangna Upper	Bajiya	Bhilangna	Thati Domana	250300100238
29	Bhilangna Upper	Sankri	Bhilangna	Veena	250300100218

Table PPR 7.h : District : Tehri **Project No. Tehri IWMP- VIII/2012-13**

1	**Name of the State**	**Uttarakhand**
2	Name & Type# (Hilly/Desert/Others) of the project	Hilly
3	Name of the District	**Tehri**
4	Name of the Blocks	Bhilangana
5	Name of Gram Panchayats	Attached in Annexure 8
6	Name & Census Code of Villages Covered	Attached in Annexure 8
7	Name & Codes of the micro-watersheds	Aragad, Tungri
8	Four major reason for selection of watershed	i-Acuteness of drinking water scarcity.
		ii-Preponderance of wastelands/degraded lands.
		iii-Proportion of scheduled castes/scheduled tribes.
		iv-Productivity potential of the land.
9	Area of the Project (ha.)	6060
10	Area proposed to be treated (ha.)	4994
11	Project Cost (Rs.in Lakhs)	749.13 Lakhs
12	Name and Address of proposed PIA	Proposed RD deptt.
13	Any other (please specify)	

Annexure 8 - Tehri IWMP- VIII: List of Gram Panchayat and Names and Census Code of Villages

S.No.	SWS	MWS	Dev_Block	Village	Village Code Census 2001
1	Balganga	Aragad	Bhilangna	Anuwa May Warh	250300100140
2	Balganga	Tungri	Bhilangna	Baleshwar	250300100282
3	Balganga	Aragad	Bhilangna	Banoli	250300100143
4	Balganga	Aragad	Bhilangna	Bhimleth	250300100128
5	Balganga	Aragad	Bhilangna	Bonga	250300100135
6	Balganga	Tungri	Bhilangna	Chakchaund	250300100276
7	Balganga	Tungri	Bhilangna	Chamiyala May Kangra	250300100279
8	Balganga	Aragad	Bhilangna	Changora	250300100137
9	Balganga	Tungri	Bhilangna	Chiniyal Gaon	250300100273
10	Balganga	Aragad	Bhilangna	Dalla	250300100133
11	Balganga	Tungri	Bhilangna	Ghansali	250300100301
12	Balganga	Aragad	Bhilangna	Ghanyur	250300100127
13	Balganga	Aragad	Bhilangna	Gona	250300100150
14	Balganga	Aragad	Bhilangna	Jaspur	250300100134
15	Balganga	Aragad	Bhilangna	Kemriya Saur	250300100142
16	Balganga	Tungri	Bhilangna	Khola	250300100283
17	Balganga	Tungri	Bhilangna	Kireth	250300100272
18	Balganga	Tungri	Bhilangna	Konti Ban Gaon	250300100274
19	Balganga	Tungri	Bhilangna	Kothaga	250300100284
20	Balganga	Tungri	Bhilangna	Kothiyara	250300100278

21	Balganga	Tungri	Bhilangna	Kundi Banasu	250300100269
22	Balganga	Aragad	Bhilangna	Maykot	250300100275
23	Balganga	Aragad	Bhilangna	Myar	250300100130
24	Balganga	Aragad	Bhilangna	Myar Mdahey Nauli B.Chak	250300100131
25	Balganga	Tungri	Bhilangna	Nauli	250300100271
26	Balganga	Tungri	Bhilangna	Nauli Urph Chamol Gaon	250300100285
27	Balganga	Aragad	Bhilangna	Paira Bhaneldi	250300100136
28	Balganga	Aragad	Bhilangna	Paunada	250300100144
29	Balganga	Aragad	Bhilangna	Ragri	250300100129
30	Balganga	Tungri	Bhilangna	Saktwana Bhujnar	250300100277
31	Balganga	Tungri	Bhilangna	Sandul Maya Camara	250300100291
32	Balganga	Tungri	Bhilangna	Sarans Gaon	250300100290
33	Balganga	Aragad	Bhilangna	Sarkanda	250300100138
34	Balganga	Tungri	Bhilangna	Silolisera	250300100286
35	Balganga	Tungri	Bhilangna	Silyara	250300100287
36	Balganga	Aragad	Bhilangna	Sitakot	250300100155
37	Balganga	Tungri	Bhilangna	Srikot	250300100281
38	Balganga	Aragad	Bhilangna	Sunar Gaon	250300100141
39	Balganga	Aragad	Bhilangna	Tungana	250300100139
40	Balganga	Tungri	Bhilangna	Tungari	250300100270

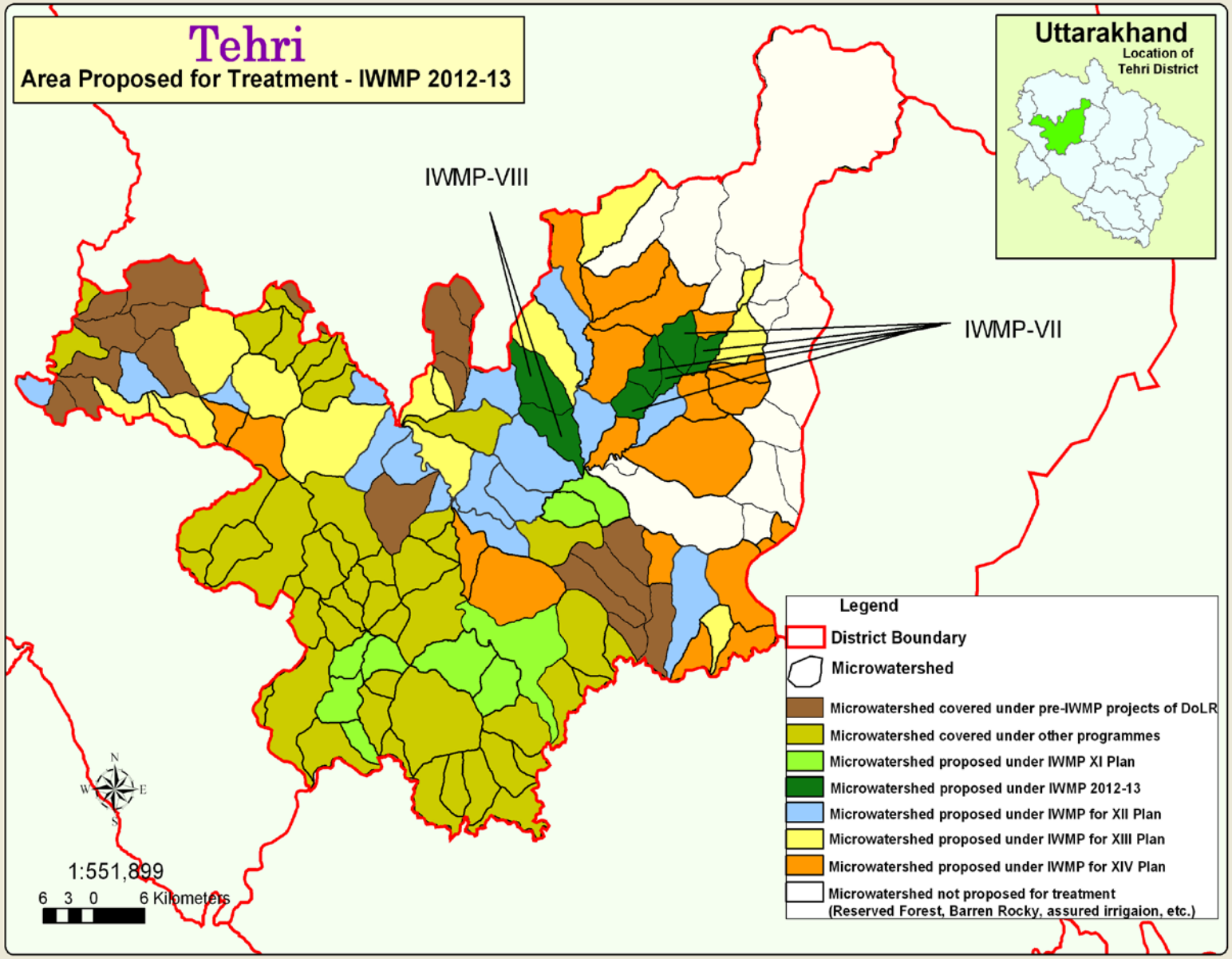

Tehri
Area Proposed for Treatment - IWMP 2012-13
Uttarakhand
Location of Tehri District
IWMP-VIII
IWMP-VII
Legend
District Boundary
Microwatershed
Microwatershed covered under pre-IWMP projects of DoLR
Microwatershed covered under other programmes
Microwatershed proposed under IWMP XI Plan
Microwatershed proposed under IWMP 2012-13
Microwatershed proposed under IWMP for XII Plan
Microwatershed proposed under IWMP for XIII Plan
Microwatershed proposed under IWMP for XIV Plan
Microwatershed not proposed for treatment
(Reserved Forest, Barren Rocky, assured irrigaion, etc.)
N
W
E
S
1:551,899
6 3 0 6 Kilometers

Table-PPR 8: Details of previously identified DPAP/DDP areas proposed under IWMP (ha) during the financial year

S.N.	Names of Districts	Project proposed	Name of Block (s)	Type of Block (DPAP /DDP)	Area of Block (ha)	Area of pre-IWMP projects sanctioned in the Block	Area of sanctioned projects (IWMP)		Net area to be covered	Area proposed to be covered by schemes other than DoLR	Area of the proposed project (IWMP)	Net balance area (Ha)
							2010-11	2011-12			2012-13	
1	Almora	IWMP	Syaldeh	DPAP	24400	14071	4793	678	4859	0	0	4859
2	Almora		Takula	DPAP	15000	8650	0	0	6350	0	0	6350
3	Almora	IWMP	Dwarahat	DPAP	20800	11995	1958	0	6847	0	0	6847
4	Almora	IWMP	Bhikiyasain	DPAP	16700	9630	175	449	6446	0	0	6446
5	Almora	IWMP	Salt	DPAP	30500	17588	0	10429	2482	0	0	2482
6	Almora		Tarikhet	DPAP	23900	13782	4054	0	6064	0	0	6064
7	Almora		Lamgara	DPAP	21300	12283	0	0	9017	0	0	9017
8	Bageshwar	IWMP, UDWDP	Kapkot	DPAP	60400	15500	6686	0	38214	19630	0	18584
9	Chamoli		Joshimath	DPAP	363500	49518	0	0	313982	0	0	313982
10	Chamoli	IWMP	Narayan bagad	DPAP	27400	3733	1978	0	21690	0	0	21690
11	Chamoli		Tharali	DPAP	27200	3705	0	0	23495	0	0	23495
12	Chamoli		Gairsain	DPAP	40700	5544	0	0	35156	0	0	35156
13	Champawat	ILSP	Barakot	DPAP	18100	5569	0	0	12531	3024	0	9507
14	Champawat		Lohaghat	DPAP	21600	6646	0	0	14954	0	0	14954
15	Champawat	IWMP, ILSP	Champawat	DPAP	44800	13785	12450	5869	12696	2352	0	10344
16	Pauri Garhwal		Khirsu	DPAP	50800	16583	0	0	34217	0	0	34217
17	Pauri Garhwal	IWMP	Kot	DPAP	18300	5974	4590	5608	2128	0	0	2128
18	Pauri	IWMP	Pauri	DPAP	14600	4766	0	765	9069	0	0	9069

	Garhwal											
19	Pauri Garhwal	IWMP	Thailisain	DPAP	65200	21284	6463	5119	32334	0	0	32334
20	Pauri Garhwal	IWMP, ILSP	Pabo	DPAP	43600	14233	3266	0	26101	4841	0	21260
21	Pauri Garhwal		Yamkeshwar	DPAP	64400	21023	0	0	43377	0	0	43377
22	Pauri Garhwal		Dhangu	DPAP	67200	21937	0	0	45263	0	0	45263
23	Pauri Garhwal		Kaljikhal	DPAP	23500	7671	0	0	15829	0	0	15829
24	Pauri Garhwal	IWMP	Bironkhal	DPAP	24400	7965	4779	0	11656	0	5278	6378
25	Pauri Garhwal		Lansdowne	DPAP	29300	9565	0	0	19735	0	0	19735
26	Pithoragarh		Gangolihat	DPAP	31400	15277	0	0	16123	0	0	16123
27	Pithoragarh	ILSP	Pithoragarh	DPAP	16900	8223	0	0	8677	1625	0	7052
28	Tehri Garhwal		Chamba	DPAP	44800	18185	0	0	26615	0	0	26615
29	Tehri Garhwal		Kirti Nagar	DPAP	17900	7266	0	0	10634	0	0	10634
30	Tehri Garhwal		Deoprayag	DPAP	42000	17049	0	0	24951	0	0	24951
TOTAL	7 District	IWMP-12, *ILSP-1, UDWDP-1	30 Dev. Block	778	1310600	389000	51192	28917	841491	31472	5278	804741

*ILSP and UDWDP projects are EAP

Table-PPR 9: Land Use pattern of the project

District	Name of Project	No.of MWS	No.of Villages	MWS Area	Area to Taken	Total Forest Area	Land under Agricultural Use	Rainfed Area	Permanent Pastures	Wasteland		Irrigated
										Culturable	Non Culturable	
Almora	Almora -VII	2	38	6025	4195	4275	1777	1715	NA	1516	754	24
	Almora- VIII	3	41	6556	4318	4119	2410	2378	NA	1266	915	40
Pauri Garhwal	Pauri -VII	3	63	7209	5278	2856	4353	4268	NA	763	682	85
US Nagar	USNagar -VII	1	27	5585	5585	0	4738	4586	NA	480	0	152
Haridwar	Haridwar -V	1 D.B.	30	6410	5000	1560	3538	2128	NA	53	263	1410
	Haridwar -VI	1 D.B.	12	6691	5000	2287	3715	2024	NA	61	210	1691
Tehri Garhwal	Tehri Garhwal- VII	5	29	6726	5161	4653	2375	2296	NA	432	510	79
	Tehri Garhwal -VIII	2	40	6060	4994	3844	1914	1842	NA	198	273	72
	Total	**16+2 D.Block**	**280**	**51262**	**39531**	**23594**	**24820**	**21237**	**0**	**4769**	**3607**	**3553**

Source of data: Land Survey Department UK& Census 2001.

