Integrated Watershed Management Programme

Land Development & Water Resources

Batch – I

Preparatory Phase Evaluation Report 2009-10 (Batch – I)

Presented By:

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GOVERNMENT OF UTTAR PRADESH

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समेकित वाटर शैड प्रबंधन कार्यक्रम
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Content

Executive Summary

Soil and water conservation has a long history in Uttar Pradesh for example an early organized attempts made at ravines reclamation began as early as in 1884. It was initiated by Mr. Fisher, the then collector of Etawah. Persuading local zamidars to hand over to the government about 1200 ha of ravenous land, the area was successfully forested . The first major landmark in U.P is developing natural resources through creation of the separate Soil Conservation Section in Department of Agriculture in 1954 and Department of Land development and Water resources in 1974. State has approximately 25% rain fed area. Watershed Projects Tejpura- Jhansi and Rendhar-Jaluan brought laurel to the state by bagging National Productivity Award in 1986-87 by President of India. These projects highly motivated the state to involve stake holders particularly the community for the successful implementation and sustainability of the watershed programme.

In Uttar Pradesh Department of Land Development and Water Resources and Soil Conservation Section of Department of Agriculture are mainly responsible for the overall management of the projects related to natural resources management. Soil conservation units of the districts of both the departments are project implementing agency (PIA) for their respective allotted projects. Soil Conservation officers of the respective department and units are locally called as Bhoomi Sanrakshan Adhikari (B.S.A) and become project manager and incharge of the projects BSAs are supported by 4 members of watershed development team (WDT) having specialization in agriculture, agriculture Engineering, Soil Science and Social Science. The Projects are formulated and executed by BSA and his WDT in consultation with the watershed committee (WC) formed at Gram Panchayat (GP) level. The preliminary project report (PPR) and Detailed Project Report (DPR) prepared through consultation with Gram Panchayat are approved by Watershed Cum Data Cell (WCDC) which is headed by district Magistrate in each district.

Now Integrated watershed management programme (IWMP) has been launched by DOLR Govt. of India. It is a boon in the country for real Sustainable Rural Livelihood Security (SRLS) in the country. First batch of IWMP

projects sanctioned during 2009-10 has just completed it's Preparatory Phase and entered into Watershed Work Phase. Adopting the common guide lines for watershed development projects-2008 issued and modified in 2011 by Govt.of India, the first batch of 66 IWMP Projects are being executed in 46 Districts having total number of Micro Watersheds (MWS) of 648. Total treatable area is 3,49,982 ha. with total outlays of Rs. 419.9784 crores. Total no. of PIAs handling these projects are 65. Total 20 Percent of budget released for preparatory phase which is (6%+14%) has been 83.9957 crores.

Progress at a glance

Keeping in view of the objective of the preparatory phase the major activities completed with regard to the running projects are as under-

1- Identification and completion of Entry Point Activities.
2- Sensitization and awareness creation.
3- Formation and functioning of participatory based organization (SHGs, UGs) (Institutional Preparation).
4- Preparation of Detailed Project Report (DPR)
5- Identification of Capacity Building Organizations (CBOs) and conducting training programmes.
6- Planning and Implementation.
7- Watershed Development Works
8- Monitoring and Evaluation.

This report attempts to give a synopsis of the progress of various activities coming under preparatory phase which would be basis for watershed work phase and effective participatory implementation and a foundation for post project sustainability of the project. Up to preparatory phase evaluation some initial impacts that are visible, are highlighted under each of the above activities. The major impacts visualized are mainly in the social mobilization and Institutional preparedness to ensure participatory involvement in the subsequent phases of the projects. The impacts evident at this stage are as follows-

The Major Visible Impacts

Entry Point Activities (EPA)

EPA have been implemented in all these projects. The main activities are taken for construction of Kharanja, Kisan Manch, Drainage Channels, Toilets, Boundaries etc. and maintenance/renovation of Bundhies, roads, well platform, hand pumps, rural roads, ponds, temple and school boundaries etc. The total no. of activities done are 2636. The activities done related to social and general welfare have motivated and developed faith in people of project area for active participation and co-operation of project work which have been a major bottleneck in success of a number of projects. Renovation of bundhies and pond in increasing ground water recharge in the near areas, catering to animals drinking water requirement, occasional usage for resulted in irrigation and washing purposes. The grant under this head allocated was 16.79914 crore and in which Rs 16.6134 utilized (98.89%).

SENSITIZATION AND AWARENESS

The success of SRLS projects depend on participation and cooperation of rural people and developed faith in them. After gaining faith through executed work of EPA the Sensitization and Awareness of every stake holder and beneficiary is of utmost importance for successful going ahead of the project activities. Sensitization and Awareness programmes were organized at all Gram Panchayat levels of the project in which complete objectives , structure and goal discussed. The role and importance of participatory rural structure like SHGs and UGs were clarified. The result revealed that on an average approximately 70% awareness has been observed for adopting project activities. People took part very actively in PRA exercise and have shared their views on finalization of location specific activities and beneficiaries

INSTITUTIONAL PREPAREDNESS

Community organization viz watershed committee(WC) an Executing Committee at project level, Self Help Group(SHGs) and User Groups(UGs) have been constituted in the project area as per the target. Total no. of WC, SHGs and UGs constituted are 1596,4382 and 5079, respectively under these 66 projects. The SHGs are making savings.

The UGs are land area based groups whose members are the direct beneficiaries of the project. The WC consist the member of SHGs, UGs and GP.

Gender sensitivity has been ensured in the project. It is noteworthy that about 40 % SHG women have been constituted . SHGs of SC have been given special priority. Equity has been ensured through IGA particularly the women SHGs. Micro enterprising and livelihood option have been provided to landless, labours, women and other weaker section community on priority basis. The social inclusion has been ensured in the project through proper representation of vulnerable classes in WC.

CAPACITY BUILDING

Various categories of training modules have been developed and programme organized accordingly. CB programmes were conducted at SLNA, district, PIA and WC levels. The participation on these levels were very encouraging. The participation on these levels were about 90, 70, 75 and 75%, respectively. These trainings were conducted by mostly identified SAUs, state and central level institutions. These training enhanced the practical skills and motivation to all categories of stake holders involved in running the IWMP projects successfully. Exposure visits were also organized for further enriching the stake holders. Beside, Technical personnel, SUGs, UGs, WC members and other beneficiaries, account personals, data entry operator and computer operators were also trained in their respective fields. It is noteworthy that data entry operator/ computer operators are doing MIS feeding directly from their respective project area/districts. Total grant allocated and utilized under this head was Rs 12.558 and Rs 610.512 crore (48.61%), respectively.

PREPARATION OF DETAILED PROJECT REPORT (DPR)/ PLANNING AND IMPLEMENTATION

After obtaining maps of watershed and micro watersheds from Remote Sensing and SLDC, comprehensive base line survey for required data on all aspects needed in preparation of DPRs was conducted by PIAs permanent staffs and WDT members with participation of WC members and beneficiaries of Gram Panchayat. PRA and RRA exercise were conducted number of times and activities to be taken on locations and beneficiaries specific finalized with consultation of stake holders to avoid any conflict in future. The compiled report of complete watershed project was put up before WCDC for recommendation and was put up before SLNA for approval. Under this head total allotted and utilized was Rs 4.1997 and Rs 3.3245 (79.16%), respectively.

WATERSHED DEVELOPMENT WORKS

Under these works Water harvesting structures viz, contour, peripheral, submergence, field, marginal bundhies, earthen and masonary check dams have been constructed. Besides these works, fruit crop trees and afforestration of fuel, fodder, timber trees etc in wasteland areas have also been taken up. Total grant allocated and expenditure incurred on this head was Rs. 31.4983 and Rs. 28.7781 crore (91.36%) , respectively. As it is well known that it is too early to realize any visible impacts immediately but these activities will have greater impact on soil and water conservation, enhancing permanent vegetative cover and ultimately eco-development which is utmost need of the hour. Convergence from MNREGA of Rs. 91.6421 crore has been taken up for WDW activities.

MONITORING AND EVALUATION

To obtain essential bench mark data, tangible outputs, behavioral outcomes, suggestions for improvement for timely actions before proceeding to watershed work phase, preparatory phase evaluation was conducted. As the project started only one year before so it is very early to realize much visible impacts from natural

resource management point of view. However, in preparatory phase the above mentioned process activities have definitely started to show the impacts particularly in EPA.

MODEL WATERSHED

On the basis of performance of activities so far it is visualized that sanctioned IWMP Projects of 2009-10 have made a proper beginning. As envisaged that these projects are Participatory centered in the Preparatory Stage. Now, the challenging task is to ensure that these projects must be essentially Community-Driven in its second crucial Watershed Work Phase. It is hoped that all efforts will be made to ensure and fulfill the dream of true Sustainable Rural Livelihood Security (SRLs) through IWMP Projects.

1. Introduction

1.1.1 Rationale for the IWMP

The 'green revolution' in wheat and rice, the 'white revolution' in milk, the 'yellow revolution' in oilseeds and the 'blue revolution' in fisheries have all augmented the food basket of the country. But many technological challenges remain to be solved. First, despite the shrinking share (23%) of the agricultural sector in the economy, in majority of the labour force (Nearly 60%) continues to depend on agriculture. About 75% of India's poor people with low purchasing power live in the rural areas & nearly 60% of the cultivated area is under the rainfed farming. Hence, the national agricultural policy and the 10th five year plan have placed high priority on raising agricultural productivity as a means to achieving rapid agricultural growth and reducing rural poverty. Secondly, stagnating/decelerating productivity growth and declining total factor productivity in agriculture have cast doubts on the resilience of the sector in meeting the challenges of market-driven and competitive regime. Related to the issue of stagnating productivity is the obvious limited connection between input-use and productivity growth performance. Thirdly, the current unsustainable land and water use practices will lead to lowering of agricultural productivity in the future. Fourthly, ensuring an economically and ecologically sound success to food for every Indian, while conserving and improving the natural resources and traditional knowledge, in a more competitive regime, is yet another big challenge.

To address these challenges and to generate additional income and employment for the poor the role of IWMP is critical. Given the limited scope in area expansion, increase in productivity, profitability & competitiveness will be the main parameters of agricultural growth in future, This should be triggered by advances and innovation in, and application of science in agriculture. In other words Indian agriculture will have to be shifted from input-based to knowledge-based growth. In this paradigm shift the dissemination of knowledge plays a critical role.

The country, during the past decade, has witnessed a paradigm shift in agricultural production from field crops to value added horticultural crops like fruits, vegetables and flowers. The change is welcome on account of generation of additional livelihood options but food security for the ever increasing human population along with environmental protection and conservation of natural resources have also emerged as prime concerns to the sustainability of Indian agriculture. An intense use of land and water resources has also emerged as prime concerns to the sustainability of Indian agriculture. An intensive use of land and water resources on agriculture and other land based non-agricultural uses have triggered non-reversal bio-degradation processes resulting into expansion of problem soils (like soils' alkalization and Stalinization and nutrients' deficiency) and degradation in quality of surface and ground waters.

The most urgent task in our country is the diversification of income earning opportunities in rural areas where seventy per cent of our Population live. In fact, the widespread occurrence of under- nutrition in the country is largely due to poverty. The endemic rural poverty of India compels a review of all our policies and strategies of agriculture's and rural development.

Mahatma Gandhi said that for a hungry man, bread was God. We produce 200 million tonnes of foodgrains annually, which can provide 200 kilogram to every man, woman and child. But you need the purchasing power to buy the food. Purchasing power means there should be adequate employment for all able-bodied adults.

It is the lack of employment of full employment that is the problem. We have a work force of about 400 millions out of which about 40 millions are unemployed. Unemployment is the real picture of poverty. There is no cash in the villages. Food for work schemes of the Government look well on the paper but leave much to be desired in implementation. Public distribution system of the Government has developed defects which goes deep into the basic rural realities of India today.

Agriculture is a cosmos. A lesson can be learnt from the recording of this history that the programme of watershed management has the potential to integrate this cosmos of technology and place the resulting synergic benefit of development at the farmer's door.

Soil and water Conservation, watershed management and now Bio-industrial Watershed Management, has a great future. It has the potential to transform rural society and bring it to a level dreamt by President A.P.J. Abdul Kalam- Providing Urban Amenities to Rural Areas (PURA).

At this critical juncture GOIs plan to implement Integrated Watershed Management programme (IWMP) instead of scattered and sporadic watershed projects viz DPAP, IWMP and DDP is the timeliest and best efforts for Sustainable Rural Livelihood Security (SRLS) for uplift of the poor rural people in the country.

1.1.2 Integrated Watershed Management Programme (IWMP) at a Glance

The new approach to watershed development provides a paradigm shift in the traditional approach where the role of the government is changed from that of governance to facilitation. It envisages a bottom-up approach whereby the user's group themselves decide their work programme.

The basic objective of this scheme is integrated watershed development based on village/ micro watershed plans. The highlights of the scheme are:-

- Development of clusters of micro watersheds in a holistic manner rather than piecemeal treatment in sporadic patches.
- Decentralization of decision-making process by involving local panchayati raj institutions, NGOs, government departments and the watershed community at the grassroots level. The people are given actual decision-making powers in terms of project implementation and fund disbursal.
- A three-tier approach addresses hilly/ forest regions, intermediate tier or slopes and lastly, plains and flat areas.
- The scheme promotes locally available low cost technology.
- The scheme also aims at creating rural employment opportunities.

At present 487 IWMP projects (66 in 2009-10, 183 in 2010-11, 174 in 2011-12 and 64 in 2012-13) have been sectioned by DoLR for Uttar Pradesh . 66 projects of 2009-10 are complete in all respects and proposal to release 50% next grant has been submitted to DoLR. DPRs of all 183 projects of 2010-11 projects have been prepared.. The MIS feeding of the prepared project are being done and will be completed before the end of September 2012. The DPR preparation of 174 projects of the year 2011-12 is also in the pipeline.

Abstract of the State

S. No.	Item		Details	
			No. of MWS	Area
1	Total micro-watersheds (MWS)		25352	240.93
2	Total untreatable MWS (Barren Rocky, assured irrigation, etc.)		5317	49.06
3	Total treatable MWS		20035	191.87
4 a	Total MWS covered under pre-IWMP schemes of DoLR		2089	17.74
b	Total MWS covered under schemes of other Ministries		10083	94.02
c	Total MWS covered under IWMP 2009-10 , 2010-11 & 2011-12 of DoLR		3289	23.60
d	Total of 4 a to c		15461	135.36
5	Balance micro-watersheds not covered till date		4574	56.51
6	Plan for covering balance micro-watersheds	12th Plan	1771	20.23
		13th Plan	1526	19.74
		14th Plan	1277	16.54
		Total	4574	56.51

1.1.3 Objectives of IWMP

- Harvesting every drop of rainwater for purposes of irrigation, plantations including horticulture and floriculture, pasture development, fisheries, etc., to create sustainable sources of income for the village community as well as for drinking water supplies.
- Ensuring overall development of rural areas through the Gram Panchayats and creating regular sources of income for the Panchayats from rainwater harvesting and management.
- Employment generation, poverty alleviation, community empowerment and development of human and other economic resources of the rural areas.
- Mitigating the adverse effects of extreme climatic conditions such as drought and desertification on crops, human and livestock population for the overall improvement of rural areas.
- Restoring the ecological balance by harnessing, conserving and developing natural resources, i.e. land, water and vegetative cover especially plantations.
- Encouraging the village community towards sustained community action for the operation and maintenance of assets and further development of the potential of the natural resources in the watershed.
- Promoting use of simple, easy and affordable technological solutions and institutional arrangements that make use of, and build upon, local technical knowledge and available materials.

1.1.4 Expected outcome

All planned activities under the project will be implemented in the participatory mode for which necessary training for capacity building of the watershed committee (W.C) has been provided under the project.

- It is expected that the maintenance of the assets created will be taken up with suitable administrative and financial arrangement. Funds available i.e. watershed development funds (WDF) will be suitably utilized for maintenance.
- The orientation and training provided to the W.C., members and volunteers will improve their skill. It is expected that these personals are expected to take up follow up and maintenance activities after the withdrawal of the project intervention.

- Self Help Group's formed during the project implementation are expected to upgrade their skill and take up different types of Income Generating Activities (IGA). This will provide additional income to the members of the groups and provide support to improve their social status.

- Various project activities like land development, water harvesting and adopting of improved agricultural practices will help in

  1- Increasing the cropping intensity.

  2- Increasing the productivity of crops.

This will increase the overall production and add to the income of the beneficiaries

- Implementation of various activities will provide wage labour to landless labourers and the farmer beneficiaries which will directly add to their one time income. Besides adoption of improved techniques will improve crop yields. This will also add to the generation of more labour employment which will provide additional income on recurring basis.

- Various activities planned and executed in the project will directly help in rainwater harvesting and recharge of the ground water. This will improve the ground water level besides providing additional water for irrigation and drinking within the watershed area.

- Thus it is expected that the watershed development programme undertaken in rainfed areas of the state will help in overall development of the area and increasing income of the household levels in the watershed areas. The direct benefit that will accrue will be provision of employment to the local people in implementation of various activities proposed under the project.

Proposed soil and water conservation activities along with improved agricultural practices, which will be promoted under the project, is likely to improve the productivity & production of different crops by at least 30 to 40 percent . This will improve the income of farm households. Besides this there will be increase in cropping intensity by at least 20 to 25 percent. The various water harvesting activities would provide life saving irrigation to various crops, resulting in increase in productivity. With formulation of Self Help Groups under the project the women and landless labourers, would undertake various income generating activities which will provide employment as well as income to these groups in the watershed area.

Plantation and grassland development activities will provide fuel and fodder for which at present the people of the area are dependent on outside sources. This will also help in overall improvement in the environment.

The state level expected/estimated outcomes (for calculation purpose standard area of 20,000 ha. per Distt. has been taken as indicator) in quantitative terms for the project area to be covered in the last three years of 11th Five Year Plan has been given in **Table 1.**

Table 1-: Expected/ Estimated Outcomes from Watersheds During the Project Period of 4 to 7 years for Watersheds Proposed during 2009-10

1		2	3	4	5
Item		Unit	Pre-project Status	Post-project Status	Remarks
Status of water table		Meters BGL	15 TO 25	14.50 TO 24	
Ground water structures repaired/ rejuvenated		No's	Approximate 3800	All such structures will be repaired	
Quality of drinking water		Quality	Muddy/ Contaminated	Will improve	
Availability of drinking water		No of days	About 240 days	300 days	
Increase in irrigation potential		ha.	Approximate 3700	Approximated about 12000	
Change in cropping/ land use pattern					
Area under agricultural crop		Lac. Ha.	2.64	2.86	
i	Area under single crop	Lac. Ha.	1.84	1.71	
ii	Area under double crop	Lac. Ha.	0.80	1.15	
	Area under multiple crop				
iii	**Cropping Intensity**	%	130	140	

1		2	3	4	5
Item		Unit	Pre-project Status	Post-project Status	Remarks
Increase in area under vegetation (tree cover)		ha.	Approx. 7500	Approx. 12000	
Increase in area under horticulture		Ha	Approx. 1300	Approx. 2000	
Area under fuel & fodder		Ha	Approx. 500	Approx. 1200	
Increase in milk production		Percapita Per-day Ltr.	1.5 to 2.00	2.00 to 3.00	
No. of SHGs		No's	Approx. 1300	Approx. 4800	
Increase in income		Rs./ Capita /Annum	Approx. 16000	Approx. 30000	
Migration		%	10	6	
SHG Federations formed		No's	2	10	
Credit linkage with banks		No's	1200	4800	

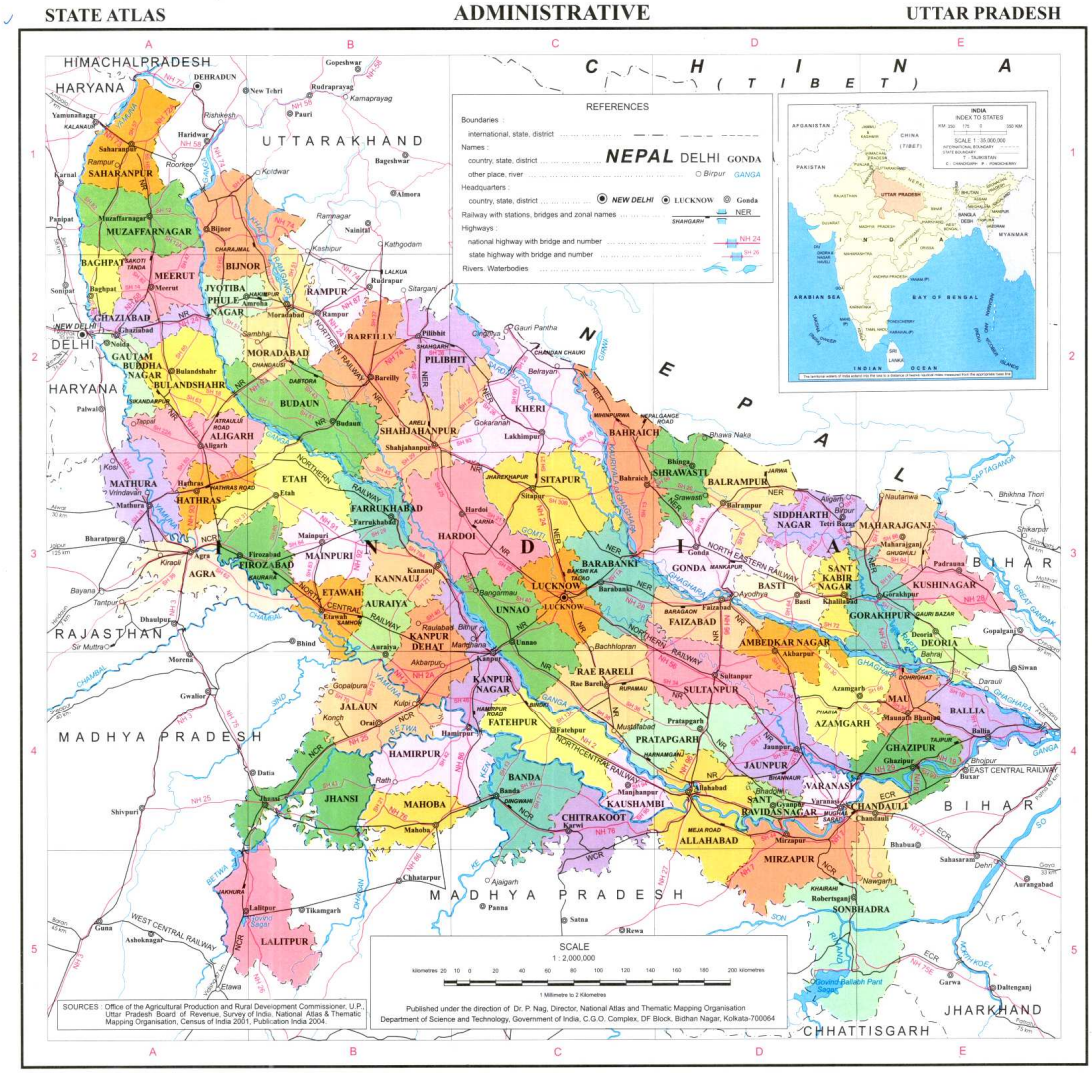
1.2.1 About the State

Uttar Pradesh occupies an important place in the polity and economy of the country. The economy of U.P. is predominately agrarian. The performance of agriculture and allied activities such as horticulture, animal husbandry, dairying & fisheries is critical in determining the growth rate of the State. Extending between 25^0-31^0 N latitude and 77^0-84^0 E longitude, Uttar Pradesh is the fifth largest State of India after Rajasthan, Maharashtra, Madhya Pradesh and Andhra Pradesh in area. For administrative purposes, the state is divided into 18 divisions and 75 districts. There are 303 sub divisions, 313 Tehsils, 11 Municipal Corporation, 689 Cities, 820 community development blocks, 52,000 Gram Sabha, 1,07,452 revenue villages, out of which 97,941 are inhabitant and 9,511 uninhabitant in the state. Districts & Tehsils of the State are shown in Map 1 & Map 2.

Though planned efforts since Independence yielded positive outcomes for the state economy in terms of development of social, economic and industrial infrastructure and many other dimensions, it is still the 10^{th} poorest state in the country. Heavy population pressure is often mentioned as one of the key reasons of widespread poverty in the state.

Total geographical area of the state is 24,170 thousand hectare (which is 7.33% of total area of India) out of which 16,573 thousand hectare is under cultivation. Gross cropped area is 25,414 thousand ha with the cropping intensity of 153%. In Uttar Pradesh size of holding is around 0.83 ha and per capita land area is 0.14 ha, which is less than a half of the national average of 0.32 ha. Uttar Pradesh is largest producer of wheat, potato, sugarcane and milk whereas third largest producer of rice. Agriculture still constitutes the backbone of the state economy, more so, because it provides livelihood to about two-third population of the state. The state is endowed with ample alluvial soil along with diverse 8 agro-climatic zones (Diagram 1 to 3) which can support the cultivation of variety of crops. Due to large cultivated area, its share in national agricultural production is quite impressive but low crop productivity has hindered the realisation of ultimate potential.

Map 1- Administrative Units (Districts) of the state



Map 2- Tahsils of the State

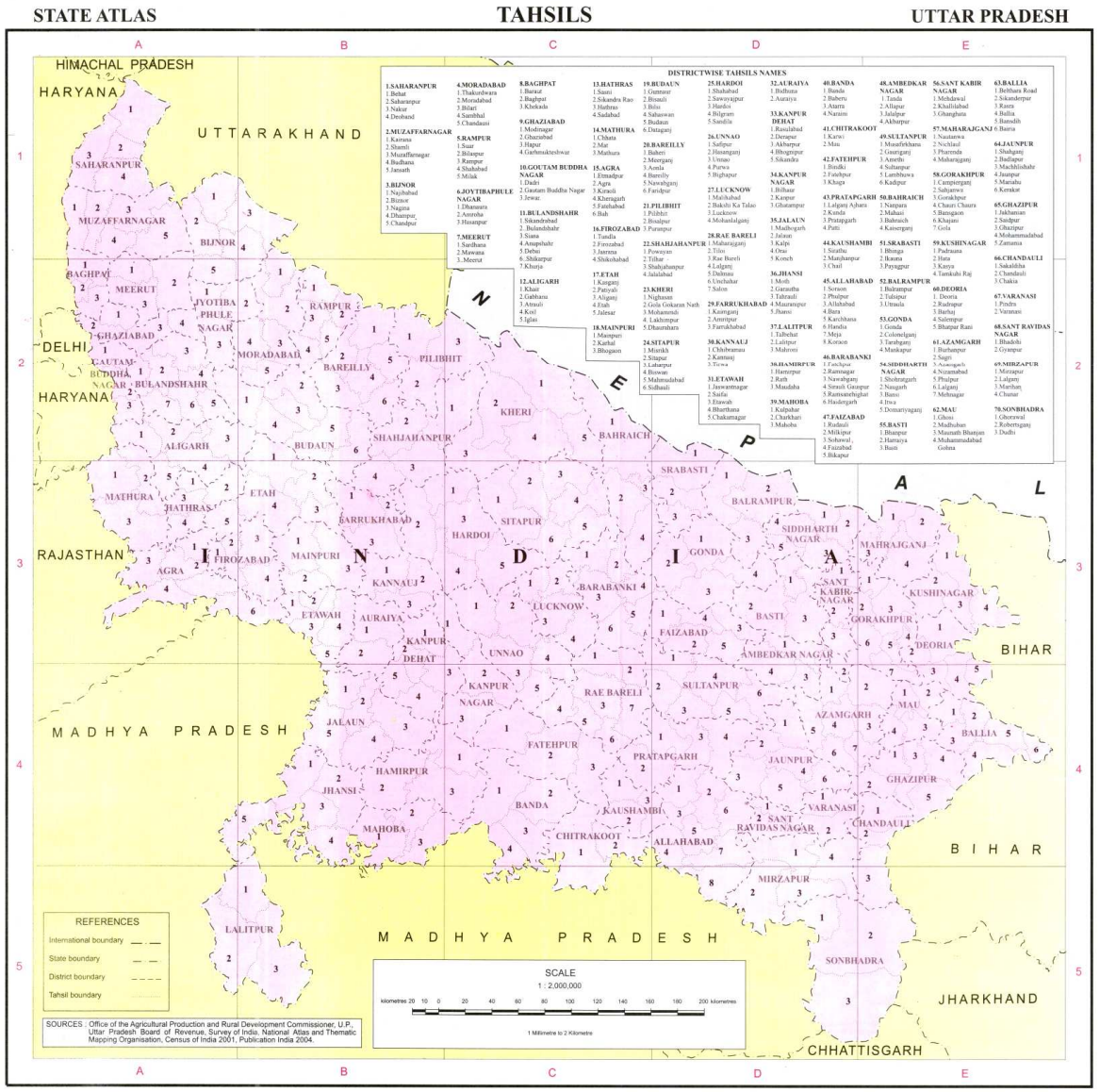


Diagram 1 to 3: Broad Soil Groups, Agro Climatic Regions & Degraded Land Percentage of U.P.

Diagram-1

BROAD SOIL GROUPS OF U.P.
(As reconstituted)

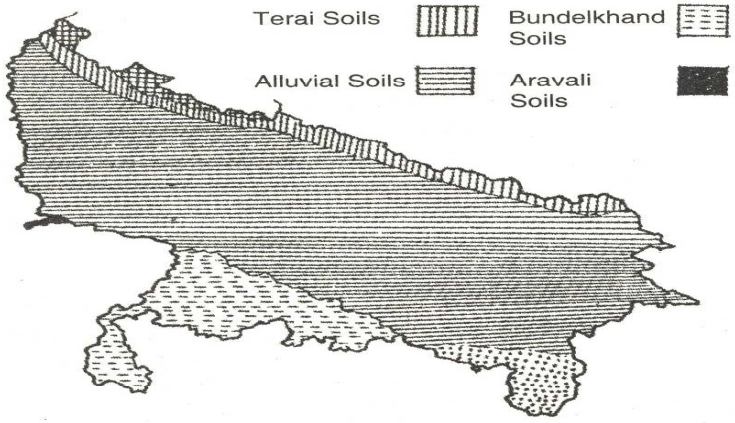


Diagram-2

AGRO-CLIMATIC REGIONS OF U.P.
(As reconstituted)

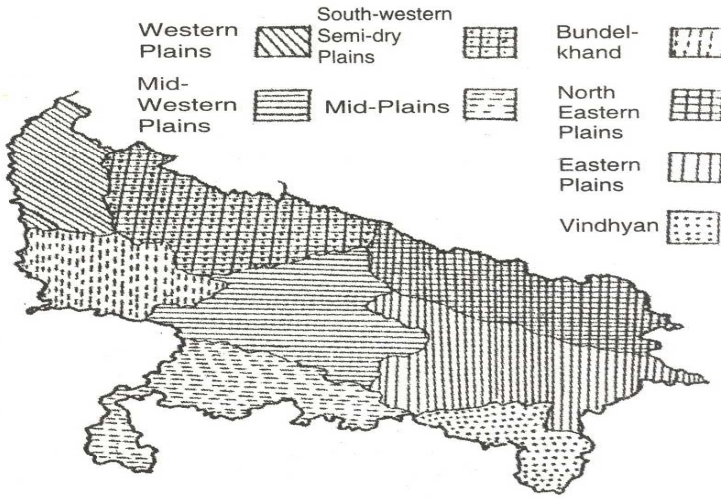
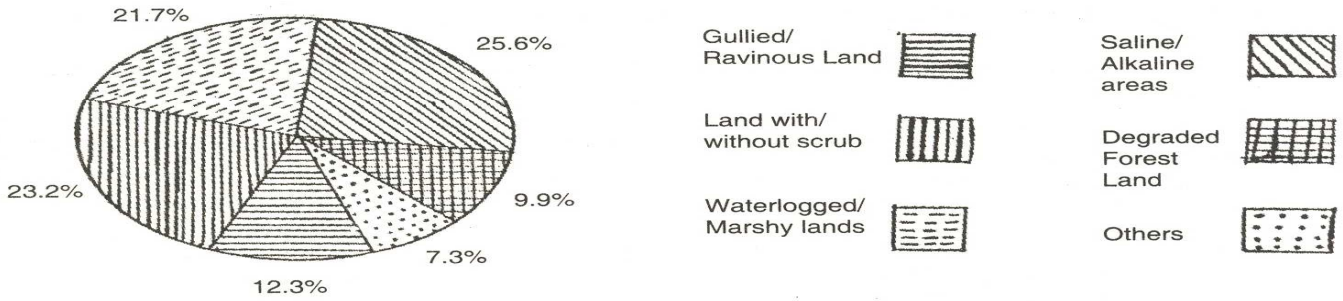


Diagram-3

DEGRADED LAND PERCENTAGES IN U.P.



Note: The above diagram does not include sub-surface water-logged areas.
Source: Threatened Lands, IIPA-2001

1.2.2 Economic classification of population

Uttar Pradesh is the largest populated state of India, having 1662 lakh population as per 2001 census, against 16.2% of India's population.

From economic view point, the population is divided into main workers, marginal workers, and non-workers. People who worked for major part of the reference year are characterised as main workers and those worked for lesser duration are termed as marginal workers. Persons who did not work at all during the reference year are known as non-workers. The Census is the main source of such classification of population. Comparative population with India & Economic classification of state's population as per the Census 2001 is given in **Table 2 & 3**

Table 2: Comparative population Status (Census 2001)

Year	Population (Lakh)		Density (Population per Sq. K.m.)	
	Uttar Pradesh	India	Uttar Pradesh	India
1901	486	2384	165	77
1911	482	2521	164	82
1921	467	2513	159	81
1931	498	2790	169	90
1941	565	3187	192	103
1951	632	3611	215	117
1961	738	4392	251	142
1971	883	5482	300	177
1981	1109	6833	377	216
1991	1320*	8463	548*	267
2001	1662*	10287+	690*	325

* Excluding Uttrakhand + Amended

Source :- Indian Census - 2001

Table 3: Distribution of population of Uttar Pradesh by working status (2001)

(In thousands)

Particulars		Total	Rural	Urban
Population	Persons	1661.98	1316.58	345.40
	Males	875.65	691.57	184.08
	Females	786.33	625.01	161.32
Main workers	Persons	393.38	312.43	80.95
	Males	343.38	269.75	73.63
	Females	49.99	42.68	7.32
Marginal workers (Total)	Persons	146.46	134.33	12.13
	Males	66.43	57.96	8.48
	Females	80.03	76.38	3.65
Marginal workers (seeking/available for work)	Persons	31.73	27.58	4.15
	Males	24.94	21.28	3.65
	Females	6.79	6.29	0.50
Non-workers (Total)	Persons	1122.14	869.82	252.32
	Males	465.84	363.87	101.97
	Females	656.30	505.96	150.35
Non-workers (seeking/ available for work)	Persons	50.84	30.95	19.89
	Males	30.31	18.54	11.77
	Females	20.53	12.41	8.12
Total workers	Persons	539.84	446.76	93.08
	Males	409.82	327.71	82.11
	Females	130.02	119.05	10.97

(Percentages)

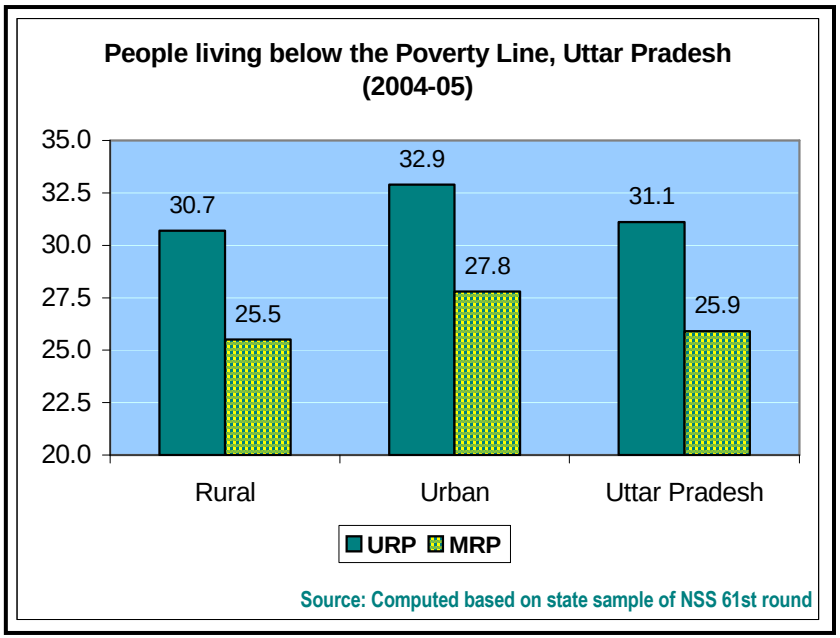
Percentage of Main Workers in population	Persons	23.67	23.73	23.44
	Males	39.21	39.01	40.00
	Females	6.36	6.83	4.54
Percentage of Marginal Workers in population	Persons	8.81	10.20	3.51
	Males	7.59	8.38	4.60
	Females	10.18	12.22	2.26

Particulars		Total	Rural	Urban
Percentage of Non-workers in population	Persons	67.52	66.07	73.05
	Males	53.20	52.61	55.39
	Females	83.46	80.95	93.20
Percentage of Main workers in total workers	Persons	72.87	69.93	86.97
	Males	83.79	82.31	89.68
	Females	38.45	35.85	66.70
Percentage of Marginal workers in total workers	Persons	27.13	30.07	13.03
	Males	16.21	17.69	10.32
	Females	61.55	64.15	33.30

Source: Directorate of Census Operations, Uttar Pradesh

1.2.3 Poverty levels

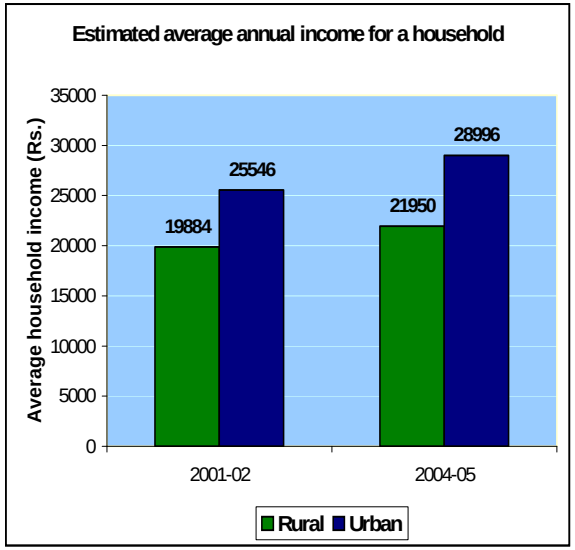
National sample survey (NSS) rounds with population based designs are used to form the basis for computation of poverty statistics. The latest such round was 61st round in 2004-05. The calculations are done using uniform recall period (URP) and mixed recall period (MRP). URP considers consumption expenditures for goods and services for a reference period of one month (more precisely last 30 days) while as MRP considers expenditures of five non-frequently consumed items (clothing, footwear, education, medical-institutional and consumer durables) for last 365 days whiles as rest for last 30 days. Using state sample data of NSS 61st round, poverty for Uttar Pradesh is computed at a level of 31.1 percent based on URP. The poverty rates for rural and urban areas of the state are found to be 30.7 and 32.9 percent respectively.



Attached graph present the estimates of income (through consumption) if on the basis of per capita expenditure declared by the Planning Commission, GOI to qualify in order to cross the poverty line. This calculation is based for the household with an imaginary size of 5

members residing in household. As is clear from the chart that Rs. 19884 was needed for an ideal family in rural UP in 2001-02 which rose to Rs. 21950.

Similarly average desired income to become above poverty line is estimated to be Rs. 28996 in 2004-05 in comparison to Rs. 25546 in 2001-02 in urban UP.



Last broad data compatible for poverty calculations were generated in 55th round (1999-2000), but with a limitation of comparability due change in reference periods. In that case, for the reasons of comparison data generated in 50th round (1993-94) are being presented below to track the progress in the poverty decline.

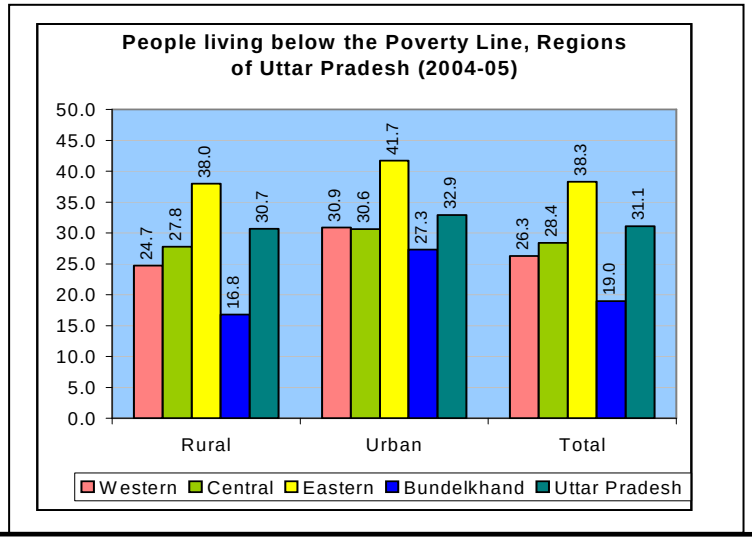
Table 4: Population below Poverty Line on the basis of URP consumption in UP

Year	Rounds	Percentage from the total population		
		Rural	Urban	Total
1993-1994	50th	42.28	35.39	40.85
2004-2005	61st (State Sample)	30.74	32.88	31.13

The above data reveals the poverty decline between the years 1993-94 to 2004-05 in percentage of population below poverty line was 1.05, 0.23 and 0.88 at rural, urban and state level respectively.

Uttar Pradesh, largest state (population wise) of India hosts over 18 crore of population, comprises of various heterogeneous regions/ zones. To understand and target the poverty, it is essential to see the relevant statistics at the sub-state levels. Adjoining chart presents the poverty levels computed from state sample of NSS for four regions of Uttar Pradesh.