*** Names of Microwatersheds and villages has been given in PPR- 7.**

CHAPTER IV
AGRO-CLIMATIC CONDITIONS

The Agro-climatic zones in the State are closely related to the physiographic conditions in the State of Uttarakhand. The major physiographic zones in the Uttarakhand Himalayas are divided into the following distinct non-montane and montane physiographic zones **(Map-1 State Map showing different Altitude Zones)** as follows:

a. Non-montane

i. Bhabhar: This is a level surface zone at the foothills of the Himalayas 34 km wide where the Himalayan torrents rush down from the steep slopes and disappear under boulders and gravels due to the extremely porous soil type of Bhabhar.

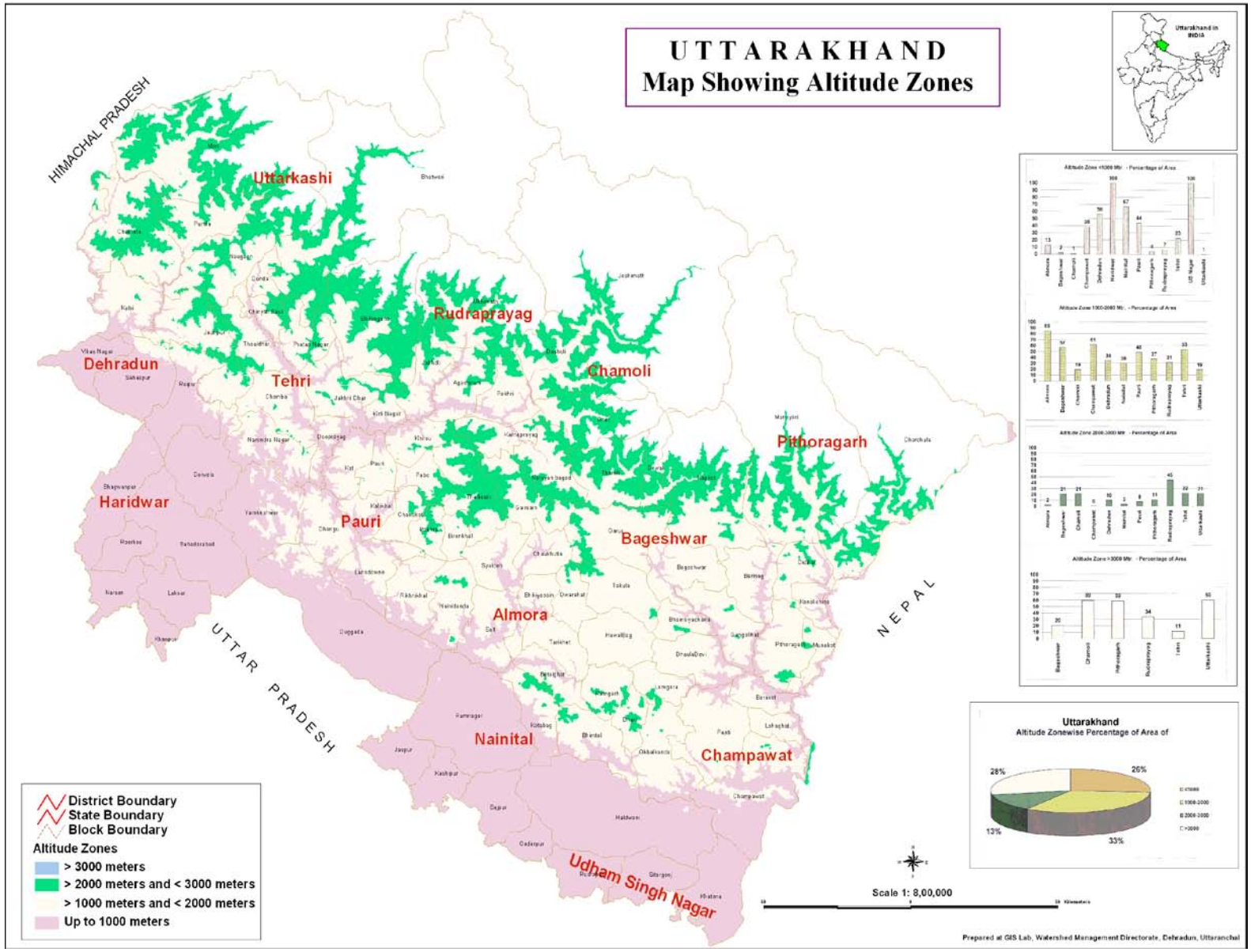
ii. Tarai: Situated below the Bhabhar and parallel to it, the Tarai is a marshy and damp tract (once 80-90 km wide) containing fertile soils with good water retention capacity.

b. Montane

i. Sub-Himalayas: Called Sub-Himalayas because it possesses the least of Himalayan features. It consists of two zones, the **Shivaliks** - the youngest of the Himalayan ranges and the **Doon** (flat longitudinal structural valleys) to the north of Shivaliks. The Shivaliks extend in a narrow varying width of 6 to 30 km with altitudes of 300 to 1000 m.

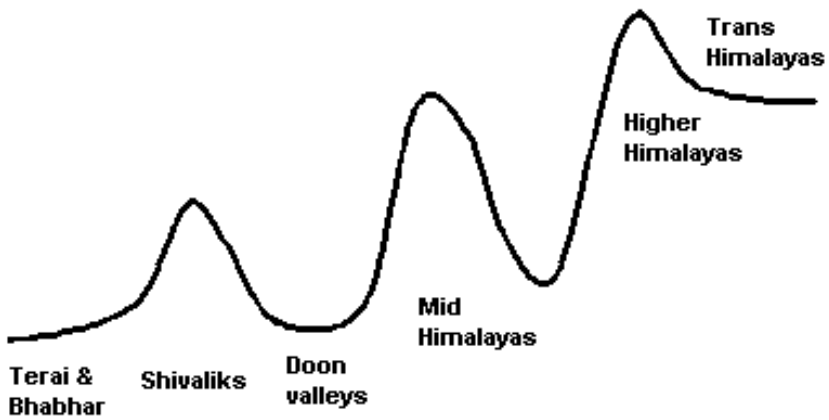
ii. Mid Himalayas: This zone extends in a varying width of 60-90 km in an abrupt rise in elevation between 1000 m to 3000 m. It contains two types of physiographic sub-units.

- The Himachal ranges
- The Himachal valleys and lake basins.


UTTARAKHAND
Map Showing Altitude Zones
HIMACHAL PRADESH
UTTAR PRADESH
NEPAL
Uttarkashi
Rudraprayag
Chamoli
Dehradun
Tehri
Pithoragarh
Haridwar
Pauri
Bageshwar
Almora
Nainital
Champawat
Udham Singh Nagar
District Boundary
State Boundary
Block Boundary
Altitude Zones
> 3000 meters
> 2000 meters and < 3000 meters
> 1000 meters and < 2000 meters
Up to 1000 meters
Uttarakhand
Altitude Zonewise Percentage of Area of
28%
26%
13%
33%
Scale 1: 8,00,000
Prepared at GIS Lab, Watershed Management Directorate, Dehradun, Uttaranchal

iii. Greater Himalayas: This zone has a varying width of 40-60 km. The altitude varies between 3000-7000 m. Except for lower valleys, this zone is perpetually covered with snow hence called Himadri. The region covers glacial landforms above 3000 m.

iv. Trans-Himalayas: Also known as the Tethys Himalayas and Indo-Tibet plateau, the region is in the rain-shadow of the Greater Himalayas and is therefore a cold desert. It slopes down to the Yarlungtsangpo (Brahmaputra) river valley in Tibet.



The various physiographic zones of the State are classified into different soil types, crops produced, district wise, along with the rainfall distribution in these zones in the following table.

Table 4.a. Physiographic zones of Uttarakhand, their attributes, major produces and livestock

S. No	Zone	Farming situation	Soil	Rainfall (mm/ year)	Districts	Principal farm produces and Livestock
1.	Zone A upto 1000 m	Tarai irrigated	Alluvial	1400	U.S.Nagar, Haridwar	Rice, wheat, sugarcane, lentil, chickpea, rapeseed-mustard, mango, litchi, guava, peach and plums. Livestock: Buffalo and cattle.
		Bhabar irrigated	Alluvial mixed with boulders and shingles	1400	Nainital, Dehradun and Pauri Garhwal	Rice, wheat, sugarcane, rapeseed-mustard, potato, lentil, mango, guava, and litchi. Livestock: Buffalo and cattle
		Irrigated lower hills (600-1000 m)	Alluvial sandy soil	2000-2400	Champawat, Nainital, Pauri Garhwal, Dehradun, Tehri Garhwal	Rice, wheat, onion, chilies, peas, potato, radish, cauliflower, pulses, oilseeds, soybean, mango, guava, plums, and peaches. Livestock: Buffalo and cattle
		Rain-fed lower hills (600-1000 m)	Residual sandy loam	2000-2400	Campawat Nainital, Pauri Garhwal, Dehradun, Tehri Garhwal, Bageshwar	Finger millet, maize, rice, wheat, pulses, mango, guava, plums, and peaches. Livestock: Buffalo, cattle and goat
2.	Zone B 1000-1500m	Mid hills south aspect (1000-1500 m	Sandy loam	1200-1300	Champawat Nainital, Almora, Dehradun Tehri Garhwal, Bageshwar	Rice, finger millet, wheat, potato, tomato, peas, Cole crops, pulses, peach & plums. Livestock: Cattle, sheep & goat
3.	Zone C 1500-2400m	High hills (1500-2400 m)	Red to dark	1200-2500	Pithoragarh Almora Chamoli Bageshwar	Amaranth, finger millet, French-beans, Cole crops, potato, peas, peaches, plums, pear, apple, stone fruits. Livestock: Cattle, sheep and goat,
4.	Zone D >2400 m	Very high hills	Red to dark Black clay	1300	Pithoragarh Chamoli Uttarkashi	Amaranth, buckwheat, peas, Cole crops, apple and potato. Livestock: Sheep, goat

AGRO CLIMATIC ZONES

Uttarakhand State is divided into two agro climatic zones only i.e. the hills and plains. As per the land use data of Uttarakhand 64% of the land area of Uttarakhand is under forest cover and about 14% area is under agriculture. The soil types in the different districts of the State have been enumerated in the Table PPR – 10.

MAJOR CROPS

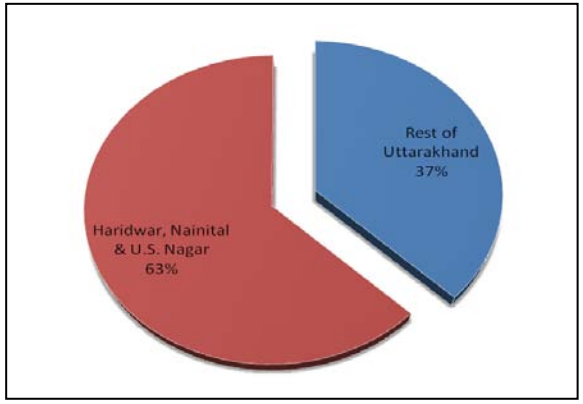
The major crops grown in the State are pulses, millets and cereals. The productivity of all the major crops is low in the hill districts of the State. Sustainable production of food is imminent importance in the state. Basic elements considered while talking of food security is considered in terms of cereals, millets and pulses.

Uttarakhand has the advantage of very fertile tarai region, which contributes maximum of its cereal production. Also this region, comprising of districts Nainital, Haridwar and Udham Singh Nagar, which have high productivity. But the production and productivity in hill districts of Uttarakhand is relatively quite low due to small land holdings, adverse geo-climatic condition and non-availability of agricultural inputs (both in terms of quantity and quality). Also the technology transfer to these areas is very difficult. The State is deficit in production of cereals and millets. The area millet and pulses cultivation has reduced over the years.

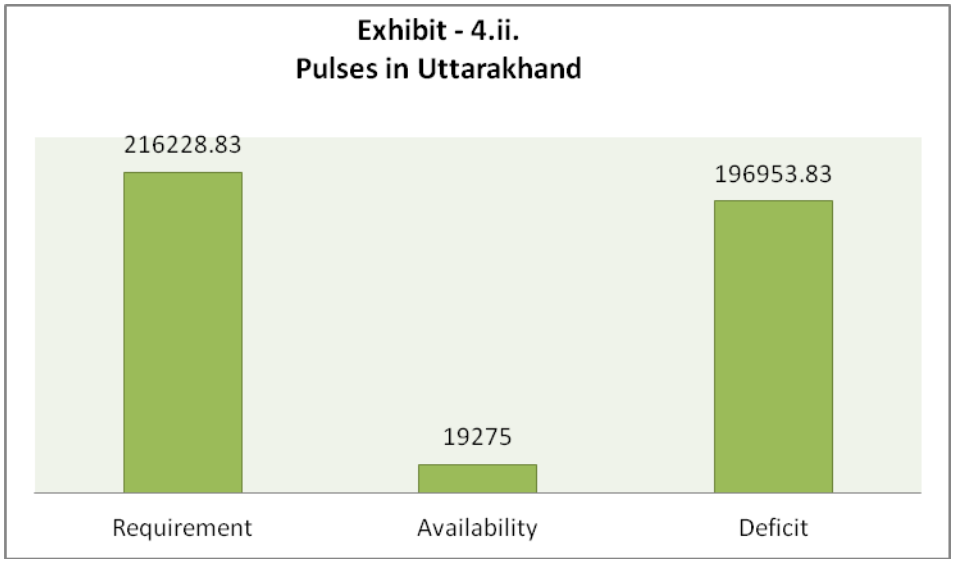
Cereals: The cereal production in Uttarakhand is high because of its high productivity in plain districts of Haridwar, Nainital and U.S. Nagar. The productivity in the hills is very low the following tables can explain the production scenario in Uttarakhand explicitly. The production of cereals from rain-fed hill areas where the production as well as productivity are low, should be dissuaded. And other crops according to their agro climatic and microclimates should be promoted.