Chart present poverty incidence (based on URP consumption) for four regions of UP by rural and urban areas. In the rural areas highest incidence of poverty is computed to be 38 percent for the Eastern region while as Bundelkhand figure with least incidence of 16.8 percent. Likewise in Urban areas similar ordering is observed as far as incidence of poverty is concerned.



1.2.4 Socio-Economic conditions of the farmers

Uttar Pradesh is 10th poorest state in the country and is characterized as one of the slow growing developing region mainly due to low per capita income, some other aspects also assign to its poverty. State per capita income was US$ 238 p.a. in 2005-06 while the national per capita income stood at US$ 450 in the same period. In terms of rural poverty it is the 12th and in regards to urban poverty the 4th poorest state. About 35% population (30 to 50 million) is living below poverty in both rural and urban areas, though condition in urban areas is little better. Heavy pressure of population on the land and power crisis restricts industrial growth in the state as a result scope of other means of livelihood is not open out in **Table 5** selected socio economic development indicators for U.P. and the major states of India as given.

Table 5 –Select Socio- Economic Development indicators for U.P. and the major States of India

States	IMR	Life-Expectancy	Literacy Rate		Sex Ration	Per Capita (NSDR (Rs.)	% Persons below Poverty Line
			Total	Female	0 to 6 years		
	2005	2003	2001	2001	2001	2003-04	2004-05
Andhra Pradesh	57	63.7	61.11	51.17	978	21372	15.8
Assam	68	58.0	64.28	56.03	932	12821	19.7
Bihar	61	61.0	47.53	33.57	921	7319	41.4
Gujrat	54	63.5	69.97	58.6	921	26672	16.8
Haryana	60	65.4	68.59	56.31	861	29504	14.0
Karnataka	50	54.6	67.04	57.45	964	21238	25.0
Kerla	14	73.6	90.92	87.86	1058	13722	15
Madhya Pradesh	76	57.1	64.11	50.28	920	14784	38.3
Maharashtra	36	66.4	77.27	67.51	922	13732	30.8
Orissa	75	58.7	63.61	50.97	972	12645	46.4
Punjab	44	68.6	69.95	63.55	874	28607	8.4
Rajasthan	68	61.3	61.03	44.34	922	15738	22.1
Tamil Nadu	37	65.4	73.47	64.55	986	23358	22.5

Uttar Pradesh	**73**	**59.3**	**57.36**	**42.98**	**898**	**11534**	**32.8**
Rank of U.P.	(13)	(12)	(14)	(14)	(13)	(14)	(12)
West Bengal	38	61.1	69.22	60.22	934	20548	24.7
India	**58**	**62.7**	**65.38**	**54.16**	**933**	**20936**	**27.5**

About 67% of the population is rural and dependent on agricultural production for their livelihood with farm income accounting for more than 20% of the income of rural households. Growth in agriculture sector of UP has been 2.10% in 2002-07 as compared to national growth 1.1% and it is expected to grow faster in coming years because of inception of two ambitious programme i) National Food Security Mission and ii) Support to State Extension Programme for Extension Reform. Nevertheless, the share of agriculture in the GDP of UP has been declining from about 33% in 1999-2000 to 26% in 2007-08 which is alarming in a state where about 65% population's livelihood is agriculture.

One of the major causes of poor growth in agriculture sector is lack of market network for high profitable crops, number of intermediaries exist in market channels who share greater part of income.

Employment, Under-Employment and Unemployment

On the basis of Census 2001 results for Uttar Pradesh, the magnitude of labour force, work force, employment, underemployment and unemployment is presented in **Table 6**.

Table 6: Labour force, work force, employment & unemployment in Uttar Pradesh

Sl. No.	Particulars		Total	Rural	Urban
1	Labour Force Participation Rate (%)	Persons	35.54	36.28	32.71
		Males	50.26	50.07	51.00
		Females	19.15	21.03	11.83
2	Work Force Participation Rate (%)	Persons	32.48	33.93	26.95
		Males	46.80	47.39	44.61
		Females	16.54	19.05	6.80
3	Full Employment (%) (Percentage of main workers in labour force)	Persons	66.60	65.40	71.66
		Males	78.02	77.91	78.43
		Females	33.21	32.46	38.33

4	Underemployment (%)(Percentage of marginal workers seeking work in labour force)	Persons	5.37	5.77	3.68
		Males	5.67	6.15	3.89
		Females	4.51	4.79	2.62
5	Unemployment (%) (Percentage of Non-workers seeking work in labour force)	Persons	8.61	6.48	17.61
		Males	6.89	5.35	12.54
		Females	13.63	9.44	42.53

Source: from Census 2001

1.2.5 Farmers profile & size of holdings

Rising population and divisions in families is directly correlated to fragmentation of holdings. Consequently sizes of holdings are continuously becoming smaller. During last one decade average size of holding has come down from 0.97 ha to 0.83 ha as a result numbers of marginal and small farmers are increasing every year. Marginal farmers are those who cannot meet out their annual food requirement from lands they own and in Uttar Pradesh 76.88% farmers are categorized in this class. Number of marginal and small farmers and distribution of land is shown in the **Table 7**

Table 7: Land Distribution

Category	Area in lac. ha.	Number in lac.	Average Size of holding in ha
Marginal farmer (less than one ha)	66.48 (36.97%)	166.59 (76.88%)	0.40
Small farmers (between one and two ha)	43.66 (24.28%)	31.37 (14.25%)	1.41
Semi medium (2 to 4 ha)	39.05 (21.71%)	14.27 (6.58%)	2.74
Medium (4 to 10 ha)	25.80(14.35%)	4.63(2.14%)	5.57
Large (more than 10 ha)	4.84 (2.69%)	0.32 (0.15%)	15.07
Total	179.83	216.68	0.83

2. Agriculture & Food Productivity

2.1.1 State Position in the country

Uttar Pradesh is the largest producer of wheat in the country contributing about 33% of the national production whereas U.P. is the second largest producer of rice, which accounts for about 12% of the national production. In Uttar Pradesh 2.7% of holdings is of more than 4 hectares and accounts for 19.2% of total area. While about 75.4% of the marginal holdings accounts for 33.7% of the total area which clearly reflects severe inequities in the ownership of land holdings.

Despite all odds the state contributes 33% wheat, 38% sugarcane and 38% potato produced in the country. The contribution of U.P. to national basket of agricultural produce in respect of major crops is given in **Table 8**

Table 8: Contribution of U.P. in Food Basket of Country

Name of Crops	Production in Lakh tonnes during 2006-07		Contribution of U.P. %
	India	U.P.	
Total Food grain	**2172.8**	**412.0**	**18.97**
Rice	933.6	111.2	11.91
Wheat	758.1	250.3	33.02
Jowar	71.5	2.4	3.36
Bajra	84.2	12.9	15.32
Maize	151.0	11.6	7.68
Total Pulses	**142.0**	**19.8**	**13.94**
Gram	63.3	5.0	7.90
Arhar	23.1	3.0	12.99
Lentil	9.1	4.3	47.25
Total Oilseeds	**242.9**	**10.3**	**1.03**
Groundnut	48.6	0.7	1.44
Rapeseed/Mustard	74.4	9.57	13.40
Sunflower	12.3	0.2	1.63
Sugarcane	3555.2	1339.5	37.68
Potato	220.91	102.48	46.39

Source – State Annual Plan 2009-10

2.1.2 Productivity Status of Agro-Climatic Zones in U.P.

Food Grains –

The average productivity of food grains is 22.06 Qtl/Ha and in case of cereals, it is 23.94 Qtl/Ha in the state. The food grains productivity varies in agro-climatic zones from 8.57 Qtl/ha. (in Bundelkhand zone) to 30.04 Qtl/Ha (in Western plain zone). Similarly in case of cereals it varies from 12.74Qtl/Ha (in Bundelkhand zone) to 30.89 Qtl/Ha (in Western plain zone). The zone wise and crop wise along with year wise details are presented in **Table 9**

Table 9– Zone wise productivity of food grains

(Qtl/ha.)

Sl. No.	Zones	Food grains	Total Cereals	Food grains	Total Cereals	Food grains	Total Cereals
		2005-06		2006-07		2007-08	
1	Tarai & Bhabhar	23.10	24.28	23.76	24.82	25.30	26.30
2	Western Plain	28.43	29.50	30.49	31.40	30.04	30.89
3	Mid- Western	22.61	23.35	23.73	24.65	24.76	25.26
4	South Western Semi-Dry	25.18	25.77	23.54	24.30	25.97	26.58
5	Mid-Plain/ Central	21.17	22.72	22.23	24.00	22.75	24.35
6	Bundelkhand	11.32	17.25	10.51	16.19	8.57	12.74
7	North Eastern	19.30	20.11	22.20	21.09	22.31	13.21
8	Eastern Plain	20.34	21.38	20.37	21.41	21.60	22.62
9	Vindhyan	13.14	14.23	16.22	17.64	15.68	17.10
	Uttar Pradesh	**20.31**	**22.30**	**20.77**	**22.90**	**22.06**	**23.94**

Source – State Annual Plan 2009-10

Pulses

The average productivity of pulses is 7.31 Qtl/Ha, in the state. The pulses productivity varies in agro-climatic zones from 5.31 Qtl/Ha (in Bundelkhand zone) to 9.37 Qtl/Ha (in Eastern Plain zone). The zone wise and crop wise along with year wise detail is presented in **Table 10**

Table 10– Zone wise productivity of Pulses

(Qtl/ha.)

S.No.	Zones	Total Pulses 2005-6	Total Pulses 2006-07	Total Pulses 2007-08
1	Tarai & Bhabhar	8.63	7.18	7.77
2	Western Plain	11.85	7.91	7.40
3	Mid- Western Plain	11.70	7.61	8.56
4	South Western Semi-Dry	14.36	7.45	8.69
5	Mid-Plain/ Central	10.56	8.09	8.89
6	Bundelkhand	6.07	6.57	5.31
7	North Eastern Plain	8.78	7.98	8.46
8	Eastern Plain	11.38	8.02	9.37
9	Vindhyan	4.85	7.94	8.23
	Uttar Pradesh	**11.49**	**7.25**	**7.31**

Source – State Annual Plan 2009-10

Oilseeds

The average productivity of Oil seed is 9.07 Qtl/ha., in the state. The Oil seeds productivity varies in agro-climatic zones from 2.55 Qtl/ha. ((in Bundelkhand zone) to 14.27 Qtl/ha. (in South-Western semi dry zone). The zone wise along with year wise detail is presented in **Table 11**

Table 11 – Zone wise productivity of Oilseeds

(Qtl/ha.)

	Zones	Total Oilseeds	Total Oilseeds	Total Oilseeds
1	Tarai & Bhabhar	8.56	8.13	7.98
2	Western Plain	11.61	9.69	12.54
3	Mid- Western Plain	11.01	9.26	10.23
4	South Western Semi-Dry	14.17	13.03	14.27
5	Mid-Plain/ Central	8.76	8.02	8.82
6	Bundelkhand	5.02	3.74	2.55
7	North Eastern Plain	9.42	8.26	8.18
8	Eastern Plain	10.40	10.39	10.14
9	Vindhyan	4.10	5.05	3.94
	Uttar Pradesh	**9.58**	**8.36**	**9.07**

Source – State Annual Plan 2009-10

Gap in Productivity and Potential

Although there is a marked gap in the productivity of various crops grown in U.P. compared to other State and countries, yet it has wide variation from one zone and region to another. On the basis of an analysis of crop cutting experiments this gap has clearly been identified, where a large number of farmers could get significantly very high yield of crops, which can be termed as workable potential and can be compared with any other State. The gap between potential and actual yield is depicted in **Table 12**

Table 12– Gap between potential and actual yield (qtl./ha.)

S.N.	Particulars	Tarai & Bhabhar	WP	MWP	SWSDP	MP	BUND	NEP	EP	VIN	Uttar Pradesh
1	Rice										
	Potential	95	62	53	65	47	25	43	49	33	47
	Present yield	25	24	22	24	21	5	20	20	16	21
	Gap (a-b)	72	38	31	41	26	20	23	29	17	26
2	Wheat										
	Potential	65	68	54	57	73	41	52	57	38	57
	Present yield	31	34	30	32	29	16	28	26	20	28
	Gap (a-b)	34	34	24	25	44	25	24	31	18	29
3	Maize										
	Potential	45	52	30	52	54	50	55	42	55	45
	Present yield	10	19	16	21	15	7	10	12	8	14
	Gap (a-b)	35	33	14	31	39	43	45	30	47	31
4	Lentil										
	Potential	20	20	20	20	20	20	22	22	20	20
	Present yield	8	5	10	7	8	5	9	9	7	7
	Gap (a-b)	12	15	10	13	12	15	13	13	13	13
5	Bajra										
	Potential	30	30	30	25	25	25	30	29	30	30
	Present yield	13	15	14	17	16	6	16	11	11	15
	Gap (a-b)	17	15	16	8	9	19	14	18	19	15
6	Gram										
	Potential	30	30	30	30	31	23	18	34	18	26
	Present yield	8	7	8	14	11	5	7	10	9	7
	Gap (a-b)	22	23	22	16	20	18	11	24	9	19
7	Barley										
	Potential	45	42	42	67	42	42	45	42	19	42
	Present yield	22	30	22	27	20	11	23	19	7	21
	Gap (a-b)	23	12	20	40	22	31	22	23	12	21

Source – Annual Plan 2009-10
*(WP=Western Plain, MWP= Mid Western Plain, SWSDP= South Western Semi Dry Plain, MP= Mid Plain, BUND= Bundelkhand, NEP= North-Eastern Plain, EP= Eastern Plain, VIN= Vindhyan)
* The potential yield of various crops indicated in the table is actually the highest potential yield of varieties recommended for corresponding agro climatic zone. * Base year 2005-06.

State-Wise Comparative Production and Productivity of Major Crops:

Comparative production and productivity of some major crops with some other States are depicted in the following **Table 13**

Table 13– Comparative production and productivity of some major crops with some other States

Crop	State	Area under crop (lakh ha)	Production (lakh tons)	Average yield (qtl per ha)
Rice				
	Andhra Pradesh	39.80	117.00	29.39
	Chhattisgarh	37.50	50.10	13.37
	Punjab	26.40	101.90	38.58
	Uttar Pradesh	55.80	111.30	19.96
	Orissa	44.80	68.60	15.31
	West Bengal	57.80	145.10	25.09
	India	436.60	917.90	21.02
Maize				
	Andhra Pradesh	7.60	30.90	40.73
	Bihar	6.50	13.60	20.98
	Madhya Pradesh	8.60	12.50	14.50
	Rajasthan	10.00	11.00	10.98
	Uttar Pradesh	8.10	10.50	12.95
	India	75.90	147.10	19.38
Wheat				
	Bihar			
	Hariyana	23.00	88.60	38.44
	Madhya Pradesh	36.90	59.60	16.13
	Punjab	34.70	144.90	41.79
	Rajasthan	21.20	58.70	27.62
	Uttar Pradesh	91.60	240.70	26.27

	India	264.80	693.50	26.19

Crop	State	Area under crop (lakh ha)	Production (lakh tons)	Average yield (qtl per ha)
Chick pea				
	Andhra Pradesh	3.90	6.30	15.91
	Madhya Pradesh	25.60	23.70	9.26
	Maharashtra	10.20	7.10	6.91
	Rajasthan	10.80	4.80	4.43
	Uttar Pradesh	7.40	6.60	8.93
	India	69.30	56.00	8.08
Pigeon pea				
	Andhra Pradesh	4.90	3.00	6.09
	Gujrat	2.50	2.80	11.02
	Madhya Pradesh	3.20	2.40	7.39
	Maharashtra	11.00	7.90	7.20
	Uttar Pradesh	3.80	3.70	9.87
	India	25.80	27.40	7.65
Rapeseed/ Mustard				
	Gujrat	3.40	4.60	13.49
	Hariyana	7.10	7.90	11.17
	Rajasthan	37.70	44.20	12.05
	Uttar Pradesh	7.90	9.10	11.49
	West Bengal	4.20	3.80	9.09
	India	72.80	81.30	11.17
Sugarcane				
	Andhra Pradesh	2.30	179.60	767.65
	Karnataka	2.20	182.70	834.11
	Maharashtra	5.00	388.50	755.51
	Uttar Pradesh	21.60	1254.70	582.01

	Tamilnadu	3.40	351.10	1046.71
	India	42.00	2811.70	669.28
Crop	**State**	**Area under crop (lakh ha)**	**Production (lakh tons)**	**Average yield (qtl per ha)**
Potato				
	Bihar	1.42	12.33	86.63
	Gujrat	0.44	12.10	275.00
	Punjab	0.75	12.23	163.07
	Uttar Pradesh	4.45	99.87	224.32
	West Bengal	3.55	74.63	210.51
	India	14.01	239.05	170.58

2.2.1 Plan Outlay

The plan outlay is the most effective and widely known source of investment. There is a wide range of activities which are financed from the outlay and the State has large freedom and choice in the use of the same. The plan outlay in the Agriculture and Allied sector since First Five Year Plan is given in **Table – 14**

Table 14-Percentage Expenditure on Agriculture & Allied Sector over Plan period in Uttar Pradesh (Rs. In lakh)

Plan	Total Outlay / Expenditure	Agriculture & Allied Sector	Percentage
First Plan	15337	2487	16.2
Second Plan	23336	2625	11.2
Third Plan	56063	5789	10.3
Fourth Plan	115924	9921	8.6
Fifth Plan	287118	16350	5.7
Sixth Plan	645312	44307	6.9
Seventh Plan	1194872	122678	10.3
Eighth Plan	2164246	206116	9.5
Ninth Plan	2830918	274375	9.7

Tenth Plan	5485571	425126	7.7
Eleventh Plan	18109400	1914637	10.6

Source – State Annual Plan 2009-10

An analysis of the above table shows that the share of Agriculture and Allied sector which stood at 16.2 percent in the First Plan decreased to 5.7 percent in the fifth Plan, but thereafter some higher allocation are done. During Eleventh Five Year Plan it is expected to be 10.6 percent. However these allocations are not sufficient in view of the 32 % contribution in agriculture and allied sector to state SGDP.

2.2.2 Growth Rate in Agriculture

High growth in agriculture sector is necessary for attaining higher growth in the overall economy of the State, as also for reduction in the incidence of poverty. Average annual growth rate in agriculture sector during the 10th Plan was targeted at 5.1 percent. However, the achievement has been only about 2 percent. A lower growth rate of this order is indicative of the fact that there was 'something' missing in our efforts and strategies for agriculture development. A review of past growth rates in the agriculture sector reveal that the state had achieved a growth rate of 5.7 percent during Fifth Plan. Thus, the State has potential of achieving higher growth in the sector. It is in this background that a growth rate of 5.7 percent envisaged in agriculture sector during Eleventh Plan. The growth rate in the Agriculture and Allied sector since First Five Year Plan is given in **Table – 15**

Table 15–Agriculture and Allied Sectors Growth Rate in Plan Periods

Sl. No.	Plan	Agriculture & Allied Sectors (percent)		Overall Economy (percent)	
		U.P.	India	U.P.	India
1.	First Plan (1951-56)	1.7	2.7	2.0	3.6
2.	Second Plan (1956-61)	1.4	3.2	1.9	4.0
3.	Third Plan (1961-66)	(-) 0.5	(-) 0.7	1.6	2.2
4.	Three Annual Plan (1966-69)	0.6	4.2	0.3	4.0
5.	Fourth Plan (1969-74)	0.8	2.6	2.3	3.3
6.	Fifth Plan (1974-79)	5.7	6.3	5.7	5.3
7.	Sixth Plan (1981-85)	9.7	2.5	8.7	5.3
8.	Seventh Plan (1985-90)	2.7	3.5	5.7	5.8
9.	Two Annual Plan (1990-92)	5.4	4.0	3.1	2.5
10.	Eighth Plan (1992-97)	2.7	3.9	3.2	6.8
11.	Ninth Plan (1997-02)	0.8	1.9	2.0	5.6

12.	Tenth Plan (2002-07)	2.10	1.1	5.3	7.7
13.	Eleventh Plan (2007-12)	5.70	4.1	10.0	9.0

Source – Annual Plan 2009-10

Fertilizer Consumption

Use of chemical fertilizers in comparison to neighbor states Hariyana and Punjab is very low and also below the national average. As per the U.P. Statistical Diary 2006-07 there was 37.34 Lakh M.T. (N 27.14 Lakh M.T. , P 8.53 Lakh M.T., K 1.68 Lakh M.T.) consumption in the state. Consumption of chemical fertilizers is going ahead in a positive trend but there is a threat of imbalance use which caused the deterioration of soil health.

The recommended fertilizer use is focused on NPK ratio which should be in the ideal form i.e. 4:2:1. The pattern of fertilizer consumption in the state shows that the NPK ratio is gradually narrowing. During 2002-03 the ratio was 16.6:5.1:1 which has narrowed to 10.7:4:1 indicating the efforts for balanced use of fertilizer. Details are shown in **Table – 16**

Table 16 – Fertilizer Consumption (Per/ha) in U.P.

Year	Nitrogen(kg/ha)	Phosphorus (kg/ha)	Potash (kg/ha)	NPK Ratio
2002-03	93.10	28.60	5.60	16.6:5.1:1
2003-04	93.10	30.10	6	15.5:5:1
2004-05	104	32	8	13:4:1
2005-06	107	34	8	12.5:4.25:1
2006-07	107	40	10	10.7:4:1

Source – State Annual Plan – 2009-10

Lack of quality seed, imbalance use of fertilizers are the other reasons of low yield. Though the availability of quality seed has increased during the past three years but farmers often mistaken in selecting appropriate variety with consideration to region, date of sowing, type of soil and other requisites of variety. Imbalance use of chemical fertilizers and wider ratio of NPK against the recommended ratio also hamper desired results. Rains also play an important role in agriculture especially for kharif crops.

Moreover, illiteracy or semi literacy, poverty and lack of resources or poor access to amenities are the root cause which inhibits timely and scientific operation of most of the agriculture practices many times in many cases.

Seed Replacement Rate

Seed is one of the most vital inputs responsible for higher production under specific agro-climatic situation and can contribute 10 to 15 percent increase in production. The seed scenario in Uttar Pradesh during Xth Five Year Plan (2002-07) period has been highly encouraging in the case of cereal seeds especially the paddy and wheat. There is an encouraging trend in the Seed Replacement Rate during the current Five Year Plan which is evident from **Table – 17**

Table 17: Crop-Wise Seed Replacement Rate in U.P.

Sl. No.	Name of Crop	2007-08	Targeted (2008-09)
1.	Paddy	25.00	27.00
2.	Maize	19.51	22.00
3.	Pearl Millet	57.30	72.50
4.	Sorghum	17.13	24.50
5.	Black gram	16.21	20.50
6.	Green gram	84.98	86.00
7.	Pigeon pea	19.20	19.00
8.	Groundnut	4.36	3.50
9.	Sesame	13.56	18.50
10.	Soybean	33.00	42.00
11.	Sunflower	71.80	100.00
12.	Cotton	70.71	71.75
	Kharif	**23.66**	**25.08**
13.	Wheat	26.84	28.75
14.	Barley	24.96	26.75
15.	Gram	14.89	19.01
16.	Pea	18.57	24.00
17	Lentil	27.81	29.68
18.	Rape seed/Mustard	61.24	61.41

19.	Brassica compestris	98.62	100.00
20.	Linseed	10.70	11.60
	Rabi	**26.00**	**28.19**
	Annual	**25.40**	**25.82**

Source – State Annual Plan- 2009-10

However, the seed replacement in case of pulses and oil seed are not at the desired level. Infacts these crops are from the rainfed areas and in watershed development activities, for improving the productivity of pulses and oil seed, special emphasis will have to be given on seed replacement of pulses & oilseeds.

2.3.1 Major Constraints in agriculture productivity and production

The state's position in overall production of foodgrains is at number one position having around 20 percent of the overall production of country. Infact the State contributes around 35 percent of wheat in the country. State is at 2nd position of the rice production, first in sugarcane and potato production. However at the productivity level the state has poor performance compared to some advanced states like Punjab, Hariyana and Tamilnadu .The main reason for lower productivity levels are:

1 – Irrigation even 80 percent of area is reported to have been under irrigation but in terms of number of irrigation as per requirement of crops is not sufficient. 65 percent area irrigation is by mostly Diesel operated privately owned tube wells. The cost of diesel operated pumps being high, the farmers are not irrigating through pumps in kharif. Even in rabi they irrigate only 2 to 3 times instead of 5 to 6 times required for wheat crop. In canal commands due to poor maintenance of canal and distribution system, the availability of water is poor. Water availability is also poor especially at tail ends.

2 – Timely availability of inputs like seed fertilizer etc. is poor.

3 – Dwindling extension services. Most of the posts are vacant with the result the farmers are not getting timely and required technical inputs.

4 – Land holding size is day by day getting smaller with the result the investment capacity of the farmers is poor, resulting is low productivity.

5 – Problematic area: - the state has a total problematic area of around 120 lac. Ha. which includes erosin , soil salinity alkalinity , ravines, waterlogging, diyara lands etc. This affects productivities from these areas.

6 – Poor investments in agriculture sectors.

7 – In case of milk production also the State stands at number one but productivity per animal is poor due to non availability of sufficient quality feed and green fodder.

8 – In case of vegetable and fruits also the States position is at no 2 level but in these crops also the productivity as compared from the other states-position is poor.

9 – Erratic Mansoon trend and occasional moisture stress conditions with long dry spell especially in rainfed areas and run off from sloppy lands causing severe erosion also results in poor productivity and production.

10 – Poor soil health and low organic matter content in the soil is also a major cause for low productivity. Soils are getting deficiency is some important nutrients like Sulpher, Iron, Zinc, Boron etc. which also results in low productivities of different crops and vegetables & low seed replacement rate particularly in case of pulses & oilseeds the main crops of the rainfed areas.

2.3.2 State Agriculture Policy

In its policy document for agriculture (2005) the State has given due emphasis on the following issues.

i- Efficient utilization of natural resources and environment management

ii - Efficient and judicious utilization of natural resources for agriculture would be ensured considering its technical feasibility, economic viability and eco-friendliness besides its social acceptability.

iii- Soil Management **-** On line availability of information regarding inventory of land resources based on their capabilities will be ensured. Land use pattern would be monitored regularly and changes if any, would be updated at every five years interval. Waste and degraded lands available in the form of usar barren, ravine, fallow and diara would be reclaimed and subsequently utilized for agriculture, horticulture, forestry and pasture. The farmers are not getting any income from the sodic and waste land in state. On the basis of **'public-private panchayat partnership model',**

iv - The self help groups of farmers will be encouraged for the plantation of Jetropha, Ratanjot, etc. for production of bio diesel.

v - The unirrigated and erosion affected lands will be managed through integrated watershed management approach using vegetable, mechanical and agronomical measures. For the success of watershed management programme, the ownership of

the common village resources such as pasture lands, forest and water resources will be decided in such a way so that they can be utilized by all the villagers living in the command of concerned watershed. If required, necessary changes in existing law will be made.

vi - Development of Pasture & Forest Land –Pasture and forest lands will be developed for growing of grasses, forage, fuel and timber trees to cater local needs.

A. comparative average yield of major crops of the State and India during Triennia 1972-73 to 1974 -75 and 1992-93 to 1994-95 (in Kg/Ha.) is given in **Table- 18**

Table-18: Comparative average yield of major crops of the State and India during Triennia 1972-73 to 1974 -75 and 1992-93 to 1994-95 (in Kg/Ha.)

1	2		3		4	
Major Crop/crop group	**Period I: 1972-73 to 1974-75**		**Period II: 1992-93 to 1994-95**		**Post 1994-95**	
	State	**India**	**State**	**India**	**State**	**India**
Rice	797.56	1088.60	1843.91	1848.24	1858.00	1911.00
Wheat	1124.29	43827.30	2349.05	2423.45	2505.00	2559.00
Sugarcane	41895.83	50676.14	58136.34	67512.95	59942.00	71254.00

Source : AGRICULTURE STATISTICS ,U.P.

3. Land & Water Resources Scenario & Reclamation Efforts

3.1.1 Land Use and Land Degradation Scenario

U.P. occupies a unique position in the country. Amongst the States of India it is the most populous. Nearly-one sixth of India lives in U.P. (the demographic density being very high at 689 per sq. km) while the State has less than one-thirteenth of the country's land. Nearly four-fifth of the population lives in about 97,000 villages of the State, which covers eight of the fifteen natural agro-climatic zones. Land use in U.P. is largely oriented to crop cultivation. Of about 241 lakh ha of area reported in the revenue records, a little over 70 percent is under crops. About seven percent of the total land represents fallows. Thus, a major part of the total land area is being used for cultivation purposes. The area under forests, pastures and grazing lands, after the carving out of Uttaranchal as a separate State, has become abysmally low. According to the State of Forest Report (2001) of the GOI, while the recorded forest cover is 16826 sq. km. (i.e. 7 percent of the geographical area), actual cover just a mere 3.7 percent. Growing demands of land required for community purposes, and other non agricultural uses such as urbanization, industries, roads, parks, government buildings, housing, educational institutions, hospitals, business centers, etc, that are related to accommodating the increasing needs of growing population have necessarily to be met. Not only is population growing, its demands are getting scaled up owing to rising incomes, changing life- styles and ascending levels of expectation. Such pressures intensify competitive demands on land.

Let us now take a look at the evolution of category- wise land use in Uttar Pradesh. Here, we face a bit of a problem. The available time- series data from 1950-51 to 1998-99 relates to the State when Uttaranchal was also a part of it. The broad land use trends during this period are reflected in Table-19.

Table-19 shows that there was a sudden change in forest cover from 1950 to 1970. In point of fact this rise is merely apparent. It was only the result of a definitional re-classification. A lot of barren and cultivable wasteland was brought under plough or planting. The area of land put to non- agricultural uses sharply went up. The area under grass/ tree cover went down. In spite of all this there was only about 3.5 percent increase in the net sown area. The State of UP was divided in November 1999 when Uttaranchal was carved out of it. Its geographical area, thereafter, got reduced to a little over 2.40 lakh sq. km.

Table-20 indicates the more recent land use changes that have occurred in the now reconstituted state of U.P.

In the reconstituted U.P. the forest cover percentage has sharply come down. The area under barren and culturable lane categories is also on a decline due to demographic pressures and demands of land for non-agricultural purposes. Uttar Pradesh

now has very little pasture land. Since most of the mountainous areas have gone to Uttaranchal the proportion of net sown area has statistically gone up by nearly ten percentage points. Per capita availability of cultivated land is now precariously low at one tenth of a hectare and it is inexorably falling.

The above table may be indicative of land use changes but it does not reflect the extent and intensity of land degradation in U.P. While the figures may vary in these assessments, the seriousness of the problem is well recognized by most of them. The State's Tenth Plan Document states that 28.50 lakh hectares of arable and 8.32 lakh ha of non-arable land suffer from soil erosion, and another 37.66 lakh hectares face other specific degradation problems, namely:

a) Lands covered by ravines 9.23 Lakh ha
b) Sodic lands 7.63 Lakh ha
c) Riverine Lands 13.50 Lakh ha
d) Waterlogged Lands 7.30 Lakh ha

In all, therefore, there are degradation problems in 74.48 lakh hectares of land in the State. The above figures are just one set of the many estimations that are available. According to the assessment of the Department of Land Resources, Ministry of Rural Development, GOI, (Wasteland Atlas-2000), U.P. has 22.69 lakh ha of wasteland which is 9.4 percent of the State's geographical area. Some districts have very substantial wasteland areas-25 percent in Lalitpur and 23 percent in Bahraich (including Shravasti). Seventeen other districts have between 10 to 20 percent area categorized as wasteland. This assessment is based on remote sensing data which has obvious limitations. Remote sensing techniques (RSTs) have poor capabilities in respect of ascertaining sub- surface degradation and nutrient loss. Also quantitative estimates in respect of rill and wind erosion and water logging can not be reliable. As for sub-surface water logging RSTs are just not capable of any estimation. In such circumstances it would be more prudent to assume the State Government's own estimates which are, in all probability, more akin to ground realities. This figure is 74.48 lakh ha, which is a whopping 30.9 percent of the total geographical area. Taking into account the heavy demographic pressure and the rising requirement of land for both agricultural and non agricultural purposes/the need for recovering degraded lands assumes great urgency. At the same time it has also to be ensured that the existing cultivated lands do not get degraded. This anxiety, that has already appeared on the land use horizon, is now becoming a dark apprehension. On the one hand food security has to be ensured within the State and agricultural surpluses have to be generated for meeting food shortages elsewhere in the country and for exports. On the other hand, for steady and rapid economic development, great many non-agricultural land needs have to be met for a multiplicity of purposes- housing, industry, commerce urbanization, roads, offices/and institutional buildings, transportation, storages, sports, cultural activities, etc. Some experts are of the view that given

the magnitude, nature and intensity of the problem, it is not only desirable but vital to strike a balance between land use and development goals.

Table 19: Evolving landuse changes in U.P. (including Uttaranchal) 1950-51 to 1997-98

S.No.	Category	1950-51	1970-71	1998-99
1	Reporting area	29258	29806	29793
2	Forests	3194 (10.92)	4952 (16.61)	5112 (17.49)
3	Barren and uncultivable land	2887 (9.87)	1418 (4.76)	930 (3.12)
4	Land put to non-agricultural uses	1853 (6.33)	2034 (6.82)	2556 (8.58)
5	Culturable waste	2311 (7.90)	1345 (4.51)	896 (3.00)
6	Permanent pasture and other grazing lands	-	77 (0.26)	286 (0.99)
7	Land under misc. groves and trees	1414 (4.83)	1260 (4.22)	547 (1.84)
8	Current fallow land	1078 (3.68)	870 (2.92)	1029 (3.45)
9	Other fallow land	290 (0.99)	545 (1.83)	742 (2.49)
10	Net sown area	(55.48)	(58.06)	(59.06)

Table 20: Landuse pattern in UP (as reconstituted in 1999 following its division)

S.No.	Particulars(Categories)	Percentage distribution		
		1990-91	1997-98	2000-01
1	Reporting Area	100.00	100.00	100.00
2	Forest	6.99	7.36	7.00
3	Barren and unculturable land	3.04	2.65	3.00
4	Land put to non-agricultural uses	9.47	9.81	9.6
5	Culturable wasteland	2.94	2.42	2.93
6	Permanent pasture and grazing lands misc. groves and trees	1.67	1.51	1.69
7	Fallow lands (Old and Current)	7.80	7.12	7.0
8	Net sown area	68.09	69.14	69.1

3.1.2 History of Land Reclamation Efforts / Soil & Water Conservation Projects

History of Soil Conservation stared in India with the taking over of the village forests by the then British Administration of India in the middle of the 19th Century. Conservation of the forests was the task. Vegetative cover was promoted. Water conservation on the hill sides are drought affected uplands was a vital need for starting new plantations. The practice of contour ditching was started early in the history of the forest establishment.

Reclamation of land has a long history in Uttar Pradesh. For example, an early organized attempt made at ravine reclamation began as early as in 1884. It was initiated by Fisher, the then Collector of Etawah. Persuading local zamindars to hand over to the Government about 1200 ha of ravine lands, the area was successfully forested. Saline efflorescence appeared in

Western U.P (Meerut and Aligarh) in 1870s in proximity of canal systems. A 'Reh committee' headed by Reid was set up by the Government to investigate which suggested the deepening of canals, Providing of deep drainage and reduction in over-irrigation of farms. As a result some experimental work was undertaken in Kanpur and Aligarh districts, by way of leaching and application of farm yard manure in the affected fields. The use of gypsum arrived later towards the end of the 19th century. The use of molass es and pressmud got evolved still later in the 1930s

Ravine Lands

As for ravines, in independent India, the first pilot project in the State was also taken up in Dileepnagar area of Etawah as a Ford Foundation aided project. In 1950s came the UP-Rajasthan Afforestation Scheme to arrest the onslaught of the Thar desert . It achieved Limited success. An Integrated Programme of Ravine Reclamation began again in 1964 in the districts of Agra, Etawah, Jalaun, Hamirpur, and Mainpuri. From time to time both shallow as well as deep ravines were taken up for treatment and reclamation but the impacts achieved were sporadic and limited. There are no authentic figures available of the ravine areas fully reclaimed. However, it is reported that, during the last five decades about one lakh ha of ravine lands have been reclaimed or improved. That is a very small part of the total ravine area. The main problem thus still remains to be tackled in a time-bound and substantive manner. We still have nearly a million ha of ravine lands. There is also no reliable information available as to new areas claimed by advancing ravines. The whole picture is fuzzy.

Usar Lands

Nearly eight lakh ha of land are sodic in U.P. (Saline, alkaline and saline-alkaline). In the post-independence era, in the state, usar reclamation began in 1949. Thus Rahimabad, Rehamankhera and Katiyar in Lucknow and Dhakauni farm in Hardoi got established. In the mid-sixties work of usar reclamation began in Azamgarh, Ghazipur, Aligarh and Jaunpur districts. Research efforts were mounted by various central and state institutions (NBRI, Agriculture Universities, State Agricultural Research Farms, ICAR Stations, etc) the central and the State Governments have been funding many usar reclamation schemes for decades now. These, for example, included the Bhumi Sena Project, the centrally sponsored Land Reclamation schemes and some externally aided projects (World Bank, EFC, etc.). During the last decade some of the other important programmes of land treatment included the National Watershed Project, the treatment of Flood Prone Catchments of Gomti and Sone, the Centrally Sponsored Sodic Land Development Project, NABARD- Aided Watershed Programmes, DPAP, Integrated Wasteland Development Programmes, etc. According to State Development of Agriculture, from 1994-95 to 2002-03 nearly 11 lakh ha of land have been treated for reclamation under different programmes which are said to have resulted in many production as well as productivity gains. U.P.'s

Sodic Land Reclamation Project deserves a special mention here. The Bhumi Sudhar Nigam was set up in the state in the late seventies (1976). It undertook many reclamation activities. In 1993 a World Bank assisted Sodic Land Reclamation Project was taken up in hand which was, later, extended to a second phase in 1999. The areas covered included both barren alkaline lands and those under some kind of cropping in which productivity was markedly low due to salinity. It is reported that, till the end of the year 2002-03, a little over 1.60 lakh ha of such lands had been reclaimed. The second phase of the project is scheduled to be over by 2005. The main objectives of the project include reclamation, institution building at the local level and poverty alleviation. Local NGOs have been associated with the project to advantage. Crop yields are said to have shown very encouraging improvements with productivity levels achieved being higher than the state averages. The efforts of the Bhumi Sudhar Nigam have been in many ways markedly positive. However, the fact also remains that the area yet to be covered to recover the remaining sodic land of the State is still very high at, around 7 lakh ha. This is only a part of the picture. Two deeply worrying aspects of sodification need to be additionally considered here, namely:

i) Many waterlogged areas in the U.P. plains are progressing towards becoming alkaline for want of a correct water management strategy. And when we say water logged it does not mean only surface waterlogging. That is only a part of the problem-perhaps, a comparatively more manageable part. The bigger problem is that of sub-surface waterlogging. According to the recognized technical definition where water level below ground is less then 2 m, the area is said to be critically waterlogged; where it is between 2 to 3 m, it is semi-critically water logged. According to U.P.'s Ground Water Directorate, in the post-monsoon period of 1996, 43.92 lakh ha of land (21.84 per cent) fell in the category of 0-2 meter water level below ground range and 38.08 lakh ha in the 2-3 meter (18.94 per cent) range. That means 40.78 per cent of land in the U.P.Plains was waterlogged critically or semi-critically (Waterlogging, land Degradation and Drainages in Agriculture, Department of Irrigation, U.P.Draft Concept Paper, Dec. 2003). In such areas unless water management is focused upon reducing the ground watertable speedily the lands will progressively move towards greater Stalinization and consequent degradation.

ii) The next problem is of 'secondary usrisation' that is reversion of reclaimed sodic soils to alkalinity. According to the State Irrigation Department such a phenomenon can already be observed widely in "districts like Unnao, Rae Bareilly, Sultanpur, Hardoi, Barabanki,etc. where vast areas of user lands have been reconverted into barren user".

Waterlogged Lands

Waterlogging is yet another serious land degradation issue. It is generally connected to the problem of progressive alkalinisation of land, which accentuates unless the water stress is relieved. Apart from recurrent floods, there is the widespread problem of sub-surface as well as surface waterlogging in the State, especially in Eastern and Central U.P. The problem has its genesis in the rise of the water table above or very close to surface areas and absence of drainage. It is estimated that just a little under one third of land area in U.P. is affected by surface and sub-surface waterlogging. This is a problem that needs to be addressed with earnestness and dispatch. B.B.Vohra, in his book "Managing India's Water Resources" has said that throughout the world the area of land brought under new irrigation systems annually is almost equal to additional land which is subject to water –logging negating the benefits of additional irrigation. Water logging admittedly is a serious threat and a challenge of high magnitude. It needs to be dealt with on a priority footing. This should be an area of concern for water and land use planners. The key requirement is to reduce the water table in such areas and that would, inter alia, mean reduction in seepages or recharge and, simultaneously, the use of shallow tube wells for irrigation. We need reliable data on sub-surface waterlogging, appropriate water-management strategies (e.g. conjunctive use of water, or reducing canal irrigation in such areas on the one hand and increasing shallow acquifer groundwater pumping on the other for such areas), proper drainage, appropriate crop rotations, and even use of water absorbing hydropaths (tree species that absorb water e.g.,eucalypyus).

Other Problem Affected Lands

Besides special problem areas (usar, ravines and waterlogged lands) there are other degraded lands that need attention and treatment. These are eroded lands with or without scrub, degraded forest lands and pastures, mining/industrial wastelands, rocky areas and also some (limited) steep sloping areas, In U.P. after its division in 1990 when Uttaranchal was carved out of it, the proportion of forest cover has very sharply dwindled. While recorded forest is 7 per cent of the geographical area, actual cover is a mere 5.7 per cent and more than one third of it is just open scrub land. There is tremendous pressure on the less than meager forest cover in the State. We need a really massive afforestation programme in U.P. that should cover government forest lands, village commons and, importantly, farm forestry. At the national level a very massive afforestation programme is on the anvil. Uttar Pradesh must take every step to tap this national programme in a substantial measure if it is to improve its paltry forest cover. Massive afforestation can provide extensive employment opportunities, give us more fuel, fodder and timber, make possible development of herbal and medicinal plants, improve biodiversity, increase pasture and grassland cover, protect soil and water regimes and, much more importantly, protect the environment. In

developing forest resources people should be effectively and fully included as stakeholders and beneficiaries. That is how forest can be protected and developed as life supporting commons and environmental security providers.