Exhibit-4.i

Cereal Production in Uttarakhand



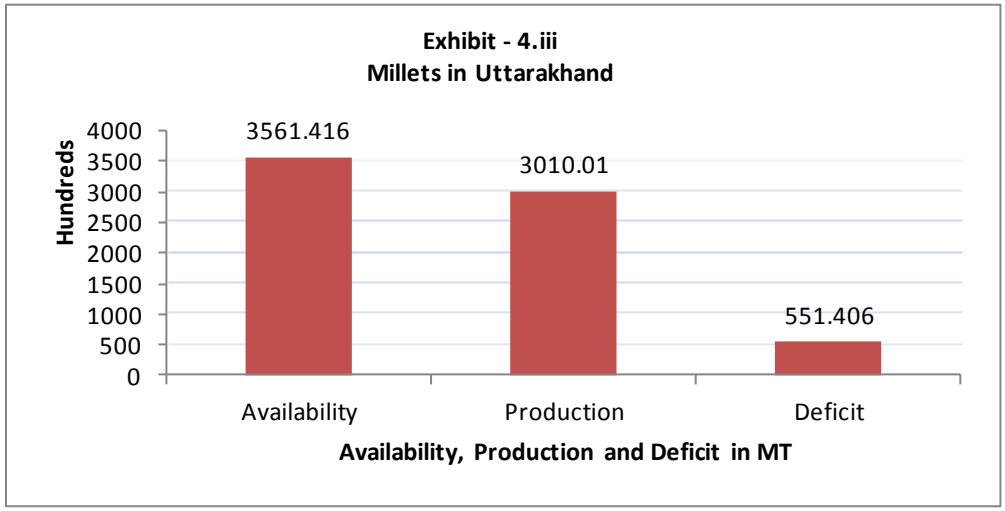
Pulses : As is evident from the graph, the State is severely lacking in pulses, which are a critical part of food security as most important supply of protein. The state has been traditionally producing Rajma, Guerns (Lal dal) and Gahat. There is potential for development of other pulses in the state. Cropping patterns and 'package of best cropping practices' needs to be extended to the farmers, and there is a need to increase the area under production and productivity of pulses in the state. The state also has the opportunity for producing and marketing the traditional pulses with high nutritional value like Gahat. This highly nutritious pulse is mainly consumed in winter. Soup made from this grain is believed to maintain body warmth during severe winters. This soup has medicinal properties; it is a cure to kidney stone. Other pulses grown in the state are Arhar, Urad, Moong, Gram and Masoor. Masoor is the main pulse from the state with nearly 12,500 hectares under cultivation. The productivity of the pulses and area under production can be increased with promotion of scientific cropping patterns in the state.



Millets : The State of Uttarakhand is deficit in millet production that includes madua, sawaa, koto and oat. Though eight of the thirteen districts produce more than their local requirement. The millet requirement per capita per year is 42 Kg.

Millet is a very important crop for the difficult Himalayan conditions as they have high nutritional value and are one of the cheapest sources of dietary energy, in the form proteins and carbohydrates. Such crops are particularly valuable in the mountains where most of the population depends on vegetable proteins and carbohydrates as dietary staples. Traditionally in the Himalayas many of these traditional crops supplement the wheat and rice meals.

The production of Millets in Uttarakhand could be given focus to achieve self-sufficiency. Millets production zones and cropping patterns could be augmented and streamlined for attaining sustainable and optimum production.



HORTICULTURE CROPS

Various topographic and agro-climatic conditions are congenial for different kind of fruits cultivation at different altitudes e.g. apples, peaches, plums, apricots, walnuts, pecans, cherry are grown successfully between altitudes of 2000 – 3000 meters, almonds, kiwis etc, at 1000 – 2000 meters. In areas below 1000 meters and in fields of Terai and Bhabar, mango, litchis, jackfruits, aonla, and papaya can be easily grown.

The areas of expansion should be taken up in strategic locations in accordance to the topography, agro climatic zone and soil conditions. Here help should be taken from the GIS mapping of the state with the watershed and micro watershed analysis data.

Present area under fruit cultivation is around 1.89 lakh hectares. The area under fruit cultivation can be increased by nearly 25,000 hectares over the next five years.

Productivity: The productivity of the fruit crops in Uttarakhand is low. For example when compared with apple production the Jammu & Kashmir the productivity in the year 1998 – 1999 was around 9500 Kg/Hectare as to 3210 kg/ ha. in Uttarakhand. Recent proactive steps of the horticulture department should enhance the productivity trends comparable to neighboring states. Improving crop productivity would include various components like uprooting senile and virus infected plants, integrated pest and nutrient management, training to the farmers (up gradation of skills) and supply of high yielding variety of planting material and seeds.

Table-PPR 10: Details of Agro-climatic conditions

S.No.	Name of the Project (Districts wise)	Name of the Agro-climatic Zone covers project area	MWS Area (ha)	Number of the villages*	Major soil types in districts		Topography	Average rainfall in mm (preceding 5 years' average)	Major Crops	
					a) Type	b) Area (ha)			a) Type	b) Area (ha)
1.	Almora	9	12581	79	Brown Forest Soil, Red to Dark, blackclay	12581	Steep Slope	1192.35	Paddy,wheat Ragi,	4157
2.	Haridwar	9, 14	13101	42	Alluvial Sandy, Residual, Sandy Loam	13101	FLAT	826.16	Paddy,wheat Sugarcane	7253
3.	Pauri Garhwal	9	7209	63	Brown Forest Soil, Red to Dark black	7209	Steep Slope	1057.09	Paddy,wheat Ragi	4353
4.	U S Nagar	9, 14	5585	27	Alluvial Sandy, Residual, Sandy Loam	5585	FLAT	1459.53	Paddy,wheat Sugarcane, Soyabean	4738
5.	Tehri Garhwal	9	12786	69	Brown Forest Soil, Red to Dark	12786	Steep Slope	1039.32	Paddy,wheat Ragi	4289
	Total		**51262**	**280**		**51262**				**24790**

*** Names of the villages have been given in PPR-7**

Table-PPR 11: Details of Flood and Drought in the Project Areas

S.No.	Particulars	Villages	Periodicity		Not affected
			Annual	Any other (please specify)	
1	Flood	No. of Villages	Nil, Uttarakhand being predominantly a hilly State, only flash floods are reported due to sudden cloud bursts.		
		Name(s) of Villages			
2	Drought	No. of DPAP Villages	63		217
		Name(s) of Villages	Enclosed in **Annexure XIV**		

Annexure XIV: List of Drought Prone Villages in the Project Area

S. No	District	SWS	MWS	Dev_Block	Village	Village Code Census 2001
1	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Amkulaou Or Amkumaou	250500200338
2	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Badanu	250500200319
3	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Bairgradh	250500200230
4	Pauri Garhwal	Purvi Nayar	Jiwai	Bironkhal	Bajwad	250500200246
5	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Bamradi	250500200332
6	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Bansi	250500200233
7	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Bapta Malla	250500200236
8	Pauri Garhwal	Purvi Nayar	Jiwai	Bironkhal	Bapta Talla	250500200237
9	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Bhaiswada	250500200335
10	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Bheswada	250500200308
11	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Bhrouli Malli	250500200349
12	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Bhrouli Talli	250500200348

13	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Chanchriya	250500200234
14	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Chaor Kot Malla	250500200299
15	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Choupdiyou	250500200251
16	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Chundliya	250500200320
17	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Daulou	250500200254
18	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Degoli	250500200330
19	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Dhopighat	250500200321
20	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Dumaila Malla	250500200352
21	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Dumaila Talla	250500200350
22	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Eeda	250500200238
23	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Fakir Khola	250500200351
24	Pauri Garhwal	Purvi Nayar	Jiwai	Bironkhal	Gadigad Or Gudgad Laga Sukeyee	250500200242
25	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Gadoli	250500200265
26	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Gawni Bagicha	250500200253

27	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Gundinda	250500200390
28	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Jaspur	250500200232
29	Pauri Garhwal	Purvi Nayar	Jiwai	Bironkhal	Jiwaye	250500200243
30	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Kakroda	250500200346
31	Pauri Garhwal	Purvi Nayar	Jiwai	Bironkhal	Karndhar	250500200244
32	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Kathado	250500200229
33	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Kimoli	250500200339
34	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Kolinda Malla	250500200227
35	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Kot (Chyur Kot)	250500200331
36	Pauri Garhwal	Purvi Nayar	Jiwai	Bironkhal	Kund Lagga Sukeyee	250500200248
37	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Lachi	250500200323
38	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Langura	250500200240
39	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Magro Malla	250500200333
40	Pauri Garhwal	Purvi Nayar	Jiwai	Bironkhal	Mataila	250500200247

41	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Mataila	250500200325
42	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Matkunda	250500200322
43	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Nawasu Or Banasu	250500200329
44	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Nawgaon	250500200327
45	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Okhliyou	250500200250
46	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Padinda	250500200389
47	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Pakhersain	250500200337
48	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Ragdigad	250500200354
49	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Ranghra Or Ranghera	250500200318
50	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Rikhad Or Rikha	250500200347
51	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Sain Gaon	250500200324
52	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Sera Talla	250500200388
53	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Sila Malla	250500200334
54	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Sila Talla	250500200336

55	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Sinkholi Or Simkholi	250500200239
56	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Soukyani	250500200231
57	Pauri Garhwal	Purvi Nayar	Jiwai	Bironkhal	Sukayee	250500200245
58	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Syunsi	250500200328
59	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Tankila	250500200298
60	Pauri Garhwal	Purvi Nayar	Machhigad	Bironkhal	Tatiya / Baijrow Or Dhariya	250500200252
61	Pauri Garhwal	Purvi Nayar	Chanchariya Gad	Bironkhal	Thapla	250500200255
62	Pauri Garhwal	Purvi Nayar	Jiwai	Bironkhal	Toliyo Lagga Jawaee	250500200235
63	Pauri Garhwal	Purvi Nayar	Jiwai	Bironkhal	Toliyou Laga Sukeyee	250500200249

Table-PPR 12: Details of Soil Erosion in the Project Areas

1	2	3	4	5

Cause	Type of erosion	Area affected (ha)							Run off (mm/ year)	Average soil loss (Tonnes/ ha/ year)
Water erosion										
a	Sheet	**District**	**Project**	**E1**	**E2**	**E3**	**E4**	**Total**		
b	Rill	Almora	Almora IWMP-VII	62	4937	1026	0	6025		i) Soil loss due to moderate erosion 11 tonnes/ha/year * ii) Soil loss due to high erosion 65 tonnes / ha. / year**
			Almora IWMP-VIII	243	4430	1883	0	6556		
c	Gully	Pauri Garhwal	Pauri IWMP-VII	350	3776	3039	44	7209		
		US Nagar	US Nagar IWMP-VII	5507	72	6	0	5585		
		Tehri Garhwal	Tehri IWMP-VII	1603	3603	1520	0	6726		
			Tehri IWMP-VIII	188	2716	3128	28	6060		
Sub-Total				**7953**	**19534**	**10602**	**72**	**38161**		
Wind erosion		Not Applicable								
Total										

- Haridwar excluded

Note: Basis for erosion intensity classification: **E1 = Slight Erosion** **Arable land :** **(i) Natural slope unto 25% (14^0), field slope, below 5% (3^0), arrangement for the disposal of excess water provided terraced.** **Forest Land** **(i) Natural Slope 60% and density of top canopy of tree species exceeding 0.7 no gullies or rills**
E2 = Moderate Erosion **Arable Land:** **(i) Natural Slope upto 25% (14^0), defective terracing, either field slopes exceeds.** **(ii) Slope between 25% (14^0) to 60% (31^0) with proper terracing.** **Forest land :** **(i) All slope density of vegetation between 0.5 to 0.7** **(ii) Natural Slope exceeding 60% (31^0) vegetation density exceeding 0.7** **(iii) Gullies less than 0.2 m deep and covering less than 60 m per ha.**
E3 = Severe Erosion **Arable Land:** **(i) All un-terraced fields with no defined gullies.** **(ii) Natural slope between 25% (14^0) and 60% defective terracing** **(iii) Slope over 60% (31^0) with proper terracing.** **Forest Land :** **(i) All slope with vegetation of less than 0.5** **(ii) Gullies deeper than 0.2 m and length upto 60 m per ha. or gullies upto 0.2 m deep and length more than 60m per ha.**

*** Source: Bhardwaj S. P., Hill Watershed Management Models**

**** Source: G.B.Pant Institute of Himalayan Environment and Development, Kosi- Katarmal, Almora (Uttarakhand)**

CHAPTER V
DEMOGRAPHY AND LAND DISTRIBUTION

GENERAL STATE PROFILE

Uttarakhand which came into existence on 9th November 2000 is the 27th Indian state and the 10th in Himalayan region. It lies between 28^0 43' and 31^0 27'N Latitude and 77^0 34' and 81^0 02'E Longitude. The total geographical area of the state is 53,483 sq. Km., of which approximately 89% is mountainous. Of the total geographical area, about 19% is under permanent snow cover, glaciers and steep slopes. The total population of the state is 8.48 million (Census 2001) of which over 5 million people live in the mountainous parts of the state. Below Poverty Line population in hills is 44% and in the plains is 19%, thus, making the State average BPL population 36.5%.