Mining/Industrial Wastelands

Uttar Pradesh has small areas where mining is done industrial wastes (e.g.fly ash, industrial solids, etc.) get dumped on the land. Such areas occur in districts like Mirzapur, Sonbhadra, bijnor and at places where thermal power stations and industrial unit-clusters are located. Then there are areas that get degraded due to release of untreated effluents from sugar mills, distilleries, chemical, cement and paper plants, brick-making, etc. River beds are mined for sand, gravel and ballast. There can be no single prescription for the reclamation of mining/industrial wastelands. Some of such lands can be reclaimed by leveling of small areas at particular levels are depths through a series of graded bunds. Some can be green-covered or filled up by biomass wastes. The important thing is that, where meaning or industrial activity that degrades land are allowed, reclamation of the affected area must be a compulsory condition for permitting such operations and it should be enforced by law and strict regulation.

3.1.3 Pre-IWMP watershed programs

At present the watershed development programme activities are being handled by the department of Agriculture and the Land Development and Water Resources, Department of Uttar Pradesh Government. The Department of Agriculture has got 98 Soil Conservation Units, Ramganga Command Project 53 Units and Sharda Sahayak Command Project 44 Units. The Watershed development Programmes in the state were being taken up under U.P. Bhumi avam Jal Sanrakshan Act 1963 where as the Land Development and Water Resources Department of U.P. are working as per G.O.I's guidelines of 1994 and Hariyali Guidelines of 2003. Each of these organizations has got a well organized structure of units working in the districts with Deputy Directors at the Regional level and Additional Director, Soil Conservation under Director of Agriculture at state level in the Department of Agriculture and Administrators of Ramganga Command and Sharda Sahayak Command in their area of Jurisdiction. All the 71 Districts are covered under the following various watershed programmes.

Table 21: Pre-IWMP Projects

Sl.N0.	Name of Schemes	Sponsored by
1.	Integrated Wasteland Development Programme (IWDP)	Ministry of Rural Development, GOI Deptt. Of Land Resources
2	Drought Prone Area Programme (DPAP)	-do-
3	National Watershed Development Programme for Rainfed Area (NWDPRA)	Ministry of Agriculture and Cooperation Natural Resource Management (NRM) Division
4	River Valley Programme (RVP)/Flood Prone Area	-do-
5	Scheme of Watershed Development under **RIDF**	NABARD
6	Scheme of Watershed Development Programme under Watershed Development Fund (WDF)	NABARD
7	U.P. Land Reclamation Project	World Bank
8	Macro Management of Agriculture	Ministry of Agriculture, GOI
9	State Soil Conservation Programme	U.P. State
10	Kishan Hit Yojana	U.P.State
11	Mitigation of Drought through Rain Water Harvesting and better Water Management	U.P.State
12	Efficient Water Management	U.P.State

It is to be noted that the majority of the programmes are centrally sponsored i.e. by the Ministry of Agriculture and Ministry of Rural Development.

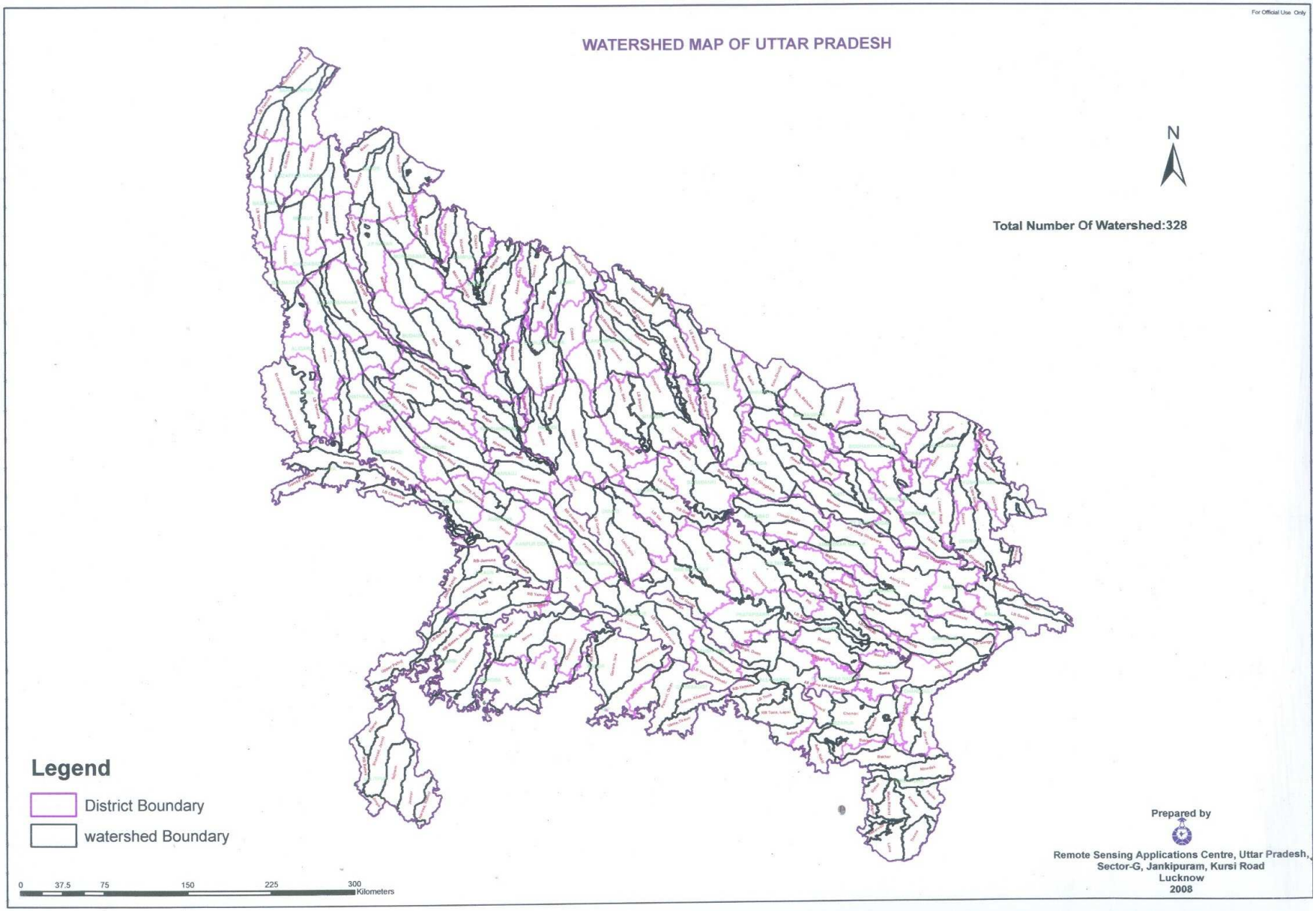
Status of Watershed Programme in the State

As per demarcation of Watershed & Micro Watersheds done by the State Remote Sensing Agency, the total number of Watersheds in the State is 328 & no's of Micro Watersheds are 21278 ranging from 1.02 ha. to 3477 ha. size. 4074 Micro Watersheds are overlapping in some adjoining districts.

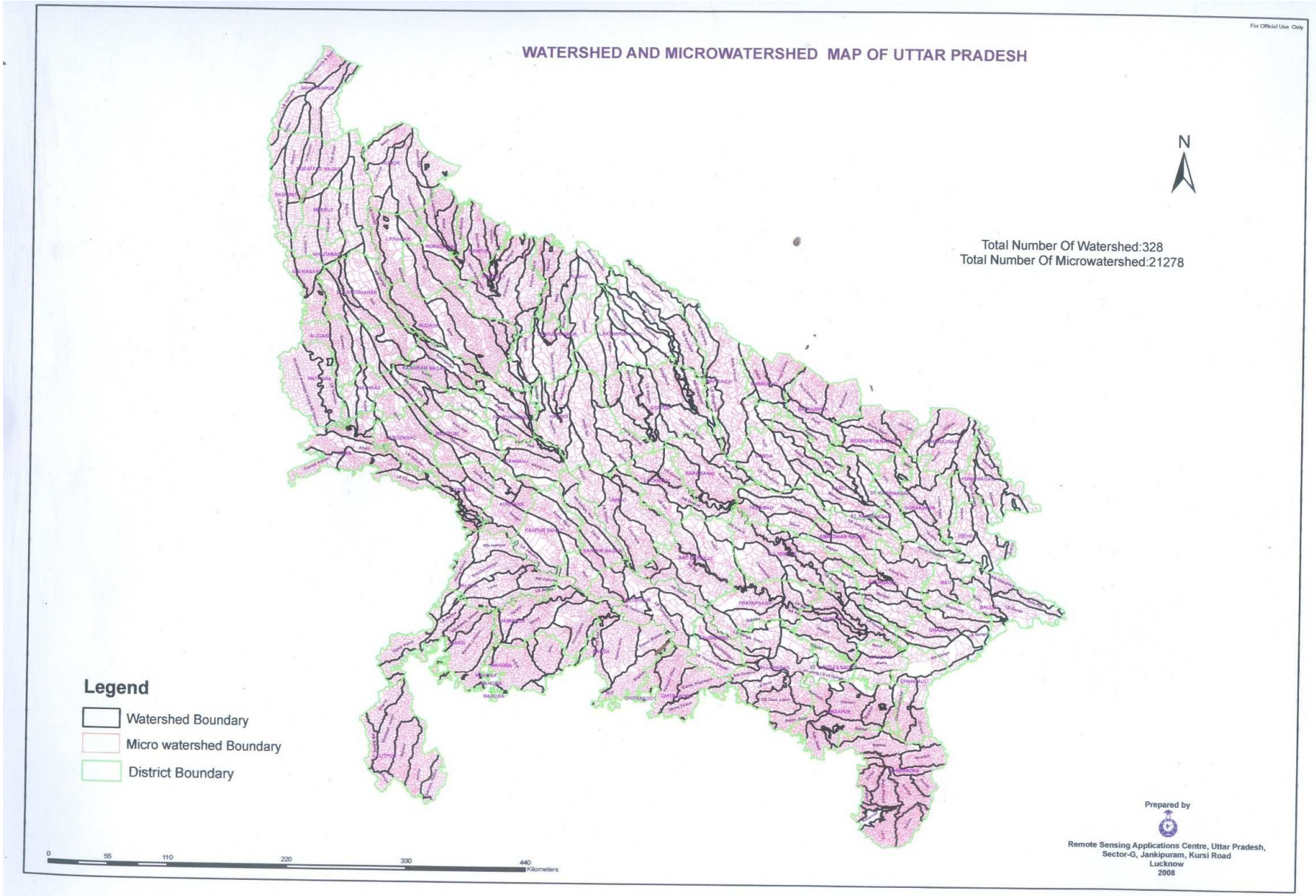
Watersheds and Micro Watersheds in the State are shown in Map

As pre IWMP Project, the two major watershed management activities i.e. DPAP and IWDP of the Ministry of Rural Development, Department of Land Resources, were in operation, wherein, total 1355 micro watersheds were covered with an area of 12.81 lac ha. within 63 Districts. The schemes of other Ministries (mostly Department of Agriculture, RIDF, and other State Government Schemes) were also in operation in 8660 micro watersheds covering an area of 83.28 lac. ha. within 63 Districts. Thus so far, total micro watersheds taken up are 10015 and area covered 96.09 lac ha within 63 districts.

Map 3- Watershed of Uttar Pradesh



Map 4 – Watersheds and Micro watersheds of Uttar Pradesh



Watershed Management Programms in Uttar Pradesh

- The watershed management programme in Uttar Pradesh started in sixth five year plan.
- Three project Tejpura-Jhansi, Randhar - Jalaun and Sitapur- Hamirpur were selected.
- Tejpura- Jhansi bagged "National Productivity award in 1986-87" by President of India.
- In 7th five year plan in 1988-89 seven Watershed in Jhansi, Hameerpur & Banda district were selected.
- In three other watershed of Mirzapur, Barailly and Jalaun programme was run with the help of University.

Details of Watershed Projects sanctioned by DoLR in the State -

DPAP

Project was in operation in 15 districts and 60 Blocks covering 1777 projects. Total area covered under this scheme was 8.45 lac hectares.

IWDP

Under this project the total number districts covered were 54 with 147 blocks The total area covered was 11.38 lac hectares.

3.1.4 Watershed Priority in Changing Scenario of State

Looking into the increase in the numbers of natural problems like drought, flodd, declining ground water table, stagnating crop productivity, soil health, soil and water losses, declining water storage and permanent vegetation cover etc and numbers of social problems like increasing unemployment, lack of work throughout the year, poverty and forced migration, the utmost concern of the state is to uplift the poor rural people. State govt. sees the IWMP as best option for the same.

The following tangible along with numbers of intangible benefits accrued due to implementation of watershed projects in the past. Now State is earnestly implementing IWMP projects with full will and determinations.

- Average productivity of dry land crops increased from 4.36 Qt/ha to 17.50 Qt/ha.
- Seed replacement rate increased from 2% to 41.2%
- Cropping intensity increased to 151% from 84%
- Life saving irrigation increased to 31% from 11%
- The water level in wells increased upto 2 to 3 meters.
- After evaluation of programme in 1988-89 Ariel watersheds in Bareilly and Randhar watershed in Jalaun, Gahrawa nala in Jhansi in 1989-90 and Kharaiya nala watershed in Jhansi in 1990-91 were given National Productivity Award.
- In 8th five year plan NWDPRA scheme along with Flood Prone River scheme were executed.
- The schemes were formulated on the principles of participatory watershed management.
- The project was executed with the help of Mitra Krishak Mandal (MKM.) These were constituted amongst the farmers of the watershed. These MKM's were responsible for project formulation and execution of programme with the help of beneficiary.
- In the 9th five year plan the watershed projects were executed with the help of watershed committees. These committees were constituted from the farmers of watershed committee. The participation of people was ensured at every stage of the project.
- In the 10th five year plan State Government executed several centrally sponsored and State sponsored project. These were all on participatory mode. The centrally sponsored project were executed though watershed Site Implementation Committee (SIC).
- In the 11th five year plan project were executed on similar pattern of 10th five year plan.

3.2.1 Water Resources

Out of 820 blocks in the state 76 comes under category of over exploited, 32 under critical stage and 104 under semicritical stage. At present, 10 IWMP projects are running under over exploited blocks 06 under critical stage blocks and 21 under semicritical stage blocks. The status of water resources in U.P. has been illustrated in table 22.

Table 22: Status of Water Resources in U.P.

1. Rain water precipitation average annual rainfall (depth)	1167 mm
Average annual rainfall (volume)	34.37 lakh ha m
2. Surface water resources River flow (grass)	13.77 lakh ha m
Utilizable	13.11 lakh ha m
Utilizable for irrigation	9.86 lakh ha m
Utilized at present	4.38 lakh ha m
3. Rain water dispersion Evaporation	6.01 lakh ha m
Ground water recharge	15.47 lakh ha m
River flow	12.89 lakh ha m
4. Ground water resources (dynamic)Annual grass recharge	8.42 lakh ha m
Utilizable for irrigation	7.15 lakh ha m
Utilized at present	4.01 lakh ha m
5. Ground water resources (static) Gross availability	8.80 lakh ha m
Utilizable for irrigation	7.48 lakh ha m

4. Methodology

Methodology is generally a guideline system for solving a problem, with specific components such as phases, tasks, methods, techniques and tools. It can be defined also as follows:

1. "the analysis of the principles of methods, rules, and postulates employed by a discipline";
2. "the systematic study of methods that are, can be, or have been applied within a discipline";
3. "the study or description of methods".

A methodology can be considered to include multiple methods, each as applied to various facets of the whole scope of the methodology. The research can be divided between two parts, they are qualitative research and quantitative research.

4.1.1 Objectives of Evaluation

Project evaluation is a systematic method for collecting, analyzing, and using information to answer questions about projects, policies and programs particularly about their effectiveness and efficiency. In both the public and private sectors, stakeholders will want to know if the programs they are funding, implementing, voting for, receiving or objecting to are actually having the intended effect (and to what cost). This definition focuses on the question of whether the program, policy or project has, as indicated, the intended effect. However, equally important are questions such as how the program could be improved, whether the program is worthwhile, whether there are better alternatives, if there are *unintended* outcomes, and whether the program goals are appropriate and useful. Evaluators help to answer these questions, but the best way to answer the questions is for the evaluation to be a joint project between evaluators and stakeholders.

The important objectives of evaluation for watershed projects are summarized below.

1- To obtain essential bench mark data related to the project and incorporating the same in DPRs.

2- To identify phase wise tangible outputs and behavioral out comes that can be used in the long term impact evaluation of project.

3- To suggest improvement and initiate timely actions.

4.1.2 Preparatory Phase Evaluation Protocol Process and Methodology

Since, there was no guidelines issued by DoLR, therefore, in this regards DoLR authorities were consulted and action was taken accordingly. Evaluation format was developed and Agencies were identified with the approval of Chairman SLNA. Evaluation agencies evaluated the projects physically by inspecting the working area, got interacted with PIA, WDT and checked records and minutes of meeting. Members of SHGs and UGs groups and other stakeholders were consulted. Evaluators submitted the report accordingly. Evaluation reports were scrutinized by Technical Experts of SLDC. The Project wise categorization and evaluating agency has been given in Table…….. In the future guidelines issued by DoLR will be followed.

4.1.3 Identification of the agencies and resources institution to undertake the study

SLNA has already identified the institutions and Agencies having expertise in watershed activities to take up evaluation work. Infect a panel of agencies and institutions will be submitted to National Agency and get it approved by them. Evaluation work will be assigned to only Approved Agencies.

4.1.4 Study Domain

A study domain is a major segment of the programme for which separate statistics are needed. A domain could consist of a geographical area such as a region. It could also comprise a specified category, such as a major region or ethnic group. The number of domains has an important bearing on the size and distribution of the sample. Normally, statistics are presented for different sub-groups of the programme, so called study domains. Here our study domains are the project for which evaluation is carried out. The List of those projects is given in the Table 23 shown below.

Table 23: Study Domain

Area in Ha.

S. No.	District	Name of the Project 2009-10	Area Proposed for treatment
1	2	3	4
Bundelkhand			
1	Banda	IWMP-I	5590
2		IWMP-II	5210
3	Chitrakoot	IWMP-I	6624
4		IWMP-II	5150
5		IWMP-III	5198
6	Hameerpur	IWMP-I	5020
7		IWMP-II	4817
8		IWMP-III	4820
9	Jalaun	IWMP-I	4500
10		IWMP-II	4600
11		IWMP-III	4200
12		IWMP-IV	4300
13		IWMP-V	4578
14	Jhansi	IWMP-I	6194
15		IWMP-II	6540
16		IWMP-III	4816
17	Lalitpur	IWMP-I	3850
18		IWMP-II	3700
19		IWMP-III	5000
20		IWMP-IV	5000
21	Mahoba	IWMP-I	5560
22		IWMP-II	5020
23		IWMP-III	4150
24		IWMP-IV	5160
25		IWMP-V	4660
26		IWMP-VI	5250
27		IWMP-VII	5493
	Total (Bundelkhand)		**135000**

S. No.	District	Name of the Project 2009-10	Area Proposed for treatment
1	2	3	4
	Non Bundelkhand		
1	Aligarh	IWMP-I	4959
2	Bulandshaher	IWMP-I	4229
3	Firozabad	IWMP-I	5132
4	Etah	IWMP-I	4081
5	Hathras	IWMP-I	4039
6	JP nagar	IWMP-I	5523
7	Kannauj	IWMP-I	4989
8	Kanpur Nagar	IWMP-I	6696
9	Mainpuri	IWMP-I	4004
10	Meerut	IWMP-I	4779
11	Muradabad	IWMP-I	6180
12	Muzaffernagar	IWMP-I	6995
13	Rampur	IWMP-I	6768
14	Saharanpur	IWMP-I	6849
15	Ambedkar Ngr	IWMP-I	5085
16	Azamgarh	IWMP-I	6839
17	Badaun	IWMP-I	5104
18	Barabanki	IWMP-I	7188
19	Bareilly	IWMP-I	5038
20	Basti	IWMP-I	4571
21	Deoria	IWMP-I	4304
22	faizabad	IWMP-I	5104
23	Fatehpur	IWMP-I	5205
24	Ghazipur	IWMP-I	4304
25	Gorakhpur	IWMP-I	3677
26	Kausambi	IWMP-I	5126

27	Kushi Nagar	IWMP-I	5864
28	Lakhimpur Kheri	IWMP-I	6837
29	Mirzapur	IWMP-I	4198
30	Pratapgarh	IWMP-I	6686
31	Raibareili	IWMP-I	6391
32	Sant Kabir Nagar	IWMP-I	3666
33	Shajahanpur	IWMP-I	6926
34	Siddharthngr	IWMP-I	6710
35	Sultanpur	IWMP-I	7091
36	Unnao	IWMP-I	6820
37	St.Ravidas Nagar	IWMP I	5082
38	Hardoi	IWMP I	5766
39	Auriya	IWMP I	6177
	Total (Non Bundelkhand)		**197957**
	Grand Total		**349982**

4.2.1 Scope of Evaluation

It was essential from project management point of view as it allowed to cross check the status of the project identified, drawbacks and strength offered, path of corrections/revision, gained knowledge, build expertise and shared experiences within and between the various groups of actors and stakeholders.