Uttarakhand is a part of the North-Western Himalayas bound by Nepal in the East and Himachal Pradesh in the West. The Northern boundary goes upto Tibet/China whereas southern boundary extends into Indo-Gangetic Plains. The major North Indian Rivers the Ganga and the Yamuna, originate from this region.

Uttarakhand state covers over 53000 sq.km. Of geographical area, it is split into 13 districts within two revenue divisions **(MAP-2- Map showing District and Block Boundaries).**

1. Garhwal Revenue Division includes following 7 districts-
   i. Dehradun
   ii. Tehri Garhwal
   iii. Pauri Garhwal

iv. Uttarkashi
v. Chamoli
vi. Rudraprayag
vii. Haridwar

2. Kumaon Revenue Division includes 6 districts

i. Nainital
ii. Almora
iii. Pithoragarh
iv. Champawat
v. Bageshwar
vi. Udham Singh Nagar

These thirteen districts include 49 Tehsil, 95 Development Blocks and 16,826 revenue villages within their administrative boundaries. Almost 65% (34,662 sq.km.) of the total geographical area of the state (53,662 sq.km.) is under forests with 12 Protected Areas covering an area of 6,479 sq.km.

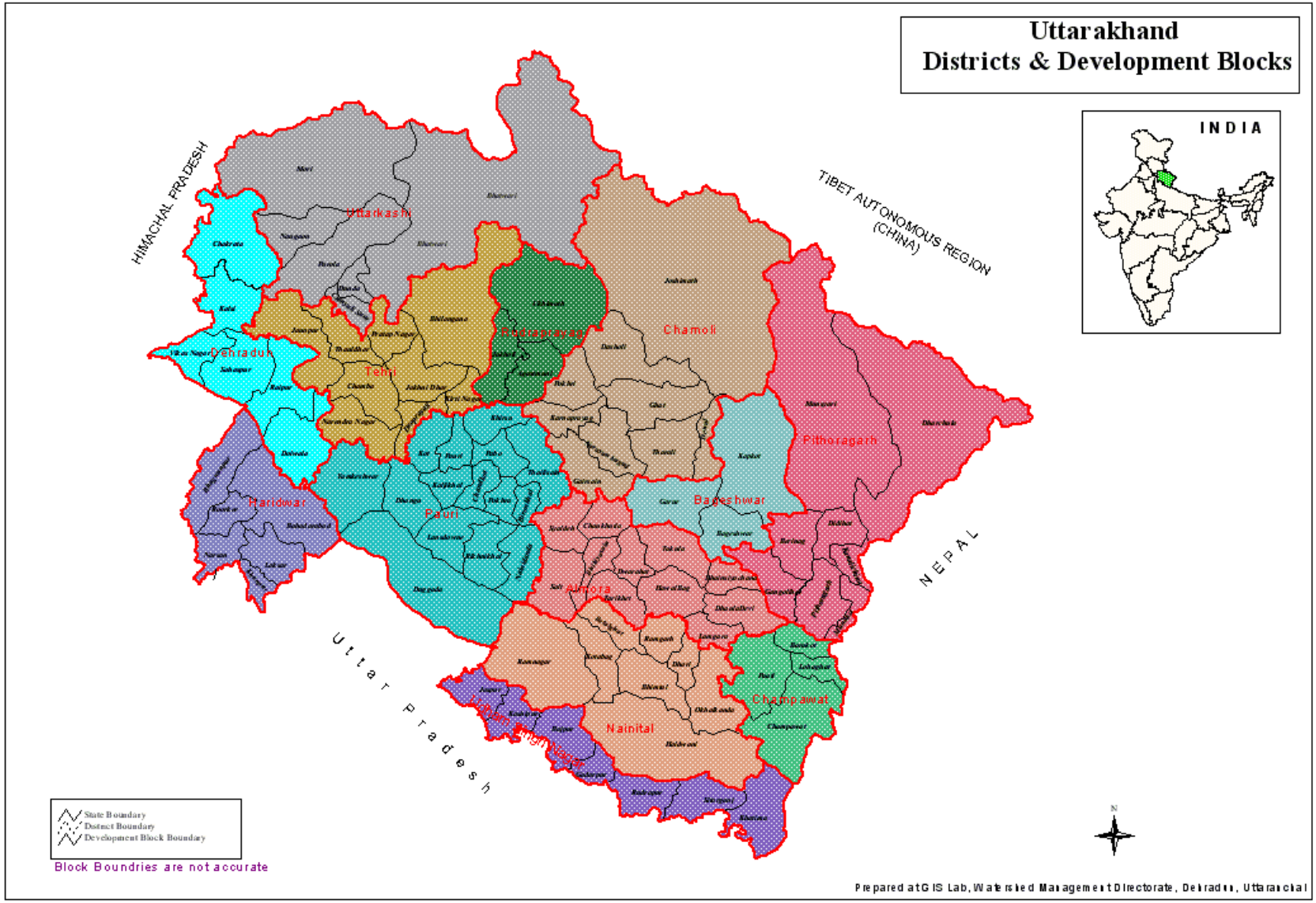

Uttarakhand
Districts & Development Blocks
INDIA
HIMACHAL PRADESH
TIBET AUTONOMOUS REGION
(CHINA)
NEPAL
Uttar Pradesh
Uttarkashi
Chamoli
Rudraprayag
Tehri
Dehradun
Pithoragarh
Haridwar
Pauri
Bageshwar
Almora
Nainital
Champawat
State Boundary
District Boundary
Development Block Boundary
Block Boundries are not accurate
Prepared at GIS Lab, Watershed Management Directorate, Dehradun, Uttaranchal

Table -5.a. : General Information of the State

S.No.				General Population (As per the 2001Census)					
	Districts	No. of Blocks	Area (Ha.)	Male	Female	Total	S.C.	S.T.	% Pop.BPL
1	Almora	11	465858	293848	336719	**630567**	140430	878	39%
2	Bageshwar	3	213542	118510	130952	**249462**	64524	1943	42%
3	Chamoli	9	847580	183745	186614	**370359**	67539	10484	52%
4	Rudraprayag	3	235421	107535	119904	**227439**	40311	186	37%
5	Champawat	3	235388	111084	113458	**224542**	38098	740	37%
6	Dehradun	6	368944	679583	602560	**1282143**	173448	99329	32%
7	Haridwar	6	231076	776021	671166	**1447187**	313976	3139	18%
8	Nainital	8	406475	400254	362655	**762909**	148184	4961	31%
9	Pauri Garhwal	15	673431	331061	366017	**697078**	106653	1594	27%
10	Pithoragarh	8	410638	227615	234674	**462289**	106449	19279	31%
11	Tehri Garhwal	10	485766	295168	309579	**604747**	87325	691	20%
12	US Nagar	7	279234	649484	586130	**1235614**	162782	110220	20%
13	Uttarkashi	6	812414	152016	142997	**295013**	67467	2685	69%
	Total	**95**	**5665767**	**4325924**	**4163425**	**8489349**	**1517186**	**256129**	

Source:

1. Planning Commission. Uttarakhand

2. Agriculture Department, Uttarakhand

Table- 5.b. District wise population detail

S.No.	District	Male	Female	Total	SC			ST		
					Male	Female	Total	Male	Female	Total
1	Haridwar	773.173	671.040	1444.213	131.652	111.006	242.658	1.128	0.898	**2.026**
2	Almora	293.576	336.870	630.446	63.269	65.033	128.302	0.530	0.386	**0.916**
3	Bageshwar	118.202	131.251	249.453	28.038	27.896	55.934	0.875	0.948	**1.823**
4	Nainital	400.336	362.576	762.912	60.704	53.972	114.676	1.739	1.653	**3.392**
5	US Nagar	649.020	585.528	1234.548	65.559	55.747	121.306	44.407	41.920	**86.327**
6	Pithoragarh	227.592	534.557	462.149	46.613	44.845	91.458	9.081	9.071	**18.152**
7	Champawat	110.916	11.545	224.461	16.393	14.715	31.108	0.254	0.193	**0.447**
8	Dehradun	675.549	603.534	1279.083	74.251	63.213	137.464	44.510	39.566	**84.076**
9	Uttarkashi	151.599	142.580	294.179	28.082	26.512	54.594	1.205	1.095	**2.300**
10	Pauri	331.138	365.713	696.851	45.046	45.636	90.682	0.859	0.641	**1.500**
11	Rudraprayag	107.425	120.036	227.461	4.868	4.821	9.689	0.006	0.001	**0.007**
12	Chamoli	183.033	186.165	369.198	29.297	28.258	57.555	4.873	5.212	**10.085**
13	Tehri	294.842	309.766	604.608	36.710	35.964	72.674	0.260	0.348	**0.608**
	Total	4316.401	4163.161	8479.562	630.482	577.618	1208.100	109.727	101.932	**211.659**
(Source: Census 2001)										

The total population of the state is 84,79,562 which live in 16,826 villages. The population is multi-ethnic belonging to varied cultural origins. Around 36.5% of the population is Below Poverty Line (BPL).

Demographic details: Rural population consists of 74.38% (63.10 lakh) of total population of the State whereas the share of female population is 49.11% (41.63 lakh). The overall literacy rate in the State is 71.62% which varies between 59.63% in female to 83.28% in male population (2001 census). The population density per sq. km. is 159 persons in the State as against the all India level of 324 persons. The SC and ST population of the State comprises of 17.87% and 3.01% respectively. The decennial growth (1991-01) in population was 19.34% and the sex ratio was 962 females / 1000 males (2001). The details of rural – urban population are given in **Table 5.c.**

Table 5.c. - Demographic details of Uttarakhand State (in Lakh)

Particulars	Male	Female	Total	Total SC Pop.	% SC of total Pop.	Total ST Pop.	% SC of total Pop.
Rural	31.44	31.66	63.10	12.56	19.90	2.4	3.80
Urban	11.82	9.97	21.79	2.61	11.98	0.16	0.73
	43.26	41.63	84.89	15.17	17.87	2.56	3.01

The density of population is low in upper Himalayas (less than 51 persons/ sq.km. (1991) in comparison to lower Himalayas and plain regions (more than 51 persons/ sq.km (1991). The plains consists of 53.3% of total population whereas hilly region contributes around 46.7%.

Table -5.d. Decennial growth of Rural Population

S.No.	Year of census	Absolute (No.)	Percentage
1	1981-91	940,805	20.73
2	1991-01	829,918	15.15

Age profile of population: The no of population between 14 to 60 yrs. was 47.48 lakh (55.93%) whereas the working population was only 31.34 lakh which consists of main workers (23.22 lakh) and marginal workers (8.12 lakh).

Table 5.e. Percentage share of diff. age groups in total population

Age group	Male	Female	Persons
Less than 14 yrs.	1607421 (37.16)	1479555 (35.54)	3086976 (36.36)
Between 14 to 60 yrs.	2391788 (55.29)	2356229 (56.59)	4748017 (55.93)
Above 60 yrs	326715 (7.55)	327641 (7.87)	654356 (7.71)
Total	**43,25,924**	**41,63,425**	**84,89,349**

The size of non working population in the working age categories is quite large and it is 16.13 lakh which consists of 19% of total population. There is an urgent need of providing employment opportunities to non working population in the

State in the coming years which may reduce the pressure on working population as also strengthen the socio economic status of the families.

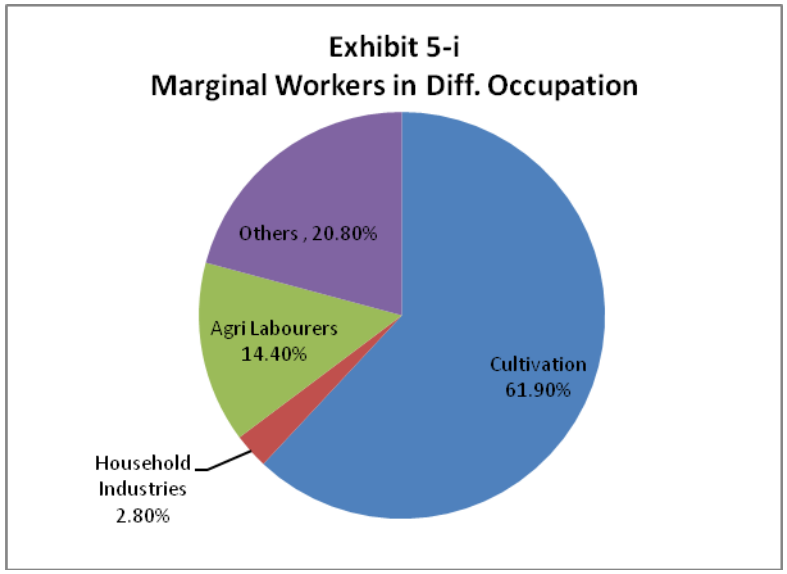
Table 5.f. Demographic details of the project area *

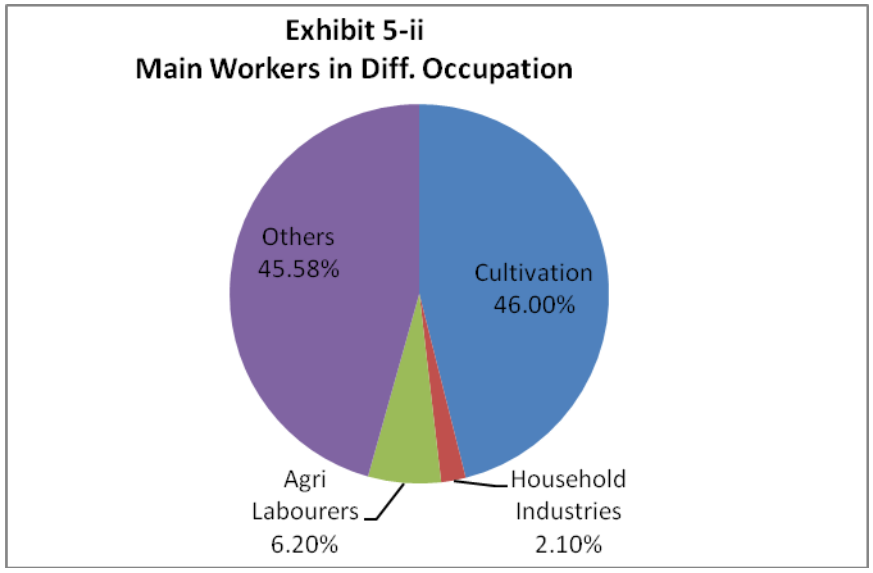
District	No.of MWS	No of Villages	Population	Male	Female	SC	ST	Literate	Illiterate	Main Cultivator
Almora	5	79	22304	10794	11510	5419	10	12784	9520	3487
Pauri Garhwal	3	63	10521	4726	5795	1472	16	6562	3959	2708
Udham Singh Nagar	1	27	21199	10914	10285	1541	9747	10873	10326	3727
Haridwar	2 Dev. Bl.	42	41607	22227	19380	10195	1671	18527	23080	4536
Tehri Garhwal	7	69	26325	12155	14170	4038	11	13489	12836	5950
Total	**16+2 dev block**	**280**	**121956**	**60816**	**61140**	**22665**	**11455**	**62235**	**59721**	**20408**

*** As per the Census of India 2001**

OCCUPATIONAL DISTRIBUTION

The work force engaged in agricultural activities is 58.39 percent of total work force. The share of female work force in total work force is 36.31 percent. The occupational distribution (2001 census) indicates that the share of cultivators was predominant in occupational structure. The occupational structure of main and marginal workers is given in following **Exhibit 5-i and 5-ii.**





Main workers are those workers who had worked for the major part of the reference period i.e., six months or more are termed as main workers. Marginal workers are those workers who had not worked for the major part of the reference period i.e, less than six months are termed as marginal workers.

The proportion of marginal workers is 1/4th of total work force and a higher proportion of marginal workers are engaged in agriculture sector. It indicates that development programs should be devised in such a manner so that adequate employment opportunities on sustainable basis are provided to the marginal workers. It would help in reduction of poverty level as also arresting in migration of labour force from rural to urban areas.

Table 5.g. District wise details of main and marginal workers

District	Main workers	Marginal workers	Total workers	% age of marginal workers to total workers
Uttarkashi	114842	21062	135904	15.50
Chamoli	96900	67829	164729	41.18
Tehri Garhwal	181205	83510	264715	31.55
Dehradun	336504	63971	400475	15.97
Pauri Garhwal	171647	98224	269871	36.40
Rudraprayag	76068	25965	102033	25.45
Haridwar	353556	71707	425263	16.86
Pithoragarh	124062	74647	198709	37.57
Almora	204649	87533	292182	29.96
Nainital	220995	57952	278947	20.78
US Nagar	300141	92015	392156	23.46
Bageshwar	85613	33231	118844	27.96
Champawat	56165	34043	90208	37.74
Total	**2322347**	**811689**	**3134036**	**25.90**

The district which are having high proportion of marginal workers than State average (25.90%) are Chamoli, Tehri Garhwal, Pauri Garhwal, Almora, Pithoragarh, Bageshwar and Champawat which indicates that employment opportunities on sustainable basis needs to be generated in these districts particularly under wage employment. In addition to this, the no. of unemployed persons registered in Live register were 4.14 lakh (2005-06) and for them also employment opportunities on sustainable basis needs to be provided.

There are 16.14 lakh non workers in the age group of 14 to 16 years. Assuming that 11.20 lakh (80%) of non workers would be from age group of 18-60 years, it would not be possible to absorb this work force in agriculture sector alone. Major portion of the non workers can be gainfully employed in Non Farm sector activities which are not only labour intensive but also give rise to wage / self employment in rural areas and will be helpful in arresting migration to urban areas. Of the 16.14 lakh Non workers, 12.18 lakh are women constituting 75.5% of Non workers. In order to provide gainful employment to such large number of women, it calls for focusing our efforts on making schemes most suitable to women, especially household industry.

Table 5.h Classification of Workers and Its Percentage to Total Workforce

Numbers in Lakh					
Type of workers	**Main**	**Marginal**	**Total**	**Male**	**Female**
Cultivators	10.67 (34.0)	5.03 (16.1)	15.7 (50.01)	6.84 (21.8)	8.86 (28.3)
Agricultural laborers'	1.43 (4.6)	1.17 (3.7)	2.6 (8.3)	1.90 (6.1)	0.69 (2.2)
Household industry	0.49 (1.6)	0.23 (0.7)	0.72 (2.3)	0.44 (1.4)	0.29 (0.9)
Others	10.63 (33.9)	1.69 (5.4)	12.32 (39.3)	10.78 (34.4)	1.54 (4.9)
Total	**23.22 (74.1)**	**8.12 (25.9)**	**31.34 (100)**	**19.96 (63.7)**	**11.98 (36.3)**

ECONOMIC PROFILE OF UTTARAKHAND

The state of Uttarakhand encompasses a geographical area of 53,483 sq. km which accounts for only 1.63 per cent of India's area. The state contains about 4.53 per cent of India's forest area and about 3.1 per cent of India's agricultural area **(Table 5.i.).** 43.6 per cent of the agricultural area is under irrigation as against the national average of 40.3 per cent and average rainfall is also above the national average. The ratio of irrigated area in the hills and plains is 10.2: 88.8 in Uttarakhand (Ref: DACNET)

Table 5.i Geographical indicators, 2010

Indicators	India	Uttarakhand
Total Geographical area (sq.km.)	3287240	53483 (1.63%)
Area under forest (sq. km.)	765210	34651 (4.53%)
Area under agriculture (ha)	183016000	5671704 (3.10%)
Area under irrigation (%)	40.3	43.6
Average annual rainfall (mm)	1432	1606

Sources: India state (www.indiastat.com) and Uttarakhand at a Glance, 2006-07 (Govt. of Uttarakhand) Note: Figures in parentheses are the per cent share of India.

Table 5.j Percent share of different sectors in GDP at factor cost in Uttarakhand

(Unit: (in per cent)

Sector	GDP (At 1999-2000 prices)		Average Annual Growth Rate
	2000-01	2006-07	2000-07
Primary	28.19	19.45	-5.16
Secondary	22.25	31.78	7.14
Tertiary	49.57	48.77	-0.27
GDP at factor cost (Rs. thousand crore)	14.30	23.30	10.49

Source: Directorate of Economics & Statistics of Uttarakhand and Central Statistical Organization.

In Uttarakhand the share of the primary sector in GDP has steadily decreased between 2001 and 2007 while that of the secondary sector is increasing **(Table 5.j). Table 5.k** shows that there has been fluctuations in the growth rate of the state net domestic product both at current prices and constant prices, but over the years these fluctuations have stabilized and is in line with the country's net domestic product.

Table 5.k: Rate of growth of Net Domestic Product at factor cost

(Unit: in percent)

		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
At current prices	India	7.4	8.5	7.6	12.3	12.9	13.7	15.8
	Uttarakhand	13.24	5.98	14.69	9.03	7.67	11.28	13.40
At 1999-2000 prices	India	4.1	5.6	3.4	8.6	7.3	9.4	9.6
	Uttarakhand	10.28	2.98	7.16	6.27	6.20	8.24	8.55

Source: Directorate of Economics & Statistics of Uttarakhand and Central Statistical Organization.

According to the 2001 population census, regions in the plains contain 56 per cent of the total state population, whereas the hill regions have around 44.3 per cent. Out of the total state population, 47 per cent of the female population and 42 per cent of the male population reside in the hills, and the remainder live in the plains **Table 5.I.**

Table 5.I: Demographic Indicators, 2001

	Uttarakhand			India
	Hills	**Plains**	**Total**	
Total Population (in lakhs)	37.61	47.28	84.89	10287.46
Male	18.21	25.05	43.26	5322.32
Female	19.41	22.22	41.63	4965.14
Population Growth Rate[1]			1.93	2.13
Population Density[2]			159	325
Sex Ratio[3]			962	933
Crude Birth Rate[4]			20.9	23.8
Crude Death Rate[5]			7.4	7.6
Infant Mortality Rate[6]			42	58
Literacy Rate Total[7]			71.6	64.8
Male			83.3	75.3
Female			59.6	53.7

Source: 2001 Census.

[1]Ratio of the difference between the population at the beginning and end of a period relative to the population at the beginning of the period, expressed as a percentage. This is for the period 1991-2001.

[2] Number of people per square kilometer.

[3] It is the number of females per 1000 males in the population. It is expressed as 'number of females per 1000 males'.

[4] Rate of births among population of 1000.

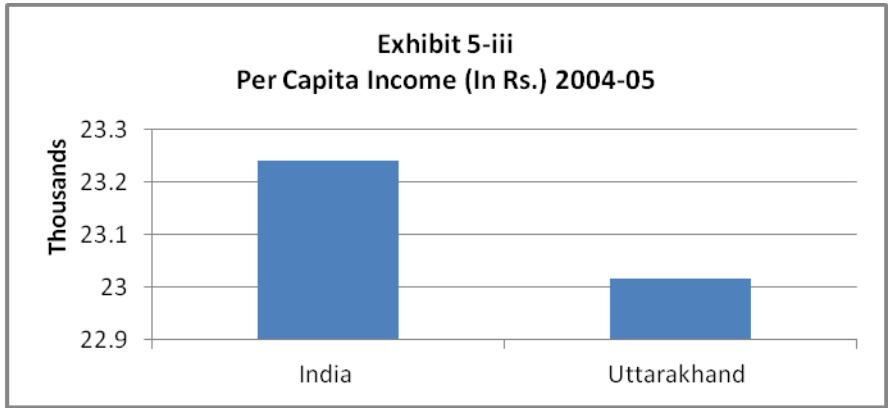
[5] Rate of deaths among population of 1000.

[6] The number of children dying under one year of age divided by the number of live births that year. (infant mortality rate is based on a three-year period, 2004-06).

[7] It is the percentage of literates to the total population age 7 years and above.

ECONOMIC INDICATORS OF THE STATE

Agriculture is a predominant sector in the State economy which contributes around 24 percent in State Domestic product and about 58 percent population is dependent on it. The per capita income in the State is Rs. 23016 (2004-05). The share of agriculture in State Domestic Product (SDP) was 38.8 percent in 1999-2000 which has come down to a level of 24.12 percent in 2004-05. The annual growth rate in GDP from agriculture during 1993-94 to 2001-02 (for 3 year) was only 0.23 percent in agriculture sector. The share of secondary and tertiary sector in SDP was 25.33 and 50.55%, respectively. After formation of State, the pace of infrastructural development has increased significantly and infrastructural development index of State was 109 (9th position in the country).



LAND UTILIZATION PATTERN

The State is having about 61.1% area under forests. The share of net sown area is only 13.4 percent as against the national average of 43.37 percent. The share of culturabale wasteland is 6.8% which provides a huge potential for fodder trees and othter plantation crops like Jatropha and other species of Tree Borne Oilseed (TBOS) as also of horticultural crops in the State. The details of land utilization are given in the Table 5.m.

Table 5.m. Land Utilization Pattern in Uttarakhand State (2009-10)

Land use classification	Area (ha.)
Forests	3484803
Barren and uncultivable land	224503
Land under non- agriculture uses	216404
Culturabale waste land	309466
Pasture and land under misc. tree crops and groves	383427
Current and other fallows	112415
Net sown area	741099
Total Reported Area	**5672378**

DETAILS OF LAND HOLDINGS PATTERN

The average size of land holding in the State is 0.93 ha as against the National Average of 1.57 ha. The share of small holdings is higher in Uttarakhand State as compared to National avareage. The approach of quasi consolidation of land holdings through promotion of cluster or group based approach (SHGs, FIGs etc) would definitely benefit the farmers as well as agriculture sector in the State. The following details of land holdings pattern (2000-01) are given below **Table 5.n.**

Table 5.n - Land Holdings pattern in the State

Size of holdings (in ha.)	No.	Area (ha.)	% of total holdings
Below 1.00	628267	242511	28.7
1.00 to 2.00	158402	220726	26.2
2.00 to 4.00	78414	212384	25.2
4.00 to 10.00	24163	132200	15.7
10.00 and above	1421	35629	4.2
	890667	**843450**	**100**

Diversification of small holdings towards high value crops coupled with cluster formation for production of sizeable marketable surplus may improve the profitability as also sustainability in the long run of these holdings. The traditional crops may be covered into high value crops through organic farming or through value addition.