4.2.2 Sample Domain

The IWMP projects were selected in all eight climatic zone on the basis of priority laid down in Common Guidelines of Watershed Management, 2008. The priority area's were-rainfed area, low productivity of crops and animals, lack of quantity and quality of drinking water, declining ground water table, more BPL families, heavy migration, lack of microenterprises and livelihood options, heavy loss of soil and water due to erosion, lack of permanent vegetation, unorganized SHGs and UGs, rural infrastructure etc. Taking into consideration of all these bottleneck in the area IWMP projects were formulated to overcome and

minimize the problem so that villagers particularly landless, labour, marginal farmers and women can start their own means of survival throughout the year and not to think for migration from their villages. In addition to this where the urgent need of conservation, development and management of natural resources -soil, water and vegetation was realized, projects were taken up.

4.2.3 Evaluation Process

In order to increase the impact of IWMP's strategies, programmes and projects, reliable and useful feedback about ongoing and completed operations is needed, as well as the ability to analyse this feedback, derive relevant strategic implications, and ultimately. The Evaluation aspect will include physical, financial issues besides the Social Audit. It is expected that the evaluators will not act as inspectors but they will be facilitators to PIA's and watershed committee (W.C.)

Evaluators will emphasize on following up of guide lines for the Watershed Development Activities. This evaluation will be done annually at every stage of activity and final stages. The release of funds will be based on evaluation reports.

The post project evaluation will be basically to evaluate the outcome of the project activities after the implementation of project. This will help in assessing the projections made at the formation stage and actual results obtained on various parameters. This will help in taking up future watershed development activities as per the observation and suggestion of the evaluation agency.

4.2.4 Research Team

The following agencies and their team were authorized for evaluation.

1. Chandra Shekhar Azad University of Agriculture & Technology Kanpur – Through Directorate of Extension-Krishi Vigyan Kendra (KVKs) of various districts under university jurisdiction were involved.
2. Acharya Narendra Dev University of Agriculture & Technology, Kumarganj, Faizabad. -Through Directorate of Extension-Krishi Vigyan Kendra (KVKs) of various districts under university jurisdiction were involved.
3. Sarda Vallabh Bhai Patel University of Agriculture & Technology Meerut. -Through Directorate of Extension-Krishi Vigyan Kendra (KVKs) of various districts under university jurisdiction were involved.
4. SH Institute of Agriculture Science & Technology (Deem university) Naini, Allahabad-Through Directorate of Extension-Krishi Vigyan Kendra (KVKs) of various districts under university jurisdiction were involved.

5. State Institute of Rural Development, Lucknow through Soil Conservation and Water Management Unit.- Through District Training Centers.
6. Dr. N.S. Dhama Retd. Dy. Commissioner Ministry of Rural Development Govt. of India and his team.
7. Institute of Applied Research and Development 22/600 Kha, Indira Nagar, Lucknow (NGO).
8. Krishi Parsav Prashikshan Avam Gram Vikas Samiti, 551/k Krishi Nagar Alambagh, Lucknow (NGO).
9. National Research Centre for Agro Forestry, Jhansi.(ICAR Institute)

4.2.5 Tools & Techniques

1. PRA/RRA Techniques:-

After getting the first hand information from remote sensing regarding watershed and micro watershed locations to be taken base line data are collected by participatory rural appraisal (PRA) and rapid rural appraisal(RRA) techniques. For preparation of preliminary project report (PPR) with consultation of project community and secondary data of revenue records etc are taken into consideration. Detailed Project Report (DPR) is being prepared by comprehensive PRA and RRA exercises and collecting primary data by door to door and field to field survey.

2. Remote Sensing Techniques:-

In order to test the adequacy standards have to be fixed and to compare the MWS and to assign inter-se ranking of sampled MWS population one has to develop standards.

The risk analysis is done first by using a set of Adequacy Rating Classes (ARC) of green area and then it is further modified or made specific to region/ area with the perceived risks due to altitude, slope, blanks etc. Therefore, a second set of standards namely Risk Prone Classes (RPC) is developed.

The watershed falling in a lower ARC and/or in higher RPC would have high risk and would demand relatively more intensive package of interventions and vice versa. And this is needed in planning. But a shift of watershed to a still lower ARC or

to a still higher RPC will indicate further deterioration. On the other an upward shift in ARC or a downward shift in RPC would mean an improvement. This is required in impact assessment.

The analysis can be carried out with either GGA or EGA. To facilitate comparison over time and amongst different watersheds, the per cent GGA or EGA has been defined as a composite index namely Watershed Eco-Index (WEI). These have been evolved and used to assess the impact of a number of watershed development and eco-regeneration projects.

4.2.6 Synthesis of the State Report

Various SAUs, State and Central Govt. Institutions and NGOs evaluated the different IWMP projects of the state. These agencies have gone through Entry Point Activities done, SHGs/UGs formed, Watershed Development work done, Capacity Building Programme organized, financial and meetings record maintained. They have also interacted with various stake holders and gained knowledge about methodology adopted for planning and execution of works. The agencies also visited various site of works and took information about institutional arrangement. On the base of totality agencies categorized the status of projects as mentioned in 7.1.3.

4.2.7 Expected Outcomes

Since the evaluation in not just for checking the works and activities but also for facilitating the technical input and general guidance for improving the quality and pace of work. On the basis of feedback of various level stakes holders evaluation have also suggested measures to overcome the problem. PIAs and his staff, WDT, SHG, UG and other stake holders and beneficiaries are taking seriously and executing the projects in true spirit to achieve the objectives of the project.

5. Implementation Strategy of IWMP projects

As per common guidelines issued by the Govt. of India, the Project Implantation will be in the following 3 phases.

1- Preparatory Phase – 1 to 2 yrs.

2- Watershed work Phase – 3 to 5 yrs

3- Consolidation & Withdrawal Phase – 1 to 2 yrs

5.1.1 Preparatory phase

In fact this is very important phase of the watershed development programme and work as a foundation of the entire activities to be taken up in 2nd phase i.e. Implementation of works phase. This will include detailed data collection, PRA exercises, training for capacity building. The most important activity in this phase is to draw up detailed plan for entry point activities to be taken up to build up a rapport with the village community. In this phase based on available and generated data and identification of the problems and their prioritization a detailed project report (DPR) will be prepared. The SLNA in close coordination of WCDC take up the following activities before entering into the village.

- Massive awareness campaign.
- Preparation of communication and information packages for GPs and village communities.
- Training/Orientation of project functionaries (WCDC, PIAs) on the vision of the project, the processes, roles and responsibilities of each entity, and rules.
- Training of project functionaries on how to work with GPs and village communities in preparing a Plan (focus on process, roles and responsibilities, rules, from where to seek what information.)
- Development of training module for various levels of project functionaries.
- Selection of PIAs by SLNA/WCDCs.
- Formation of WDT by the PIAs.

Orienting Communities and GPs to the Programme:

By: PIA staff supported by communication activities by VO's.

When: Soon after village entry

- Entry of WDT into village to give basic information on the project
- Consensus among communities and GP to participate in the project

- Signing of MOU between the WC and PIAs intent to participate in the project as per the project rules and guidelines for participation and implementation.
- Social mobilization including PRA, at village and GP levels; facilitation by WDT.
- Use of communication tools such as print material, audio-visuals, folk performance to enhance awareness among the community.
- Help by WDT and community to carry out Participatory Communication Needs Assessment (PCNA) to identify communication gaps and develop measure and process to address them
- Community receives detailed information on watershed management, concept of community- driven and process-led development, concept of ownership and details of its contribution to the project.
- Information on the project such as vision and objectives, rules, roles and responsibilities of each entity, process of participation and implementation.
- Information sources such as posters and brochures
- Community receives complete information on financial allocation for its GP and details of the allocation formula
- Detailed information on how community will prepare the Watershed Development Plan and complete information on processes, rules and guidelines.

Selection and training of Secretary Watershed Committee:

Selection to be done by GP/GS; training by WCDCs

After sharing complete project-related information with GP & community

- Secretary needs to help WC and individuals maintain proper accounts and records, and facilitate smooth transfer of funds.
- GP/GS/WDT will be part of process to select Secretary.

- Basic criteria and qualifications for Secretary to be fixed by PIAs/WCDC
- The WC develops a set of roles and responsibilities for the Secretary WC in consultation with the WDT.
- The WDT will develop a list of three qualified persons from the GP/GS who are interested in working as the Secretary.
- The President WC will finalize the candidate from this list to work as the Secretary.
- The WCDC shall be responsible for providing adequate training to the selected candidate within four months.
- The Secretary will receive his/her honorarium directly from the PIA.
- The Gram Panchayat may terminate the services of particular Secretary if Gram Sabha passes a resolution to this effect. The WDT shall then make search for another Secretary at the earliest in consultation with the Gram Panchayat.

Capacity Building Activities

- Sensitization and training of project staff (SLNA/ WCDCs/ PIAs) and GPs to facilitate the implementation of a community driven watershed project.
- Comprehensive information, training and capacity building of individual and CBOs in the village communities to participate effectively in the project.
- Training of PIA staff, GPs and Watershed Committee, on the rules and regulations of the project.
- Training of Secretary Watershed Committees to provide services to the Watershed Committees.

Development of village Watershed Proposal:

Watershed Committee (WC) in consultation and guidance by WDT prepare the proposal.

This will be done after receiving complete information and initial training on the project

- The Watershed Committee of the Revenue Village (RV) is responsible for developing its proposal.

- Each member of the RV shall get the opportunity to present his/ her views on what activities should be included in the Proposal.
- The watershed committee and revenue village must thoroughly understand the rules and processes of the project.

Development of Gram Panchayat Watershed Development Plan (GPWDP)/ Detailed project Report (DPR):

This job will be done by WC in collaboration with WDT

- The WC receives Proposals from all its Revenue Villages and in consultation and guidance prepares (GPWDP)/DPR.
- The WC shall integrate all the Proposals and form a combined plan known as Gram Panchayat Watershed Development Plan (GPWDP). The WDT will facilitate in the structured presentation of the GPWDP so that it makes easy consolidation of data regarding the contents of the GPWDP at the level of PIA to ensure provision of budget as well as monitor the progress.
- The GPWDP shall include an implementation plan over years and withdrawal strategy after fourth /Fifth .year.

Review and appraisal of GPWDP:

Who: PIA & WCDC
When: After receiving proposed GPWDP from WC

- Receipt of the proposed GPWDP by WCDC
- Appraisal of the GPWDP by WCDC
- If any shortcoming is found or if the GPWDP proposes to spend beyond the financial ceiling set for the GP, then WCDC will send it back to the WC with written observations and recommendations.

- The WC shall consider these observations and recommendation and may make appropriate changes in its GPWDP and if need be may again go to Gram Sabha for approval.
- The final GPWDP shall be resubmitted to WCDC for approval.

Formation of SHG's

While preparing a watershed development plan, self help groups (SHG's) of women and landless laborers will also be formed in initial stages and they will be trained for taking up various income generating activities along with the training in maintenance of Accounts. The members of the groups will be motivated to take up monthly saving activity and inter loaning for their requirements. These groups, after their functioning for six months will be linked to Banks for their credit requirements for IGA.

Implementation Agency for Work:

The WC with the assistance of PIA functionaries will be the implementation agency of the work:

- The Gram Panchayat
- The Individual Farmer (Beneficiary) for the work to be executed on his individual land. (Individual will work as a executer, in such cases)
- User Group/SHG may be engaged for the activities to be implemented on common/community village assets or on individual land or asset, should the beneficiary have no objection to this arrangement. Revenue Village Committee may also work as a executing agency.

The First Right of implementation of each work under the project rests with village-level entities such as the User Group, SHG's and individual farmer. If these options are not available then the WC itself may decide to execute the works. **Contractors will not be engaged for execution of works.**

5.1.2 Watershed works phase

After taking up the activities in preparatory stage the Detailed Project Report (DPR) will be prepared. On the basis of DPR Annual Work Plan (AWP) will be prepared to start executing various soil and water conservation activities proposed under the works plan. Necessary sanction from the competent authorities of the estimates will be obtained and then only execution will be undertaken. It is worth mentioning over here that all the activities will be executed under the supervision of the watershed committee (WC) with the technical support of the PIA i.e. Bhumi Sanrakshan Adhikari Unit. This is main phase of the programme and the activities to be taken up in this phase will be as under:

1- Activities of Afforestation and planting, diversion drains etc. to control run off from upper reaches of the watershed.

2- Drainage line treatment with combination of vegetative and engineering structures including earthen check dams, brush wood check dams, gully plugs etc.

3- Construction of water harvesting structures.

4- Raising of plant and grass nursery.

5- In-situ moisture conservation activities like field and contour bunding, leveling etc.

6- Crop demonstrations and farmer to farmer distribution of improved seed varieties suiting to local areas.

7- Various income generating activities such as Animal raring, bee keeping, back yard poultry etc. through SHG's formed in the first phase.

8- Developments of water bodies for fisheries and protective irrigation.

9- For implementation of Agricultural Demonstration and allied activities suitable qualified agricultural graduates/post graduates will be appointed on contract basis.

10- The project activities proposed includes the Horticultural crops.

11- Animal husbandry activities like fodder development, improvement of breed and cattle health will be an integral part of the plan.

12- Plantation on field boundaries, Agro forestry and growing medical plants are proposed to be taken up in the project.

13- Convergence of allied department activities.

14- Convergence of allied Departmental activities.

In fact the project will promote **farming system approach.**

Over and above this, bio-fuel plantations, non conventional energy activities will also be taken up in this phase. Some of the activities can be taken up by having convergence of funding and activities of other department and schemes such as NAREGS, BRGF etc.

Convergence

Convergence is proposed with NREGS, BRGF & others. It is expected that around Rs. 256.00 crores would be available through convergence of these schemes. Details are given in **Table 24**

Table- 24: Details of Convergence of IWMP with other Schemes

1	2	3	4	5		6	7
S. No.	Name of the District	Names of Departments with Schemes converging with IWMP	Funds to be made available to IWMP due to convergence (Rs. Crores)	Was this fund included in Rs.12,000/15,000 per ha.		Name of activity/task/structure to be undertaken with converged funds	Level at which decision for convergence was taken$
				Yes	No		
1	All districts	BRGF,NREGS & Others	258-00	0	No	Soil & moisture conservation / structure	MORD, G.O.I.

5.1.3 Consolidation and Withdrawal Phase

After the creation of assets and implementation of the various works in the project area consolidation and withdrawn phase starts. The WC and the SHG's and User Groups are expected to take up further activities and management and maintenance of the assets created. Watershed Development Funds (WDF) will be properly utilized for maintenance of assets created under the project. The following activities are expected in this phase.

1- Consolidation and maintenance of various works.

2- Management of developed natural resources.

3- Intensification and improvement of farm production system, off farm livelihood activities taken up by SHG's.

4- Maintenance of Assets.

5.2.1 Financial Management

Initially the WC will get funds for implementation from the project through their WCDC and will also have to collect the beneficiary contributions as agreed to with SLNA. In the beginning 10% of the funds required as per Annual work plan will be provided to W.C. The Funds made available to WC by the project will be of two kinds.

1-Implementation Fund

2-Revolving Fund

Besides this, fund generated by the WC will be watershed Development Fund (WDF) for which separate bank account will be maintained. In fact this, fund will be utilized in the last phase for maintenance of assets.

5.3.1 Implementation Fund:

Implementation Fund will be the grant transferred to the WC for the implementation of Project activities. As such major amounts received by the WC will be under this head. This fund will be used only for the activities proposed in the Project. The amount will be received in a separate Bank Account i.e. **`Watershed Management Committee Account** which will be operated by chairman and Secretary of WC jointly.

Revolving Fund:

This fund relates to the amounts transferred to the WC for the purpose of enhancing financial capacity of the SHG's formed in the village. The amount will be received by the WC in its `**Watershed Revolving Fund Account'.**

Watershed Development Fund:

The user charges shall be credited to the W.D.F. for maintenance of the asset during the project.

Flow of Funds to the WC:

On-Account payment to the extent of 10% of the Annual Work Plan shall be given at the beginning of the Project to the WC. It will be however adjusted on completion of the GPWDP cycle. Funds will be provided as per requirements on the basis of funds utilized.

Reimbursement of Cost of Works:

During implementation of Project, reimbursement of expenditure on works shall be made on submission of monthly financial statements. All expenditure made as per the agreed work plan and GWDP; incurred during the month will be reimbursement by the WCDC. In the event that the money is completely spent before the end of the month, the WC can submit the financial statements before the end of the month to get the reimbursement.

Estimates and Technical Sanction:

Estimates will be prepared in coordination with WDT and sanctions will be obtained for the proposed works from competent authority to be decided by WCDC. Payment of works will be done after proper measurements and its verifications by the technical experts of WDT.

5.3.1 Livelihood concerns

The State has got 76 percent marginal farmers and 14 percent small farmers. It is expected that the project areas may also have the same status of the farmers owning the land in the project areas. Besides this there are number of landless agricultural labourers who may not get direct benefits from the project activities. In order to have their participation and to improve the livelihood opportunities to all the people belonging to watershed areas, they will be organized in groups and provided training for taking up **Income Generating Activities** (IGA) to enhance their income and improve their likelihood.

In order to improve the production and productivity in different crops, activities like Integrated Plant Nutrient Management (IPNM), Integrated Crop Management, Integrated Water Management, and Integrated Pest Management (IPM) will be promoted in the project areas by providing training, and demonstration. In fact, since the farmers are having small holdings, **farming system approach** will be adopted in which_animal husbandry activities, vegetables growing, growing of medicinal plants etc. will be promoted in the project areas which will improve the income levels of the farmers.

In order to provide benefits to landless laborers and women in project areas, they will be organized into the Self Help Groups (SHG's). These SHG'S will be provided training in various types of income generating activities like raising of milch Animals, Backyard Poultry, Sheep and goat raring etc. Besides this women will be trained in tailoring, garment manufacturing, food is processing like sattu, bari, pickle making activities etc. All these activities will be planned systematically and will be provided backward and forward linkages. These Income Generating Activities (IGA) will improve the income of these women and landless labourers.

In order to start the various IGA's, the groups may require revolving funds to begin with. This fund will be provided as loan with no interest. Once the group starts generating funds, this loan will be returned in installments. These revolving funds will be provided in rotation to different SHG's. They will be encouraged to have regular saving habits to create and generate their own funds in a systematic way. Training in maintenance of accounts will also be provided to these groups.

Necessary funds are proposed for training and revolving fund. Further additional funds will be arranged through bank linkages of the groups.

The SHG's that can take up the following activities in the project areas which are mentioned below.

1. Horticulture- Vegetable Production, Mushroom cultivation and Floriculture.
2. Food processing, preservation, pickle making, manufacture of soybean by-products and bakery.
3. Cultivation of medicinal plants.

4. Fiber handicraft, plate/rope making, Carpet making.
5. Livestock production (backyard poultry, goat/sheep units), Dairy unit-processing plants.
6. Fisheries.
7. Beekeeping
8. Forest/horticulture nurseries.
9. Seri Culture.
10. Varmi culture
11. Tailoring with shared/individual owned sewing machine, setting up individual /jointly owned shops or tea-stalls and production of tools for artisan activities.

These activities will be chosen as per market demand and the skill will be developed amongst the members of SHG's through training for different activities.

In order to give support to the groups formed, they will be organized in clusters and federation. This will help in giving marketing support for disposal and sale of the various items produced with different Income Generating activities.

6. Institutional Arrangement

In accordance to the provisions of new common guidelines for implementation of Integrated Watershed Management Programme, an appropriate institutional arrangement would be made at various levels for effective decision making and professional management of the project.

6.1.1 State Level Nodal Agency (SLNA)

The Govt. of Uttar Pradesh has constituted State Level Nodal Agency (SLNA) under the chairmanship of Agriculture Production Commissioner to implement new Common Guidelines **(Appendix-I)**. The SLNA will be having an independent bank account. Central assistance for SLNA will be transferred directly to the account of SLNA. The SLNA will sign an MOU with the Departmental Nodal Agency setting out mutual expectations with regard to performance, timelines and financial parameters including conditions related to release of funds by SLNA. The SLNA will be required to review the programme and provide enabling mechanism to set up State Data Cell and ensure regular reporting to the Central Government/ Nodal Agency at the central level in the Department. There would be multidisciplinary professional support team at the State level to implement the programme. The State Level Nodal Agency is having a full-time CEO, who is a serving Government officer and is also the Chief Project Director, Watershed Development Programmes of Uttar Pradesh.