CHAPTER VI
LIVELIHOODS

AGRICULTURAL DEVELOPMENT IN UTTARAKHAND

Composition of Gross Cropped Area (GCA) : The major crops of the State are paddy, Wheat, Barley, Sugarcane, Mandua, Maize, Potatoes and Pulses. The share of food grains in total GCA was 88.13percent and non food grain crops was 11.35 percent in 2009-10 (provisional).

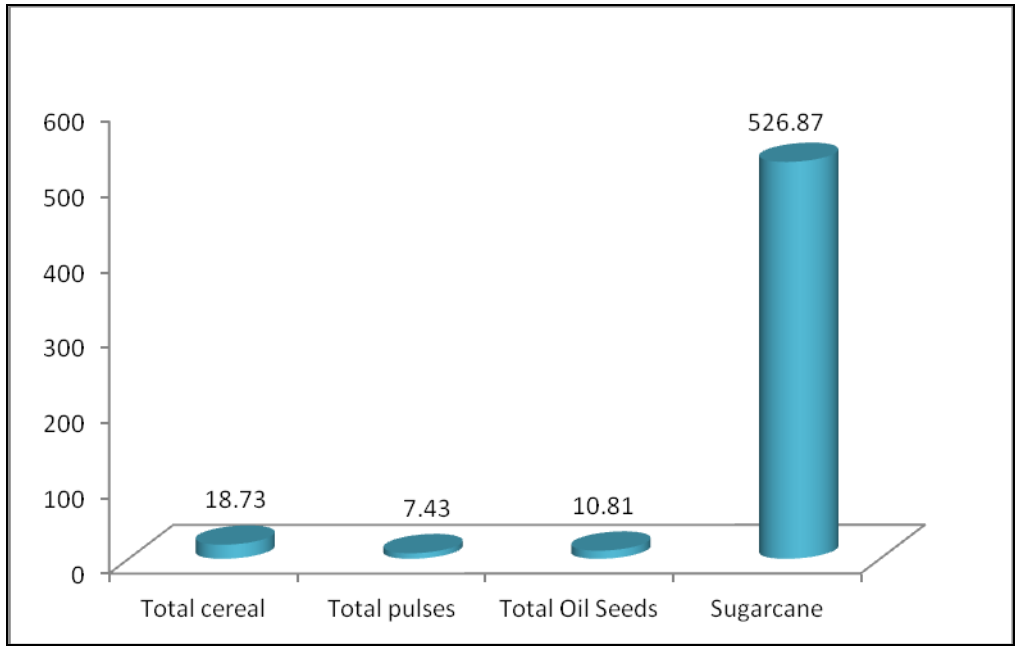
Table 6.a - Area (ha.) under Principal crops (prov.) in 2009-10 in Uttarakhand State

Name of the crop	Area (in ha.)	%area of GCA	Rank
(i)Wheat	394633	34.99	1
(ii)Rice	294223	26.09	2
(v)Manduwa	131795	11.69	3
(vi) Sanwan	63636	5.64	4
(iv)Maize	27960	2.48	5
(iii)Barley	23739	2.11	6
(vii) other	8996	0.80	
Total Cereals	**944982.00**	**83.62**	**-**
(i)Urad	12707	1.13	1

(ii)Masoor	12500	1.11	2
(iv)Gahat (Kulthi)	11032	0.98	3
(iii)Peas (Mattar)	5568	0.49	4
(vii) Bhatt (Black Soyabean)	5559	0.49	5
(v)Rajma	4767	0.42	6
(vi) Gram	663	0.06	7
(viii) Other pulses	4099	0.36	
Total pulses	**56895.00**	**5.03**	
(i)Rape and Mustard	14847	1.32	1
(iv) Soyabean	11153	0.99	2
(ii)Seasmum (Til)	2445	0.22	3
(iii) Groundnut	1340	0.12	4
Total oilseed	**29785.00**	**2.64**	
(i)Sugarcane	96072	8.52	1
(iii) Onion	2317	0.21	2
Total others	**98389.00**	**8.71**	

Source: DIRECTORATE OF ECONOMICS & STATISTICSPLANNING DEPARTMENT, GOVERNMENT OF UTTARAKHAND

Exhibit 6.i. Average productivity of different commodity groups (qtls/ha)



A detailed study on profitability of hills farming, optimum size of operational holding is required, scope of diversification in the context of natural resource conservation, exploring the possibilities of cluster formation, comparative and competitive advantage present in the changed economic scenario and sustainability in the long run may give some policy interventions to strengthen the existing Agricultural Policy of the State & Central Govts.

Cropping intensity: It has been observed that the total NSA in the State was 753711 ha. (2008-09).previously it was reported to be 758789 ha.. The GCA of the State was 11, 27,734 ha. (2009-10) which was 11, 58,261ha (2005-06). The cropping intensity of the State is estimated at 161% (excluding sugarcane crop) and 179% including sugarcane crops.

It has been observed that NSA and GCA both have shown declining trend in the State. The cropping intensity has also not shown an increasing trend despite huge investment being made on irrigation projects. There is a need to improve irrigation efficiency as also the productivity of crops for improving the food security scenario in the State. The setting up of special agricultural zones by the State Govt. would be a positive step in this direction.

Details of food grains production: The food grains production had shown a declining trend and it was 17.91 lakh MT during 1990-00 which came down to a level of 15.97 lakh MT during 2002-03 but again it has shown an increasing trend in 2003-04 and the production was estimated at 17.24 lakh MT. The food grains production during 2009-10 was 17.57 lakh MT. There is a need to minimize the fluctuations in production by providing assured irrigation facilities particularly in hilly regions.

Fertilizer consumption: The use of fertilizer in hills regions is very low (ranging between 4 to 6 kg/ ha.) whereas it is more than 200 kg./ ha. In plain regions. Presently, in the year 2009-10, the consumption of NPK is in the ratio of 15 4:1 in the state. It has been observed that the imbalanced use of fertilizer may affect the fertility adversely so the awareness among the farmers about the soil health needs to be created.

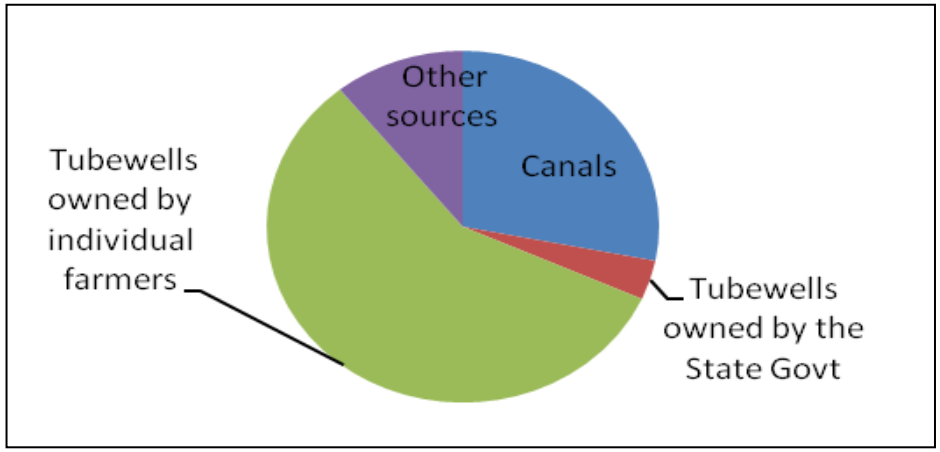
Details of seed production: Quality seed has been distributed to the tune of 83932 Qtls during 2005-06 by different agencies. However, the maximum share (74.83%) in total seed distribution is of rabi crops. The cereals account for 94% of total registered area whereas the share of all other commodity groups is only 6%.

Irrigation scenario in the State: The Net Irrigated Area (NIA) in the State is 3.40 lakh. Ha (2008-09) the share of plains is about 85.83% in total NIA of the State whereas the hilly region accounts for only 14.17%. The share of other sources such as Hauj, Hydrum, ponds, etc. is slowly increasing in NIA. The major irrigation sources in the State are as under:

Table 6.b.- Source wise details of irrigated area under various sources in Uttarakhand State

S. No	Source	Area(ha)
A	**Net irrigated area**	**340129**
1	canals	95922
2	Tube well	198193
3	Well	15587
4	Ponds	770
5	Others	29657
B	**Total irrigated area**	**569769**
	Total	**340761**

Exhibit- 6-ii. % Share of different source in net irrigated area



Presently the level of utilization of created irrigation potential is around 62% in the State. There is a need to effectively implement the water distribution system through formation of WUAs (particularly in Govt. Tube wells). Secondly, the lift irrigation projects and rain water harvesting structures need to be promoted in hilly regions of the State.

During 2005-06, the revenue collection from irrigation was Rs. 225.61 lakh which is estimated at Rs. 42.38 per ha. / Irrigation. This indicates that the revenue from irrigation may be enhanced as per the viability and ability to pay by different categories of farmers which may be used for maintenance of created structures.

Animal husbandry and dairy development: A major sub sector of agriculture is animal husbandry activities which contribute significantly to income and employment generation in rural areas. The major livestock products comprises of milk and its' by products, meat and its products, eggs, wool and hair, dung, silk worm cocoons and honey. However,

the share of milk and its products is predominant which contributes more than 65% in total livestock output. The share of State in the total milk production of the country is around 1.34 percent as against 1.06 percent share of livestock population. The details of milk production in Uttarakhand State are given in **Table 6.c.**

Table 6.c - Milk Production (In MT) Scenario at National Level

Year	Uttarakhand	India
2005-06	1.20	97.10
2006-07	1.21	102.60
2007-08	1.22	107.90
2008-09	1.23	112.20
2009-10	1.37	116.40
2010-11	1.38	121.80

Details of horticulture crops: Horticulture is one of the critical sectors in the economy of the State of Uttarakhand. Horticulture provides the much needed opportunity for diversification in agriculture especially in the context of peculiar topography and agro–climatic conditions of the hill state where the scope for production of conventional field crops is limited. Horticulture development is an effective tool for accelerating development in hill areas due to limited land available for cultivation, availability of cultivable waste lands and necessity of supplementary job and income opportunities. During the year 2009-10, the area and production of fruit and vegetable crops in the State were 193787 ha. & 7.23 lakh MT and 58451ha. 5.64 lakh MT respectively.

Rural network: Presently the state has a total length of roads of 33,914 kms (2009-10). The length of National Highways was 1375.75 Kms . The share of rural roads was 12375 Kms. and it is estimated at 241 kms. / lakh of rural population as

against the all India average of 243 Kms/ lakh population. The maintenance of roads as per the norms of Indian Road Congress and construction, prioritization of areas in road network planning and implementation of Defect liability clause, etc. are few aspects which may improve the connectivity of roads in long term.

Electricity and water supply: The gross electricity generated was 4126.55 MU during 2009-10 and the nos. of electrified villages were 15083 (97.02%). Total 21915 tube wells were energized during 2009-10. The major consumption of electricity was by industrial and domestic sector. The share of Agriculture sector was around 12%. The drinking water supply has been provided in all the villages and efforts are being made by State Govt. to improve drinking water supply at hamlet level. The availability of power supply on per ha of net irrigated area is estimated at 1331 units which needs to be improved which would ultimately lead to improvement in productivity.

Social indicators: A declining trend in infant mortality rate and death rate indicates improved health facilities in the State. However, the remote areas of the state may be prioritized for further improvement of health facilities.

Table 6.d. Details of Crude Birth Rate, Death Rate and Infant Mortality Rate

Particulars	Rural	Urban	Overall	National average
Birth rate /1000	22.1	16.6	20.9	25.8
Death rate / 1000	7.9	5.3	7.4	8.5
Infant Mortality Rate / 1000	56	19	42	-

Regional analysis: The region wise analysis has been made on the basis of plains and hills. Total net sown area (NSA) of the state is 7.58 lakh ha which comprises of about 42.74% in plains and 57.46% in hills. The share of net irrigated area in

hills was only 14.16% of total NIA of the State whereas it is 10.79% of NSA of hills. The share of NIA in total NSA of plains is 87.61%. There is thus a wide variation between plains and hills in respect of irrigation facilities.

Strengths of plains regions

- Good irrigation facilities and availability of fertile soils
- Diversified cropping pattern.
- Availability of infrastructural facilities such as roads, bank branches, input centres, research institutions, market yards, AI centres etc.
- Farmers are having entrepreneurial attitude and skill
- Agricultural extension system is more developed because of the presence of progressive farmers, developed infrastructure.
- Average size of land holding is bigger than that of the hill regions.

Strengths of hill regions

- Climate is suitable for off season cultivation of crops particularly vegetables
- Prevalence of organic farming for which demand is growing.
- Large scope of diversification in agriculture allied activities such as Angora wool, fisheries, MAPs, apiculture, food processing etc.

Socio economic regional features: Garhwali region accounts for 58 percent of total population of the State whereas it's share in total reporting area is 62.88 percent. The share of Garhwali region in NSA is 49.92 percent and it's share in total cultivators is 52.78 percent. The share of Garhwali region in net irrigated area of the state is 43.61 percent whereas

Kumaon region enjoys 56.39 percent share. Garhwal region contributes 70.90 percent in total deposits of the state (year 2003-04) whereas its share in advances is 63.43 percent. The major suggestion which may improve the development and welfare policy of the state govt. are as under.

- Building up of a reliable and accurate data base for long term planning and evaluation of ongoing programs on regular basis
- Identification and synergy of all stakeholders and active participation of local people in restructuring of plans or programs.

Table-PPR 13 : Summary of Livelihoods

District	Name of the Villages	Existing Livelihood activities	Possible livelihood interventions under the project	Current status of migration (No. of People	Main reasons for migration
Almora	79	MC, MgC, NWP	1. Higher returns from improved farming practices through diversification in Agriculture and Horticulture Sector. 2. Assured marketing of agricultural produce. 3. For the weaker sections sustainable income generating activities would be introduced.	10.2% of the total population	1. High rate of literacy resulting in better job opportunities outside the native place 2. Poor economic conditions of the household due to low wages in agricultural economy 3. Better employment opportunities outside the native place 4. Natural calamities
Haridwar	42	MC, MAL, MO, MgC, MgAL, MgO, NWP			
Pauri Garhwal	63	MC, MgC, NWP, MO			
US Nagar	27	MC, MAL, MO, MgC, MgAL, MgO, NWP			
Tehri Garhwal	69				
	280				

1. MC - Main Cultivators

2. MgC - Marginal Cultivators

3. MO - Main Others

4. MAL - Main Agricultural Labour

5. MgAL - Marginal Agricultural Labour

6. MgO - Marginal Others

7. NWP - Non Working Population

Main Workers: Those workers who had worked for the major part of the reference period (i.e. 6 months or more) are

termed as Main workers).
Marginal Worker: Those workers who had not worked for the major point of the reference period (i.e. less than 6 months) are termed as Marginal Workers.
Cultivators: For the purposes of the census a person is classified as cultivator if he or she is engaged in cultivation of land owned or held from Government or held from private person or institutions for payment in money, kind or share. Cultivation includes effective supervision or direction in cultivation.
Agricultural Laborers: A person who works on another person's land for wages in money or kind or share is regarded as an agricultural laborer. He/She has no risk in the cultivation, but merely works on another person's land for wages. An agricultural labourer has no right of lease or contract on land on which he / she works.
Other Workers : All workers, i.e, those who have been engaged in some economic activity during the last one year, but are not cultivators or agricultural labourers or in Household Industry, are 'Other workers (OW). The type of workers that come under this category of 'OW' include all government servants, municipal employees, teachers, factory workers, plantation workers, those engaged in trade, commerce, business, transport banking, mining, construction, political or social work, priests, entertainment artists, etc. In effect, all those workers other than cultivators or agricultural labourers or household industry workers, are 'Other Workers'.
Source : As per the Census of India 2001

CHAPTER VII
EXPECTED PROJECT OUTCOMES

(I) EXPECTED EMPLOYMENT RELATED OUTCOMES

Table-PPR 14: Employment Generation

1	2	3										4				
S. No.	Name of the Villages	Wage employment										Self employment				
		No. of mandays					No. of beneficiaries					No. of beneficiaries				
		SC	ST	Others	Women	Total	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
Almora	79	108400	200	111000	230200	449800	1084	2	1110	2302	4498	542	1	555	1151	2249
Haridwar	42	203900	33400	47500	387600	672400	2039	334	475	3876	6724	1020	167	238	1938	3362
Pauri Garhwal	63	29400	300	88100	115900	233700	294	3	881	1159	2337	147	2	441	580	1169
Tehri Garhwal	69	80800	200	124700	283400	489100	808	2	1247	2834	4891	404	1	624	1417	2446
U Singh Nagar	27	30800	194900	11500	81200	318400	308	1949	115	812	3184	154	975	58	406	1592
	280	**453300**	**229000**	**382800**	**1098300**	**2163400**	**4533**	**2290**	**3828**	**10983**	**21634**	**2267**	**1145**	**1914**	**5492**	**10817**

*** The wage employment has been calculated for a three years watershed works phase of the project i.e. for 100 days per year per person.**

*** The mandays have been calculated on the basis of one person from each household gets wage employment.**

*** Self Employment has been calculated on the basis that one person from atleast two households is provided self employment.**

*** The project also envisages convergence with other projects/Schemes like MNREGS etc.**

***Name of villages have been given in PPR-7**

Table-PPR 15: Details of migration from Project area

1	2	3	4	5	6
District	**Number of the Project Villages**	**No. of persons migrating**	**No. of days per year of migration**	**Major reason(s) for migrating**	**Expected reduction in no. of person migrating**
Almora	38	842	365 days in a year (permanent)	1. High rate of literacy resulting in better job opportunities outside the native place 2. Poor economic conditions of the household due to low wages in agricultural economy 3. Better employment opportunities outside the native place 4. Nature Calamities	34
	41	764			31
Haridwar	30	1087			43
	12	328			13
Pauri Garhwal	63	1073			43
U Singh Nagar	27	594			24
Tehri Garhwal	29	671			27
	40	1461			58
Total	**280**	**6820**			**273**

Source of data: Migration Population Survey (2011-12) by Economic & Statistics Directorate, Uttarakhand

(II) EXPECTED WATER RELATED OUTCOMES

Table-PPR 16: Details of average ground water table depth in the project areas (in meters)

S.No.	Name of the Villages	Sources	Pre-Project Level	Expected post-project level	Remarks
		Open wells			
		Bore wells			
		Others (Specify)			

Source of data: Not applicable as a predominantly a Hilly State

Table-PPR 17: Status of Drinking water

District	Name of Project	No. of Villages	Availability of drinking water (no. of months in a year)		Quality of drinking water		Comments
			Pre-project	Expected Post-project	Pre-project	Expected Post-project	
Almora	Almora -VII	38	7	12	Not Reported		Based on the Baseline Survey report of UDWDP by TERI, New Delhi
	Almora- VIII	41	7	12			
Pauri Garhwal	Pauri -VII	63	6	12			
US Nagar	USNagar -VII	27	9	12			
Haridwar	Haridwar -V	30	9	12			
	Haridwar -VI	12	9	12			
Tehri Garhwal	Tehri Garhwal- VII	29	6	12			
	Tehri Garhwal -VIII	40	7	12			
	Total	**280**					

*** As Uttarakhand is predominantly a hilly state all the villages in the project area have similar drinking water problems.**

(III) EXPECTED CROP RELATED OUTCOMES

Table-PPR 18: Major Crops grown and their productivity in the Project Area

Projects	Current Status												Expected post project status	
	Rice		Wheat		Ragi		Pulses		Sugarcane		Oil Seeds			
	Area (In ha)	Productivity (Qt/Ha)	Area (In ha)	Productivity (Qt/Ha)	Area (In ha)	Productivity (Qt/Ha)	Area (In ha)	Productivity (Qt/Ha)	Area (In ha)	Productivity (Qt/Ha)	Area (In ha)	Productivity (Qt/Ha)	**Area (ha)**	**Productivity (kg/ha)**
Almora IWMP- VII/12-13	370	12.67	776	10.97	581	11.97	29	5.84			5	5.86	**The area under major crops will be maintained. Increase in Gross Area is expected due to increase in irrigation potential.**	**Around 20% to 25% increase in productivity is expected due to introduction of improved varieties of seeds and technical know how.**
Almora IWMP- VIII/12-13	510	12.67	1068	10.97	800	11.97	40	5.84			7	5.86		
Pauri IWMP- VII/12-13	1443	10.24	760	11.22	1833	11.38	288	5.58			28	4.16		
US Nagar IWMP- VII/12-13	2046	29.66	1876	36.92			138	10.66	648	610	30	8.19		
Haridwar IWMP- V/12-13	339	17.86	1131	27.40			36	6.82	2022	622	9	9.92		
Haridwar IWMP- VI/12-13	356	17.86	1187	27.40			38	6.82	2123	622	10	9.92		
Tehri IWMP- VII/12-13	507	11.97	1076	10.25	597	11.43	172	8.26			19	9.17		
Tehri IWMP- VIII/12-13	410	11.97	870	10.25	483	11.43	139	8.26			15	9.17		
	5982	**18.39**	**8745**	**20.75**	**4294**	**11.58**	**881**	**7.45**	**4794**	**620.31**	**124**	**7.58**		

Source: Agriculture Directorate, Uttarakhand

CHAPTER VIII

MANDATORY CERTIFICATES

"It is certified that the State Government of Uttarakhand will abide by the following mandatory conditions laid down by DoLR"

1 The area of the proposed projects are not covered under assured irrigation

2 The area of the proposed project is not covered or overlapping with any other watershed projects sanctioned by the central govt./ state govt./ autonomous bodies & others

3 The State must sign all the mandatory MoUs before implementing the project

4 The timeframes and milestones of the projects will be followed

5 The Budget requested for must follow the criteria laid down in the Common Guidelines, 2008 and revised in 2011.

6 The State must release matching State Share within 15 days from release of each installment of central funds

7 Purchase of vehicles and other equipments are not permitted and nor is construction of buildings allowed. Only purchase of computers and related software is permitted

8 Savings, if any, in each component of the project cost can be utilized only for activities in the Watershed works

9 The DWDU will have one Member exclusively responsible for monitoring

10 All works will be evaluated after each phase of completion. Fund release will depend on favourable reports received from evaluators

11 Evaluators must include only institutions and agencies and not individuals

12 The State and DWDU cell will furnish monitoring reports and periodical reports as desired by DoLR

13 Composition of the WDT must be clearly spelt out and the team Members must be fully in place at the time of signing of the MoU of contract between the PIA and DWDU Cell

14 That DWDU shall release the funds to the PIAs within 15 days of receipt of the funds

15 The Watershed Committee must be a registered society under the Societies Registration Act, 1860

16 At least one of the WDT Members must be a woman

17 The Gram Sabhas of the proposed project areas have passed resolutions for people's contribution towards WDF

18 Resource-use agreements on the principles of equity and sustainability must be worked out among the User Groups prior to the concerned work being undertaken

19 The DPR must give detailed justification for the proposed project duration

20 No works on private lands will be repaired/ maintained from the WDF

21 The PIA will start project work within three months of the receipt of first installment by DWDU/agency or else it can come under the purview of foreclosure

22 The State will not undertake unnecessary foreclosure of the projects. In the event of foreclosure, the State will refund the amount and furnish all necessary documents as desired by DoLR. The State shall also take administrative and legal action against any defalcation, misappropriation, mis-utilization, deliberate negligence and laxity which has caused foreclosure of the project.

Date:

Bhaskaranand
Chief Executive Officer,
State Level Nodal Agency
Uttarakhand

Letter of Authority from Secretary of the concerned Department, authorizing the concerned officer to sign the above undertaking, is **enclosed** with PPR.

CHAPTER IX

STATUS OF ONGOING PROJECTS (DPAP / DDP/ IWDP)

Table-PPR 19: Details of pending UCs: Uttarakhand*

(Status as on Sep 2012)

1	2	3	4	5	6	7		8	
S.No	District	Project	Financial year of release of fund	Amount released (Rs. In Lakh) (CS+SS)	Amount utilized (Rs. In Lakh) (CS+SS)	Submission of UC		Date of Submission of UC	
						Due Date	Amount (Rs.in lakhs)	Due Date	Amount (Rs.in lakhs)
1	Almora	IWDP-I	01-02 To 09-10	393.16	368.54	Completed.			
		IWDP-II	04-05 to 10-11	299.9	299.9	Completed.			
		IWDP-III	05-06 to 10-11	226.57	226.57	Completed, Final Evaluation On Process.			
		IWDP-IV	06-07 to 11-12	146.46	146.06	Completed, Final Evaluation On Process.			
		IWDP-V	06-07 to 11-12	266.93	249.46	Completed, Final Evaluation On Process.			
		Total		**1333.02**	**1290.53**				
	Almora	DPAP-6th Batch	2007-08	566.78	562.03	Completed, Final Evaluation On Process.			
		DPAP-7th Batch	2007-08	634.14	624.52	Completed, Final Evaluation On Process.			
		DPAP-8th Batch	02-03-to 10-11	574.53	567.30	Completed, Final Evaluation On Process.			
		DPAP-9th Batch	03-04 to 09-10	474.92	474.89	2012-13	118.13	2012-13	118.13
		DPAP-10th Batch	04-05 to 10-11	629.91	629.91	Completed, Final Evaluation On Process.			
		DPAP-11th Batch	05-06 to 10-11	662.66	644.53	Completed, Final Evaluation On Process.			
		DPAP-12th Batch	06-07 to 10-11	606.73	586.17	Completed, Final Evaluation On Process.			
		Total		**4149.67**	**4089.35**		**118.13**		**118.13**
2	Bageshwar	IWDP-I	2010-11	286.91	286.60	Completed, Final Evaluation On Process.			
		IWDP-II	2008-09	133.77	133.75	2012-13	154.62	2012-13	154.62
		Total		**420.68**	**420.35**		**154.62**		**154.62**
	Bageshwar	DPAP-6th Batch	2000-01	43.00	42.97	Proposal for Forecloser			
		DPAP-7th Batch	2001-02	13.76	13.73	Proposal for Forecloser			

		DPAP-8th Batch	2002-03	13.93	13.89	Proposal for Forecloser
		DPAP-9th Batch	2003-04	13.54	13.52	Proposal for Forecloser
		DPAP-10th Batch	2004-05	13.53	13.50	Proposal for Forecloser
		DPAP-11th Batch	2005-06	18.33	18.19	Proposal for Forecloser
		DPAP-12th Batch	2006-07	27.49	27.24	Proposal for Forecloser
		Total		**143.58**	**143.04**	
3	Chamoli	IWDP-I	00-01 to 07-08	367.42	367.42	Proposal for Forecloser
		IWDP-II	04-05 to 10-11	314.57	304.62	Completed, Final Evaluation On Process.
		IWDP-III	05-06 to 10-11	308.72	264.05	Completed, Final Evaluation On Process.
		IWDP-IV	05-06 to 10-11	311.79	275.72	Completed, Final Evaluation On Process.
		IWDP-V	05-06 to 11-12	341.57	339.55	Completed, Final Evaluation On Process.
		IWDP-VI	06-07 to 11-12	360.45	327.78	Completed, Final Evaluation On Process.
		Total		**2004.52**	**1879.14**	
	Chamoli	DPAP-7th Batch	01-02 to 10-11	269.98	268.73	Completed, Final Evaluation On Process.
		DPAP-8th Batch	02-03 to10-11	479.99	476.92	Completed, Final Evaluation On Process.
		DPAP-9th Batch	2007-08	360.00	360.00	Completed, Final Evaluation On Process.
		DPAP-10th Batch	2006-07	243.00	162.00	Completed, Final Evaluation On Process.
		DPAP-11th Batch	2007-08	283.00	189.00	Completed, Final Evaluation On Process.
		DPAP-12th Batch	2006-07	76.50	76.50	Proposal for Forecloser
	Chamoli	**Total**		**1712.47**	**1533.15**	
4	Rudraprayag	IWDP-I	01-02 to 09-10	694.26	654.71	Completed.
		Total		**694.26**	**654.71**	
5	Champawat	IWDP-I	02-03 to 08-09	157.27	157.27	Proposal for Forecloser
		IWDP-II	2006-07,08-09	94.52	94.52	Proposal for Forecloser
		Total		**251.79**	**251.79**	
	Champawat	DPAP-7th Batch	01-02 to 09-10	109.80	109.80	Proposal for Forecloser
		DPAP-8th Batch	02-03 to 09-10	40.50	40.50	Proposal for Forecloser
		DPAP-9th Batch	03-04 to 10-11	269.93	269.93	Completed, Final Evaluation On Process.