The SLNA consists of one representative from the NRAA, one representative from the Central Nodal Ministry, one representative from NABARD, one representative each from the State Department of Rural Development, Agriculture, Animal Husbandry, Rural Engg. Service, Forest, Milk Development, Panchayat Raj, Horticulture, Professor & Head Forestry Deptt. of C.S. Agricultural University, Kanpur, Joint Director SIRD, Bakshi Ka Talab, Deptt. of Land and Water Management, and allied sector, one representative from Ground Water Board and one representative from an eminent voluntary organization and two professional experts from research institutes/academics of the State. There is also representation from NREGS, BRGF and other related implementing agencies at the state level.

The SLNA will sanction watershed projects for the State on the basis of approved State Perspective and Strategic Plan as per procedure in vogue and oversee all watershed projects in the state within parameters set out in Government of India Guidelines.

A Team of 4 to 7 professional experts would be nominated to assist the State Level Nodal Agency. This team would be selected by the State Level Nodal Agency from the line departments/retired professionals. Their disciplines will, inter-alia, include

agriculture, soil conservation/water management, capacity building, social mobilization, information technology, administration and finance /accounts, etc. A requisite number of technical administrative staff would be deputed to support this team of experts.

The State level Nodal Agency will be assisted by the Ramganga and Sharda Sahayak Development Authorities along with the department of Agriculture for implementation of the proposed watershed development programme under the perspective plan.

The Main functions of the SLNA will be:

a) Prepare a perspective and strategic plan of watershed development for the state on the basis of plans prepared at the block and district level and indicate implementation strategy and expected outputs/outcomes, financial outlays and approach the Nodal Agency at the central level in the Department for appraisal and clearance.

b) Establish and maintain a state level data cell from the funds sanctioned to the State, and connect it online with the National Level Data Centre.

c) Provide technical support to District Watershed Development Units (WCDC) of the state.

d) Approve a list of independent institutions for capacity building of various stakeholders within the state and work out the overall capacity building strategy in consultation with NRAA/Nodal Ministry.

e) Approve Project Implementing Agencies identified/selected by WCDC/District Level Committee by adopting appropriate objective selection criteria and transparent systems.

f) Establish monitoring, evaluation and learning systems at various levels (Internal and external/independent systems).

g) Ensure regular and quality on-line monitoring of watershed projects in the state in association with Nodal Agency at the central level and securing feedback by developing partnerships with independent and capable agencies.

h) Constitute a panel of Independent Institutional Evaluators for all watershed projects with the state, get this panel duly approved by the concerned Nodal Agencies at the central level and ensure that quality evaluations take place on a regular basis.

i) Prepare State Specific Process Guidelines, Technology Manuals etc. in coordination with the Nodal Ministry/NRAA and operationalise the same.

j) Overall management and coordination with different agencies for implementation of the programme in the State.

6.2.1 Watershed cum Data Cell (WCDC)

As per common guide lines where the project area is less than 25000 hectare WCDC will continue to oversee the watershed development programme. In districts where the coverage of area under watershed development work is more than 25000 hectare separate WCDC will be established under the Chairmanship of Dirstict Magistrate. The WCDC will oversee the implementation of watershed programme in each district and will have separate independent account for this purpose. WCDC will function in close co-ordination with the District Planning Committee. There will also be representation in WCDC from NREGA and other implementing agencies at the district level.

WCDC would function as separate unit with full time Project Manager and 3 to 4 subject matter specialists in Agriculture, soil conservation/Water Management/Social Mobilization/Management & Accounts appointed on the basis of their qualification and expertise on contract/deputation/transfer etc. The Chief Development Officer will act as a Project Manager, WCDC as per present arrangements. If open market recruitment is necessary, this will be done by the SLNA. In such cases, the Project Manager, WCDC will sign a contract (for a period not less than three years) with SLNA that will spell out well-defined annual goals, against which his/her performance will be constantly monitored. The arrangements for setting up/strengthening the WCDCs/Districts Data Cell will be financially supported by the Government of India after review of available staff, infrastructure and the actual requirement.

The main functions of WCDC will be as follows:

a) Identify potential Project Implementing Agencies (PIAs) in consultation with SLNA as per the empanelment process as decided by the State Government.

b) Take up the overall responsibility of facilitating the preparation of strategic and annual action plans for watershed development projects in respective districts.

c) Providing professional technical support to Project Implementing Agencies (PIAs) in planning and execution of watershed development projects.

d) Develop action plans for capacity building, with close involvement of resource organizations to execute the capacity building action plans.

e) Carry out regular monitoring, evaluation and learning.

f) Ensure smooth flow of funds to watershed development projects.

g) Ensure timely submission of required documents to SLNA /Nodal Agency of the Department at central level.

h) Facilitate co-ordination with relevant programmes of agriculture, horticulture, rural development, animal husbandry, etc with watershed development project for enhancement of productivity and livelihoods.

i) Integrate watershed development projects/plans into District Plans of the district Planning Committees. All expenditure of watershed project would be reflected in district plans.

j) Establish and maintain the District Level Data Cell and link it to the State Level and National Level Data Centre.

k) Management & coordination for implementation of programme in the district.

Role of Panchayati Raj Institutions at district and Block levels:

The full responsibility of overseeing the watershed program within the district will lie with the WCDC which will work in close collaboration with the District Planning Committee (DPC). The DPC will provide full governance support to the programme. The DPC will approve the perspective and annual action plans relating to watershed projects in the district. DPC will integrate the watershed development plans with over all district plans and also oversee its implementation. WCDC will help the DPC in providing oversight and ensuring regular monitoring and evaluation of the programme. The District Panchayat/Zilla Parishad will have an important role of governance in matter relating to the co-ordination of various sectoral schemes with watershed development projects, review of progress, settling disputes etc.

Similarly, Block Panchayats have an important role in planning the watershed development projects at the intermediate level. They can also provide valuable support to PIAs and Gram Panchayats/Watershed Committees in technical guidance with the help of their subject matter specialists.

6.3.1 Project Implementation Agency (PIA)

SLNA will select and approve the PIAs following appropriate mechanisms for District. PIA's may include Line Departments, Autonomous Org. under State/ Central Govt., Govt. Institutions/ Research bodies, Block Panchayats, Voluntary Org. (V.O.'s)

However U.P State is having quite a good no. of regular BSA units functioning in the districts. In majority of the cases they are proposed to Act as PIA's.

1) PIA i.e. BSA units are having experience in watershed related aspects and management of watershed development programme.

2) PIA/BSA unit will constitute dedicated Watershed Development Teams.

Voluntary Organizations (VOs):

Voluntary Organizations will have an important role in the program and their services will be utilized specially in the areas of awareness generation, capacity building, IEC and social audit among others. Women representative of VO's will be included in WDT for these activities. The selection of VO's will be done after taking into consideration their expertise on above aspects as well as in group formation.

It is worth mentioning that the State of U.P has about 200 soil conservation units/BSA units under Command Area Development Projects of Ramganga and Sharda Sahayak Command along with the Department of Agriculture. As such at this moment the services of VO's may not be necessary. However for creating awareness, formation of SHGs and UGs, the services of VO's will be taken up and the panchayat, Govt agency and nominated expertise will work in co-ordination for implementation of the programme.

Concerned soil conservation units (BSA Units) which will works as PIA will sign a contract/MOU with the concerned WCDC. It will spell out well-defined annual outcomes, against which the performance of each PIA/BSA unit will be monitored each year and evaluated on a regular basis by institutional evaluators from a panel approved by the SLNA / Departmental Nodal Agency at the central level.

Each PIA must put in position a dedicated watershed development team (WDT) with the approval of WCDC. The WDT will be constituted out of the staff available with BSA units. As regards Social /Women members of the WDT, women representative from VO's will be inducted in the team . The composition of the WDT will be indicated in the contract/MOU. No programme funds as per DPR and proposed watershed works, under any circumstances would be released to either the PIA or Watershed Committed (WC) unless the composition of the WDT has been clearly indicated in the MOU/contract and the team members are fully in place.

Roles and Responsibilities of the PIA

The Project Implementing Agency (PIA) will provide necessary technical guidance to the Gram Panchayat for preparation of development plans for the watershed through Participatory Rural Appraisal (PRA) exercise, undertake community organization and training for the village communities, supervise watershed development activities, inspect and authenticate project accounts, encourage adoption of low cost technologies and build upon indigenous technical knowledge, monitor and review the overall project implementation and set up institutional arrangements for post-project operation and maintenance and further development of the assets created during the project period

The PIA/BSA unit after careful scrutiny shall submit the Action Plan for Watershed Development Project for approval of the WCDC and other arrangements. The PIA /BSA unit shall submit the periodical progress report to WCDC. The PIA shall also arrange physical, financial and social audit of the works undertaken. It will facilitate the mobilization of additional financial resources from other government programmes, such as NREGS, National Horticulture Mission, BRGF etc

6.3.2 Watershed Development Team (WDT):

The BSA unit will form a WDT for each Micro Watershed in which one women member will be nominated from the selected V.O. Each WDT should have at least four members, broadly with knowledge and experience in agriculture, soil science/conservation water management along with social mobilization and institutional building. This work of social mobilization and institutional building will be assigned to V.O. and its representative in the WDT. At least one of the WDT members would be a woman. The WDT members should preferably have a professional degree. However, the qualification can be relaxed by the WCDC with the approval of SLNA in deserving cases keeping in view the practical field experience of the candidate. The WDT should be located as close as possible to the watershed project. At the same time, it must be ensured that the WDT should function in close collaboration with the team of experts at the district and state level. The expenses towards the salaries of the WDT members shall be charged from the administrative support to the PIA. WCDC will facilitate the training of the WDT members.

Roles and responsibilities of WDT:

The WDT will guide the Watershed Committee (WC) in the formulation of the watershed action plan. An indicative list of the roles and responsibilities of the WDT would include among others the following.

1. Assist Gram Panchayat/Gram Sabha in constitution of the Watershed Committee and their functioning.

2. Organizing and nurturing User Groups and Self-Help Groups.
3. Mobilizing women to ensure that the perspectives and interests of women are adequately reflected in the watershed action plan.
4. Conducting the participatory base-line surveys, training and capacity building.
5. Preparing detailed resources development plans including water and soil conservation or reclamation etc. to promote sustainable livelihoods at household level.
6. Common property resources management and equitable sharing.
7. Preparing Detailed Project Report (DPR) for the consideration of Gram Sabha.
8. Undertake engineering surveys, prepare engineering drawings and cost estimates for any structures to be built.
9. Monitoring, checking, assessing, and undertaking physical verification and measurements of the work done.
10. Facilitating the development of livelihood opportunities for the landless.
11. Maintaining project accounts.
12. Arranging physical, financial and social audit of the work undertaken.
13. Setting up suitable arrangements for post-project operation, maintenance and future development for assets created during the project period.

6.4.1 Watershed Committee (WC)

The Gram Sabha will constitute the Watershed Committee (WC) to implement the Watershed project with the technical support of the WDT in the village. The Watershed Committee (WC) has to be registered under the Society Registration Act, 1860. The Gram Sabha may elect/appoint any suitable person from the village as the Chairman of Watershed Committee. The secretary of the Watershed Committee (WC) will be a paid functionary of the Watershed Committee (WC). The Watershed Committee (WC) will comprise of at least 10 members, half of the members shall be representatives of SHGs and User Groups, SC/ST community, women and landless persons in the village. One member of the WDT shall also be represented in the

Watershed Committee (WC). Where the Panchayat covers more than one village, they would constitute a separate subcommittee for each village to manage the watershed development project in the concerned village. Where a watershed project covers more than one Gram Panchayat, separate committees will be constituted for each Gram Panchayat. The Watershed Committee (WC) would be provided with an independent rented office accommodation.

The Watershed Committee will open a separate bank account to receive funds for watershed projects and will utilize the same for undertaking its activities. The expenses towards the salaries of the WDT members and Secretary of Watershed Committee (WC) shall be charged from the administrative expenses under the professional support to the PIA.

Secretary, Watershed Committee:

The Secretary of the Watershed Committee (WC) will be selected in meeting of the Gram Sabha. This person would be an independent paid functionary different and separate from the Panchayat Secretary. He would be a dedicated functionary with no responsibilities other than the assistance to the Watershed Committee (WC) and would work under the direct supervision of the President of Watershed Committed (WC) and would be selected on the basis of merit and experience. The expenses towards the honorarium to be paid to Secretary of Watershed Committee (WC) will are charged from the administrative support to the PIA. The Secretary will be responsible for the following tasks:

- Convening meetings of the Gram Sabha, Gram Panchayats, Watershed Committee for facilitating the decision making process in the context of Watershed Development Programme.
- Taking follow-up action on all decisions.
- Maintaining all the records of project activities and proceedings of the meetings of Gram Panchayat, watershed committee (WC) and other institutions for Watershed Development Project.
- Ensuring payments and other financial transactions.
- Signing the cheques jointly with the WDT nominee on behalf of the watershed committee.

6.4.2 Self Help Group (SHG):

The Watershed Committee would constitute SHGs in the watershed area with the help of WDT/VO from amongst poor, small and marginal farmer households, landless/asset less poor agricultural labourers, women, shepherds and SC/ST persons. These groups shall be homogenous groups having common identity and interest who are dependent on the watershed area for their livelihood. Each self help group will be provided with a revolving fund of an amount to be decided by the nodal ministry.

6.4.3 User Group (UG):

The Water shed Committee (WC) shall also constitute User Groups in the watershed area with the help of WDT/VO. These shall be homogenous group of persons 'most effected by each work/activity and shall include those having land holdings within the watershed areas. Each User Group shall consist of those who are likely to derive direct benefits from the particular whatershed work or activity. The Watershed Committee (WC) with the help of the WDT shall facilitate resource-use agreements among the User Group based on the principles of equity and sustainability. These agreements must be worked out before the concerned work is undertaken. It must be regarded as a pre-condition for that activity. The User Groups will be responsible for the operation and maintenance of all the assets created under the project in close collaboration with the Gram Sabha.

Panchayat & Gram Sabha:

The gram panchayat would perform the following important functions:

- Supervise, support and advise Watershed Committee from time to time.
- Authenticate the accounts/expenditure statements of watershed.
- Facilitate the convergence of various projects/ schemes to watershed development project.
- Maintain asset registers under watershed development projects with a view to retain it after the watershed development project.
- Provide office accommodation and other requirements of Watershed Committee.
- Allocate usufruct rights to deserving user groups/ SHGs over the assets created.

Village Community and GP: will plan and implement the project through the notified watershed committee.

WCDC/ DRDA: Provide overall co ordinations and assist the village communities & GPs

PIA Carry out social mobilization, may provide technical assistance and undertake other activities as agreed to with GPs.

Detais of SLNA, Chairperson & C.E.O are presented in **Table 24 .**

Table- 24 a: Details of Chairperson & CEO of SLNA

1	2	3	4	5
S. No.	**State**	**Date of Notification**	**Type of SLNA**	**Total no. of members of SLNA**
1	U.P	25.02.2009	Department	18

Table- 24 b: Details of Chairperson & CEO of SLNA (Contd...)

7		8				
Chairperson		**CEO**				
Name	**Designation**	**Name**	**Designation**	**Nature of appointment**	**Tenure (No. of years)**	**Contact Ph. No./ Fax/ E-mail**
Sri Alok Ranjan	APC	Sri Anand kumar Singh	Joint Secretary	State Govt. Officer	Up to Posting	0522- 2213001,2235264 ceoldwrlu-up@nic.in

6.5 Capacity Building

Capacity building support is a crucial component to achieve the desire result from Watershed Development Programme. Uttar Pradesh has the distinction of implementing a large number of watershed projects for a long time and has been addressing the critical issues associated with the watershed programmes. Participatory watershed management for conserving rain water and other valuable natural resources is quite promising. New guideline for watershed development programme issued by govt. of India in April 2008 is an important step to converge, harmonize and rationalize development of land & water resources.

Capacity building would be a continuous process enabling functionaries to enhance their knowledge and skill and develop the correct orientation and perspectives thereby becoming more effective in performing their roles and responsibilities.

In execution of Watershed Programme in the past, it has been found that lack of trained personnel's of implementing agency, community organization and PRI functionaries has adversely affected the watershed development programme. It has been experienced that the sanctioned projects are not completed within the time frame and funds are not utilized properly. This is happening due to lack of proper training, lack of awareness and improper capacity building of above three institutions.

The training programme of watershed development may be divided into two distinct parts, one is formal and the other is informal. The formal training is to be imparted at the selected institutes and informal training to be provided at the watershed level by the WDT/Mobile training team during the informal discussions on a weekly or fortnightly basis with the various groups.

Generally no institutional arrangements are required for village level training programmes except than to identify nearby institution/agency which should be able to provide the institutional support by making available the multimedia and other audio/video facilities through mobile team.

Formal Training

The formal training has to be given in the institutions. This again can be divided into two parts. Some functionaries could be given training at the district level or at best at a regional level by combining three or four districts by District Training Support Organization. The other group, like members of WDT, members of PIA, District Watershed Development Unit (WCDC) officers could be provided training at the state level. It would be useful to organize training workshops at the state and districts for members of Zila Parishad, district level officers and members of Block Panchayat and Block level officers. The workshop will be common for the elected representatives and officers so that there is sense of participation in the common programme. The

exchange of idea, would also help in taking corrective measures. One such workshop could be organized every year at State and Commissionary (Divisional level).

In the guidelines for watershed developments there is provision for spending 5% of the project cost on training. This should include expenditure on training of formal and informal of all the functionaries indentified at the micro watershed level as well as members of WCDC, PIAs and WDTs.

The middle level and senior officers in the Project Implementing Agency (PIA) will be trained at state and national level institutions and agricultural universities for giving a proper importance to technical aspects in the programme.

Objectives of Formal training:

1. To develop proper conceptual understanding about participatory management of watershed programme.
2. To create necessary skills and competence among the officials and office bearers of PRI/PIA about planning (DPR) and implementation of various watershed activities.
3. To build necessary confidence, skills and capability among the stakeholders in the efficient management of the watershed programme.

Proposed IWMP Training Structure

A- FORMAL TRAINING of Management of Watershed Programmes and Technical aspects.

(FOR SLNA & STSO) – (Senior Officers and TOT)

National Level Training Institutes

NIRD, Hyderabad, Soil Conservation Training Centre Dehradun,

MANAGE- Hyderabad Central Dry Land Research Institution, Hyderabad Central Arid Zone Research Institute, and Jodhpur etc.

↓

(FOR WCDC<PIA<WDT)

State level Training Support Organization (STSO)

LD & WRD Institute, Lucknow, SIMA Rehmankhera, Lucknow, Agril. Universities, SIRD Lucknow

↓

(FOR PROJECT LEVEL TRAINING-WC/WS/VLF)

District Level Training Support Organizations:

B- INFORMAL TRAINING-

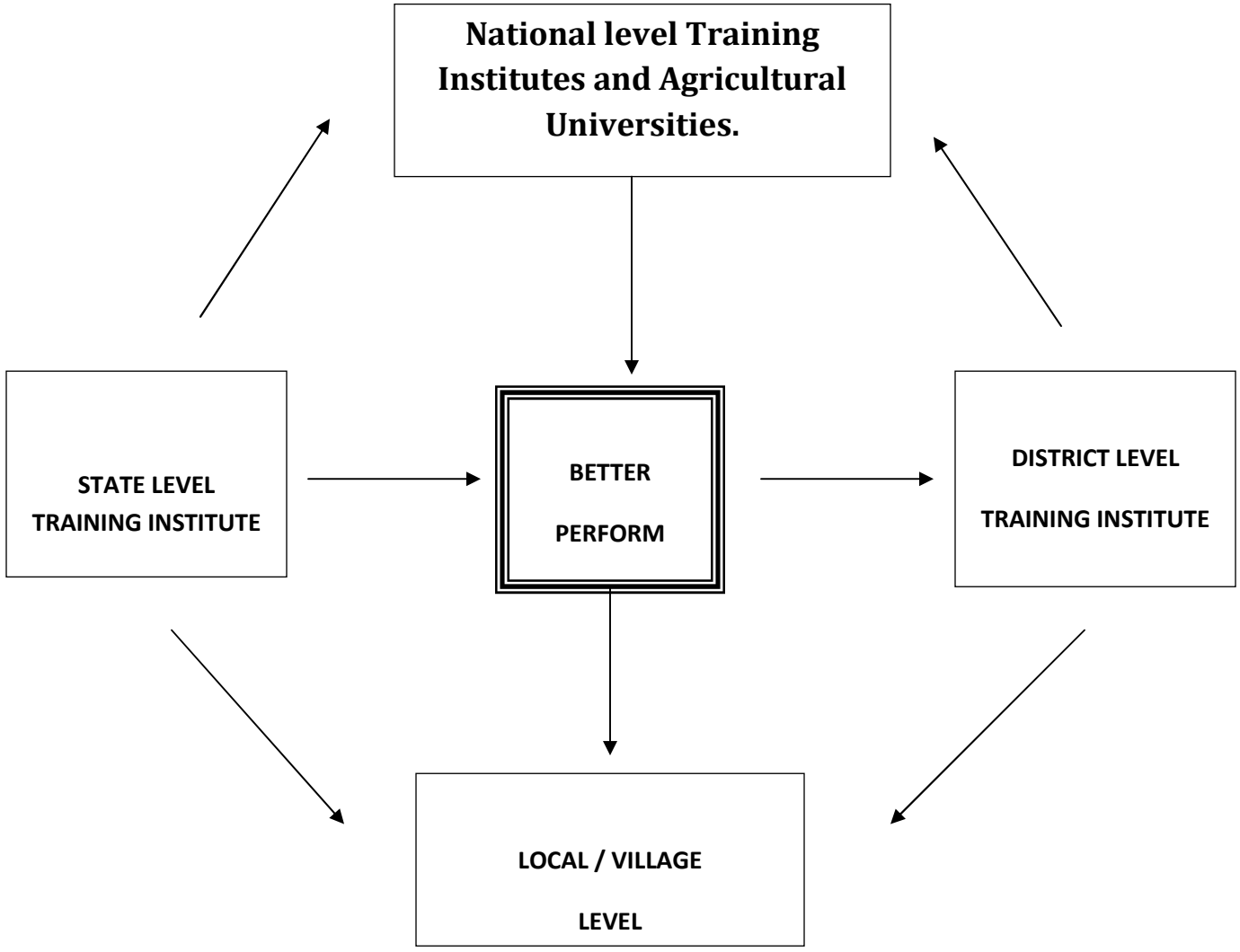
(FOR village level training-

SHG'S/UG'S/WDT)TSO/MOBILE TEAM- to be provided by local institutions and identified agencies.