		DPAP-10th Batch	04-05 to 10-11	269.81	269.81	Completed, Final Evaluation On Process.			
		DPAP-11th Batch	2005-2006	49.50	49.50	Proposal for Forecloser			
		DPAP-12th Batch	06-07 to 10-11	111.82	111.82	Proposal for Forecloser			
		Total		**851.36**	**851.36**				
6	Dehradun	IWDP-I	01-02 to 11-12	307.63	292.42	Completed, Final Evaluation On Process.			
		IWDP-II	03-04 to 09-10	224.73	224.73	Proposal for Forecloser			
		IWDP-III	05 -06 to 10-11	225.85	216.36	Proposal for Forecloser			
		Total		**758.21**	**733.51**				
7	Haridwar	IWDP-I	02-03 to 07-08	197.69	197.55	Completed, Final Evaluation On Process.			
		IWDP-II	05-06 to 10-11	231.48	229.49	2012-13	70.90	2012-13	70.90
		IWDP-III	05-06 to 08-09	149.34	147.65	Proposal for Forecloser			
		IWDP-IV	06-07 to 10-11	235.99	145.42	Completed, Final Evaluation On Process.			
		IWDP-V	06-07 to 10-11	245.43	232.48	2012-13	74.962	2012-13	74.962
		Total		**1059.93**	**952.59**		**145.86**		**145.86**
8	Nainital	IWDP-I	01-02 to 09-10	360.59	357.02	Completed, Final Evaluation On Process.			
		IWDP-II	03-04 to 11-12	300.54	297.21	Completed, Final Evaluation On Process.			
		IWDP-III	04-05 to 10-11	327.29	320.08	Completed, Final Evaluation On Process.			
		IWDP-IV	05-06 to 11-12	312.11	254.83	Completed, Final Evaluation On Process.			
		IWDP-V	05-06 to 08-09	250.64	160.77	Completed, Final Evaluation On Process.			
		Total		**1551.17**	**1389.91**				
9	Pauri Garhwal	IWDP-I	02-03 to 09-10	231.87	228.87	Completed, Final Evaluation On Process.			
		IWDP-II	03-04 to 09-10	431.7	391.81	Completed, Final Evaluation On Process.			
		IWDP-III	04-05 to 09-10	365.76	365.76	Completed, Final Evaluation On Process.			
		IWDP-IV	04-05 to 09-10	221.46	197.78	Proposal for Forecloser			
		IWDP-V	04-05 to 09-10	301.22	272.37	Completed, Final Evaluation On Process.			
		IWDP-VI	05-06 to 09-10	221.08	186.29	Proposal for Forecloser			
		Total		**1773.09**	**1642.88**				
	Pauri Garhwal	DPAP-5th Batch	99-00 to 07-08	547.53	543.87	Proposal for Forecloser			
		DPAP-6th Batch	00-01 to 07-08	500.57	491.27	Proposal for Forecloser			
		DPAP-7th Batch	01-02 to 07-08	254.50	237.80	Proposal for Forecloser			
		DPAP-8th Batch	02-03 to 08-09	597.17	395.68	Completed, Final Evaluation On Process.			

		DPAP-9th Batch	03-04 to 08-09	665.55	662.14	Completed, Final Evaluation On Process.			
		DPAP-10th Batch	2004-05	146.64	134.50	Proposal for Forecloser			
		DPAP-11th Batch	05-06 to 09-10	700.16	467.30	Completed, Final Evaluation On Process.			
		DPAP-12th Batch	06-07 to 09-10	742.47	461.16	Completed, Final Evaluation On Process.			
		Total		**4154.58**	**3393.72**				
10	Pithoragarh	IWDP-I	99-00 to10-11	724.68	724.68	Completed, Final Evaluation On Process.			
		IWDP-II	01-02 to 09-10	249.28	249.28	2011-12	25.03	2011-12	25.03
		IWDP-III	05-06 to 11-12	226.58	226.58	2012-13	69.06	2012-13	69.06
		IWDP-IV	06-07 to10-11	330.11	327.94	Completed, Final Evaluation On Process.			
		IWDP-V	06-07 to11-12	327.25	313.04	Completed, Final Evaluation On Process.			
		IWDP-VI	06-07 to10-11	232.62	232.62	2012-13	23.65	2012-13	23.65
		IWDP-VII	06-07 to10-11	313.29	241.82	Completed, Final Evaluation On Process.			
		Total		**2403.81**	**2315.96**		**117.74**		**117.74**
	Pithoragarh	DPAP- 5th Batch	99-00 to 07-08	92.72	92.72	Completed, Final Evaluation On Process.			
		DPAP- 7th Batch	01-02 to 10-11	180.05	180.05	Completed, Final Evaluation On Process.			
		DPAP- 8th Batch	02-03 to 10-11	135.00	135.00	2012-13	30	2012-13	30
		DPAP- 9th Batch	03-04 to 10-11	180.31	180.31	Completed, Final Evaluation On Process.			
		DPAP- 10th Batch	04-05 to 10-11	180.20	180.20	Completed, Final Evaluation On Process.			
		DPAP- 11th Batch	05-06 to 10-11	210.00	210.00	Completed, Final Evaluation On Process.			
		DPAP- 12th Batch	06-07 to 10-11	226.04	226.04	2012-13	56.25	2012-13	
		Total		**1204.32**	**1204.32**		**86.25**		**86.25**
11	Tehri Garhwal	IWDP-I	97-98 to 09-10	484.76	484.74	Completed, Final Evaluation On Process.			
		IWDP-II	2000-01	112.42	111.86	Proposal for Forecloser			
		IWDP-III	04-05 to 09-10	137.00	137.00	2011-12	30.25	2011-12	30.25

		Total		**734.18**	**733.60**		**30.25**		**30.25**
	Tehri Garhwal	DPAP-5th Batch	99-00 to 11-12	260.00	258.65	Completed, Final Evaluation On Process.			
		DPAP-7th Batch	01-02 to 11-12	243.00	237.51	Completed, Final Evaluation On Process.			
		DPAP-8th Batch	02-03 to 0910	162.00	162.00	Proposal for Forecloser			
		DPAP-9th Batch	03-04 to 09-10	121.50	121.44	2012-13	91.125	2012-13	91.125
		DPAP-10th Batch	04-05 to 09-10	121.50	121.41	2012-13	91.125	2012-13	91.125
		DPAP-11th Batch	05-06 to 09-10	135.00	135.00	2012-13	101.25	2012-13	101.25
		DPAP-12th Batch	06-07 to 09-10	45.00	44.88	2011-12	67.50	2011-12	67.50
		Total		**1088.00**	**1080.89**		**351.00**		**351.00**
12	U Singh Nagar	IWDP-I	03-04 to 10-11	324.02	321.41	Completed, Final Evaluation On Process.			
		IWDP-II	05-06 to 10-11	234.90	216.82	Completed, Final Evaluation On Process.			
		Total		**558.92**	**538.23**				
13	Uttarkashi	IWDP-I	01-02 to10-11	294.47	293.47	Completed, Final Evaluation On Process.			
		IWDP-II	02-03 to 10-11	333.07	332.87	Completed, Final Evaluation On Process.			
		IWDP-III	05-06 to 08.09	219.41	146.00				
		IWDP-IV	06-07 to 10-11	315.67	278.97				
		Total		**1162.62**	**1051.31**		**0.00**		**0**
	Total	**IWDP**		**14706.20**	**13854.51**		**448.47**		**448.47**
	Total	**DPAP**		**13303.98**	**12295.84**		**555.38**		**555.38**

***As per rural Development Directorate, Pauri Garhwal's Report**

Table-PPR 20 : Details of Unspent balance as on 30-09-2012*

S.No.	District	Name of the Project	Total Cost	Total Funds Released (Rs. In Lakh)		Other (Rs. In Lakh)	Expenditure (Rs. In Lakh)	Unspent balance
			(Rs.in Lakh)	DoLR	State			(Rs.in Lakhs)
1	Almora	IWDP	1537.56	1206.92	110.48	15.62	1290.53	42.49
		DPAP	5010.00	3379.79	1228.48	81.40	4689.67	0.00
2	Bageshwar	IWDP	590.10	381.72	35.38	3.59	420.35	0.34
		DPAP	930.00	104.63	34.88	4.09	143.04	0.56
3	Chamoli	IWDP	2256.40	1840.04	164.48	0.00	1879.14	125.38
		DPAP	3330.00	1845.63	703.34	2.44	2367.91	183.50
4	Rudraprayag	IWDP	694.26	623.25	57.85	13.16	654.71	39.55
5	Champawat	IWDP	655.09	228.19	23.60	0.00	251.79	0.00
		DPAP	1560.00	636.35	215.01	0.00	851.36	0.00
6	Dehradun	IWDP	955.79	692.28	64.30	1.63	733.51	24.70
7	Haridwar	IWDP	1626.24	978.87	81.07	0.00	952.58	107.36
8	Nainital	IWDP	1652.76	1417.63	115.20	18.34	1389.91	161.26
9	Pauri Garhwal	IWDP	2046.56	1634.67	135.42	3.00	1642.88	130.21
		DPAP	7460.00	3213.97	895.09	45.52	3393.72	760.86
10	Pithoragarh	IWDP	2537.66	2163.70	191.37	48.78	2315.96	87.89
		DPAP	1350.00	869.31	290.20	44.81	1204.32	0.00
11	Tehri Garhwal	IWDP	1538.64	706.61	20.79	6.78	733.6	0.58
		DPAP	2290.00	941.83	400.61	5.57	1340.89	7.12
12	U S Nagar	IWDP	673.20	512.34	46.58	0.00	538.23	20.69
13	Uttarkashi	IWDP	1264.95	1077.80	84.62	0.2	1051.31	111.31
	Total		**39959.21**	**24455.53**	**4898.75**	**294.93**	**27845.41**	**1803.80**

***As per rural Development Directorate, Pauri Garhwal's Report**

CHAPTER X

ABSTRACT OF PROJECTS PROPOSED FOR SANCTION DURING FINANCIAL YEAR 2012-13

1	**Number of districts to be covered under the present proposal**	**5**	
2	No. of Watersheds projects proposed to be taken up under IWMP	**Hilly**	**Others**
		5	**3**
3	Total area to be covered under proposed projects (000' ha)	0.39531	
	(a) Hilly areas	0.23946	
	(b) Others	0.15585	
	Total	0.39531	
4	Total cost of the proposed Watershed projects (Rs. in lakhs)	5462.10	
	(a) Hilly areas	3591.90	
	(b) Others	1870.20	
	Total	5462.10	
5	Central and State funds for the proposed watershed projects (Rs. in lakhs)*	**4915.89.(Central Share)**	
		546.21 (State Share)	

WATERSHED MANAGEMENT DIRECTORATE, INDIRA NAGAR, FOREST COLONY, DEHRADUN, UTTARAKHAND

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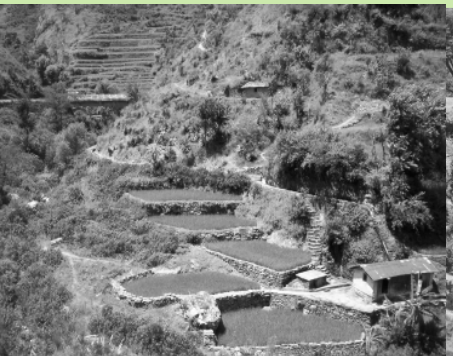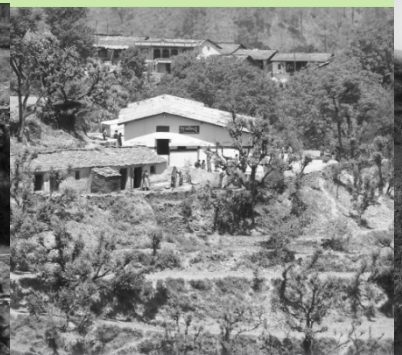
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