C- Specialized training for Income Generating Activities (IGA) –

to be organized at specialized identified institutions.

Proposed watershed training organization of Uttar Pradesh



Major Contents of Training Programme/ Capacity Building

- Concept and importance of watershed development.
- Salient features of watershed guidelines 2008
- Role responsibilities of PRI and development functionary in the programme.
- Communication method and training.
- Project formulation and people's participation.
- Sharing of experiences and benefits.
- Problems and classifications of barren lands.
- Micro planning of rainfed area.
- Soil and water conservation techniques.
- Development of animal husbandry and pasture.
- Management of natural resources.
- Departmental/non departmental coordination and convergence.
- Dispute management.
- Experienced problems and their solutions in WS.
- Maintenance of finance and accounts in WS.
- Maintenance of created properties.
- Use of remote sensing & GIS technique in WS.
- Concept, method and procedure of forming SHG/UG.

Monitoring

It will be ensured that regular monitoring will be done at all levels i.e. watershed, District, Regional level, Department level and ultimately at state level. Watershed level self monitoring by watershed committee (WC) will have to be done on day to day basis for execution of various activities. At watershed level WDT will be responsible for reviewing the progress of work on a weekly basis. Project Implementing Agencies will submit fortnightly progress reports to District Watershed Development unit which will review and submit monthly report to regional level office i.e. Deputy Director. These reports after compilation of progress of district covered under the region will be submitted to departmental heads.

It is also expected that the system of on line monitoring will be developed through MIS by providing computers at the level of Project Implementing Agency (PIA), Regional level, Departmental level and state level. GIS/Web based on line monitoring system will be developed.

Monthly progress reports will be compiled at the departmental level for their area of jurisdiction and submitted to state level. The State level nodal agency will review the progress on quarterly basis. After reviewing the progress, a quarterly report will be submitted to National Rainfed Areas Development Authority.

Thus the different streams and levels of monitoring will be as under:

- **Ongoing monitoring by W.C .**
- **Ongoing Internal Monitoring by WDTs .**
- **Field visit/ inspections of Departmental Officers/ Specialists or as directed by SLNA**
- **Submission of monthly progress report by PIA to WCDC/DRDA & to Regional Offices .**
- **Compilation and submission of Monthly Progress Report To Departmental Nodal Heads i.e. Department of Agriculture and Administrator Sharda Sahayak & Ramganga Command by concern regional officer's.**
- **Compilation of Monthly Progress Report at Departmental Nodal Agency level for onwards submission to S.L.N.A**
- **Quarterly review of progress by SLNA and its Submission to Nodal Department of GOI.**
- **Development of MIS & Computerization & Internet connectivity at all levels.**

Social Audit by Gram Panchyat will also be ensured at the watershed Association/Gram Sabha level by having open monthly meetings. Efforts will be made to select a team representing women, SC/ST members, SHG/UG member representatives to take social audits on regular basis to keep constant watch on various project activities. This team will work independently, however members of the team will be other than the W.C. member.

External Agencies will be identified/ Notified to take up independent monitoring of the project activities from time to time whose reports will be submitted to departmental heads and suitable remedial measures and corrective action will be ensured. Action taken on these reports will be submitted to State Level Nodal Agency for their review.

Evaluation

SLNA has already identified the institutions and Agencies having expertise in watershed activities to take up evaluation work. In fact a panel of agencies and institutions will be submitted to National Agency and get it approved by them. Evaluation work will be assigned to only Approved Agencies.

The Evaluation aspect will include physical, financial issues besides the Social Audit. It is expected that the evaluators will not act as inspectors but they will be facilitators to PIA's and watershed committee (W.C.)

Evaluators will emphasize on following up of guide lines for the Watershed Development Activities. This evaluation will be done annually at every stage of activity and final stages. The release of funds will be based on evaluation reports.

The post project evaluation will be basically to evaluate the outcome of the project activities after the implementation of project. This will help in assessing the projections made at the formation stage and actual results obtained on various parameters. This will help in taking up future watershed development activities as per the observation and suggestion of the evaluation agency.

Project implementation and Institutional Arrangement

The Watershed programmes are implemented by the "District Rural Development Agency'' through Village Watershed Committees (VWC). A Project Implementing Agency (PIA), which may be a government department/ autonomous institute/intermediary panchayat or an NGO, is assigned a cluster of micro watershed. The PIA forms a multidisciplinary ' Watershed Development Team' which provides technical assistance to VWC in the planning and implementation of the programme. The women and rural area laborers of the area covered by the watersheds are also organized into ' self-help groups.' The user groups are the beginning point as well as the end point for Watershed Development Programmes. Their initiative is crucial to the success of the programme and they are the ultimate beneficiaries. The State Land Development and Water Resources Department will coordinate amongst various government departments, Agricultural universities, NGOs etc., and monitor review and evaluate the watershed development programmes. Community participation is an important aspect of watershed development programme.

Capacity Building and Training

Successful implementation of projects, understanding various aspects of the programme, skill up-gradation, sustainability of projects, confidence building and planning implementation and monitoring of the watershed programme are the objectives of capacity building and training exercise. Prior sensitization and orientation training on Watershed Project Management would be imparted to all concerned functionaries and elected representatives at the district, block and village level before they assume their responsibilities. Training of self –help groups in groups management and various income generating activities and user groups for resource management forms an important component of the overall programme.

Monitoring and Evaluation

The Gram Sabha and Gram Panchayat are responsible for day to day monitoring at village level. At the district level it is essential to review the progress of each PIA on the monthly basis. Likewise PIA may review the progress of each micro watershed before participating in the district-level meeting. Village-level groups may undertake weekly meetings to review progress. This approach helps in achieving a steady progress and also timely resolution of bottlenecks in implementation. PIAs are expected to have specific MIS system and by use of computer networks online monitoring will be ensured.

Concurrent evaluation will be done by internal process. External agencies having expertise in watershed evaluation will be engaged for midterm evaluation of the project activities and its outcome. This will be used for midterm correction based on the recommendation of the evaluating agency. Critical assessment is to be done of the relevance of technological content, involvement of

people in the programme, equity for poor and women, facilitation of group action in addition to physical and financial progress along with the outcomes of the project activities in terms of increase in production, productivity, cropping intensity and income of the beneficiaries. This midterm evaluation will help to assess whether the project is on track and to carry out midterm corrections if required.

A post project evaluation will be done after completion of the project activities to assess the impact of the project on the watershed. This will preferably be done by outside agency for getting independent assessment.

7. Findings of Evaluation

Up to Preparatory phase total 20% grant was released and given to projects having allocation of 2.00, 4.00, 1.00, 3.00,7.50, 1.00,1.00,0.20 & 0.30 percent under Administrative, Entry Points Activities(EPA), DPR Preparation, Institutional and capacity Building, Watershed Development Works, Livelihood, Production System/Micro Enterprises, Monitoring and Evaluation heads respectively.

7.1.1 Project Sanctioned in the year: 2009-10

Project : Banda – IWMP-I & II, Chitrakoot - IWMP-I, II & III, Hameerpur –IWMP- I, II, & III

The above projects were evaluated by Krishi Prasar Prashikshan Avam Gram Vikas Samiti, 551/K Krishi Nagar, Alambagh Lucknow. The physical and financial status of the projects for different component for which grant was released have been depicted in Table no. 26 to 36. The evaluators have gone through all the activities, Checked the records, visited field activities, interacted with various SHGs, UG, beneficiaries, office bearers and the other stakeholders.

Evaluators found the implementation of the project in true sprit with coordinated approach. Agency has stressed for the immediate release of the balance grant to accelerate the works without further delay. They also hope that desired result would be achieved.

The following suggestions were given by evaluators.

1- WC should be provided with an independent rented office accommodation.

2- WC with the help of the WDT shall facilitate resource use agreements among the user groups based on the principles of the equity and sustainability.

3- Conditions should be laid down for the user groups before the concerned work is undertaken.

4- Details of existing user groups and SHGs should be listed and they should be motivated by IWMP projects.

Evaluators found the implementation of the project in true sprit of coordinated approach. Agency has stressed for the immediate release of the balance grant to accelerate the works without further delay. They also hope that desired result would be achieved.

Project : Jalaun – IWMP-I, II, III, IV& V. Mahoba –IWMP- I, II, III, IV, V,VI and VII

The aforesaid projects were evaluated by Institute for Applied Research and Development 22/600 Kha, Indira Nagar, Lucknow. Physical works were seen and financial records checked by agency. Interactions were done with various stake holders. Desired data of various components for physical and financial status have been shown in Table no. 26 to 36.

The generalized suggestions of these projects by evaluators are as under:

1. The account of SHG should be opened immediately.
2. SHGs should be given revolving fund as early as possible.
3. Publicity should be a continuous activity. It could be done through the project.
4. More training programmes should be organized so that the awareness level of the villagers can be increased.
5. WDT members should be given travelling allowance.
6. There is need of improvement in the DPRs.
7. The involvement of women should be more in the project.
8. SHGs must be constituted for the uplift of Weaker section of society.
9. The emphasis on plantation should be more in the project.

Project : Lalitpur –IWMP- I, II, III & IV. Jhansi-IWMP- I, II, & III.

Dr. N.S. Dhama Retd. Dy. Commissioner Ministry of Rural Development GOI evaluated these projects. The physical and financial statuses of different components have been given in Table no. 26 to 36. Evaluator has generalized following suggestions for these projects.

1. Gram Sabha/ Panchayat may be asked to raise the funds for the development of common land if any.
2. Dry farming practices may be popularized.
3. Vermi, Composting Units may be popularized.
4. Emphasis may be given on Agro forestry under work phase.
5. 10-15 plants may be distributed to user groups.
6. Under Entry Point Work, activities like repair of temples channel (drainage) may also be covered to establish good rapport with the villagers and sarpanches.

Project : Unnao-IWMP-I, Siddharth Nagar-IWMP- I, Shahjahanpur –IWMP-I, Sant kabir Nagar-IWMP- I, Raibareily-IWMP- I, Kheeri-IWMP- I, Gorakhpur-IWMP- I, Basti –IWMP-I, Badaun-IWMP-I, Bareily-IWMP-I, Hardoi-IWMP-I,Deoria IWMP-I.

These Projects have been evaluated by State Institute of Rural Development (SIRS) led by Dr. Vardani, Joint Director, Soil Conservation and Water Management. Evaluation finding regarding financial and physical status of various components have been presented in table no. 26 to 36.

Evaluating agency has mentioned in the report that all important activities have been initiated in the project for example PRA, awareness campaign, training and some watershed works. EPA have been executed by PIA with satisfaction of beneficiaries. The future of the project seems to be bright as it is clear from the performance of activities. People participation is satisfactory and overall the progress of the project is satisfactory and hopefully the project would attain its specific objectives.

The most common points and recommendations of the evaluating agency are as under :

Taking into consideration of major problems of the area, the project has been designed satisfactory. Some discrepancy also found in implementation of project which needs to rectify.

1. SHGs are not formed properly. Their accounts are not opened. SHGs are not conducting meetings properly and their records are not maintained. It is needed more attention.
2. UGs are not formed in Watershed. It should be formed according the Guideline and should work. It is needed more attention. Systematic constitution of SHG including women SHG. Organization of UGs for the specific activity will also be needed.
3. SHG-Bank linkages-needed open bank account.
4. Internal loaning should be prompted within SHG.
5. Proper coordination are needed with W.C for working properly.
6. Constitution of UGs for the specific activity from which they are to be benefited.
7. WDT should be more effective.
8. Value of weightage should be mentioned in DPR.
9. Needed more people participation
10. User participation in execution of NRM works needed more attention.
11. Production activities have not been initiated due to lack of knowledge. This is important activity and it should be initiated. Bathroom, Chabootara only EPA activities have been selected by PIA.

If above deficiencies will be rectified, then the future of the project seems to be quit bright. All important activities have been initiated in the project for example PRA, Awareness Campaign, Training and some watershed works. EPA has been executed by PIA with satisfaction of beneficiaries. The future of the project seems to be bright as it is clear from the performance of few activities. People participation is satisfactory upto some extent and overall the progress of the project is satisfactory and hopefully the project would attain its specific objectives.

Project No. : JP Nagar-IWMP-I, Moradabad-IWMP-I, Rampur-IWMP-I, Meerut-IWMP-I, Hathras –IWMP-I, Bulandshahar - IWMP- I, Saharanpur - IWMP- I, Muzaffar Nagar - IWMP- I.

Sardar Vallabh Bhai Patel University of Agri. & Tech. has been the evaluating agency for above projects. The financial and Physical statuses for various components have been presented the table no. 26 to 36. Agency found the working of various components as per the guidelines. Evaluators have felt satisfaction on progress of works. PIAs have gained faith of people of area and particularly EPA have motivated them for co-operation in future.

Project : Faizabad – IWMP- I, Barabanki – IWMP-I, Sultanpur – IWMP- I , Ambedkar Nagar – IWMP-I , Kushi Nagar – IWMP-I,Ghazipur-IWMP-I, Azamgarh- IWMP-I .

The above projects have been evaluated by A.N.D. University of Agri. & Tech. Kumarganj, Faizabad. Data regarding financial and physical progress have been depicted in Table no. 26 to 36. Evaluating agency has gone through the activities and found the performance good to very good but suggested that the monitoring of various activities in the area need little more attention.

Project : Sant Ravi Das Nagar – IWMP- I, Pratabgarh – IWMP-I, Kausambhi – IWMP- I, Fatehpur – IWMP-I, Mirzapur – IWMP- I

SH Institute if Agri. Tech, & Science (Deemed University) Naini, Allahabad evaluated the aforesaid projects. Evaluators have checked physical works and financial records that have been mentioned in Table no. 26 to 36.

The following observations have been reported by agency:

The water reservoir work and contour bunding work was done so water table of the watershed area is expected to have risen. The areas where water reservoir or contour bunding work was done, additional area was brought under cultivation.

The PIA has executed the work of Entry Point Activity (EPA) but it should be further maintained with the initiation of the watershed work.

As the project has started only one year before so it is very difficult to say about the changes in incomes for each household category but it is sure that certain increase/changes in incomes for each household will be seen at the end of the project.

The Entry Point Activities have been done by the PIA and rejuvenations of old and worst conditioned wells were done. The rejuvenation including the preparation of platform and wall of wells were constructed and handed over to the people living in those surroundings for drinking and irrigation purpose. In some of the micro watershed, damaged Bandhies and damaged culverts were renovated to store water and easy transportation of people. The maintenance of the EPA work were done by the people living in those surroundings.

Majority of the farmers are marginal and small scale enterprises would have their tremendous impact on elevation of socio-economic conditions of the beneficiaries. Therefore, emphasis is required to take up these matters. Overall the work done by PIA is appreciated and satisfactory.

The following observations have been reported by agency:

Impact of Watershed Programme:

The project has been running since 2009-10 so the watershed work has not been started in its full swing. However, water reservoir work and contour bunding work was started so water table of the watershed area is expected to have risen. The areas where water reservoir or contour bunding work was done, additional area was brought under cultivation.

As the project has started even one year before so no changes in cropping pattern, productivity and intensity was observed. Similarly, no change in fodder and fuel wood availability was observed.

The PIA has started the work of Entry Point Activity (EPA) but it should be further increased with the initiation of the watershed work.

As the project has started only one year before so it is very difficult to say about the changes in incomes for each household category but it is sure that certain increase/changes in incomes for each household will be seen at the end of the project.

Mechanism for maintenance of the assets created under Watershed Programme

The Entry Point Activities has been started by the PIA and rejuvenation of old and worst conditioned wells was done. The rejuvenation including the preparation of platform and wall of wells were constructed and handed over to the people living in those surroundings for drinking and irrigation purpose. In some of the micro watershed, damaged Bandhi and damaged culvert were renovated to store water and easy transportation of people. The maintenance of the EPA work was done by the people living in those surroundings.

Possible Improvements

The evaluation team observed that watershed work along with EPA has been initiated, though on small scale to benefit farmers in the project area. However, the self help groups which were formed by the project were not functional. Other agriculture related activities like Vermi and Nadep composting and small scale enterprises like Goatery, Piggery, Fishery, Duckery etc. could not be started.

Majority of the farmers are marginal and small scale enterprises would have their tremendous impact on elevation of socio-economic conditions of the beneficiaries. Therefore, emphasis is required to take up these matters. Overall the work done by PIA is appreciated and satisfactory.

Project :Ramabai Nagar – IWMP- I, Kannauj- IWMP-I , Aligarh – IWMP-I , Etah – IWMP-I , Kanpur Nagar – IWMP-I

These Projects have been evaluated by C.S.A. University of Agriculture and Technology, Kanpur. Evaluators visited the physical work and checked records and interacted with various stake holders. The physical and financial progress have been

presented in Table no. 26 to 36. Evaluators have appreciated the process and activities being conducted in the project are and felt happy for participatory approach.

Project : Mainpuri – IWMP-I, Firozabad – IWMP-I

National Research Centre for Agro Forestry, Jhansi has evaluated these projects. Evaluation team visited physical works checked financial records and interacted with various stake holders. The progress data have been summarized in Table no. 26 to 36. Evaluating agency has realized satisfaction over the process and execution of activities on participatory mode and satisfaction of people from project work.

As the project has started only one year before so it is very difficult to say about the changes in incomes for each household category but it is sure that certain increase/changes in incomes for each household will be seen at the end of the project.

Some waste area have been covered by contour bunding to check the run off loss of water and soil and there by new area have been brought under cultivation.

As the project has started only one year before so it is very difficult to say about the changes in incomes for each household category but it is sure that certain increase/changes in incomes for each household will be seen at the end of the project.

Waste areas have been covered by contour bunding to check the run off loss of water and soil and there by new area have been brought under cultivation.

The important suggestions are as under.

Salient observations made by the Evaluating team are as below:

- Most of the watershed committees do not have their designated office. Team of evaluators emphasized on immediate action for the same. The office must operate on daily basis.
- Display boards showing annual activities plan of IWMPs must be placed at the office.
- Watershed committees meeting should be regular with quorum presence and proceedings must be recorded.
- Similarly, in case of SHGs, regular meetings and recording minutes need to done.
- Bye-laws of all WCs, UGs and SHGs must be prepared and kept in respective files.

- Most of the secretaries of WC and nearly all secretaries of SHGs need training for cash book maintenance, record handling and preparation of minutes. Secretary of WC also needs training for physical measurement of earth work and its entry in M. book. M.B. should be signed by president and secretary besides PIA nominee.
- Greater emphasis on formation of Women SHG is required.
- Suitable livelihood activities should be identified and expedited for execution at the earliest.
- Due care should be taken at the time of joining of WDT members with regards to qualification and experience. It is advised to include animal husbandry expert in the WDT in place of either agronomy or soil science.
- Convergence needs to be rigorously expedited.
- To safe guard earthen structures in the watershed provision of field drainage structures (spillways) should be mandatory.
- Documentation of participatory crop demonstration trials, success stories and impact assessment of different activities is lacking. There is a need to train WDT and PIA in this direction.
- Basic resource data collection for net planning through WDT members must be expedited.
- Animal husbandry is the major subsidiary occupation. The development of animal husbandry component through animal health camps, forage production systems and breed improvement need to be addressed.

Impact of Watershed Programme:

The project has been running since 2009-10 so the watershed work has not been started in its full swing. However, some contour bunding work done was checked. The areas where contour bunding work was done, additional area was brought under cultivation.

As the project has been started even one year before so no changes in cropping pattern, productivity and intensity was observed. Similarly, no change in fodder and fuel wood availability was observed.

The PIA has started the work of Entry Point Activity (EPA) appreciably but it should be further increased with the initiation of the watershed work.

As the project has started only one year before so it is very difficult to say about the changes in incomes for each household category but it is sure that certain increase/changes in incomes for each household will be seen at the end of the project.

Possible Improvements:

EPA work done by PIA have been taken appreciably however it does not include many agricultural activities like plantation. On an around flood prone area under the project vermi and nadep composting and rural employment generation should be taken up.

As per instruction given by the project leader, these works is to be taken up in near future.

A waste area have been covered by contour bunding to check the run off loss of water and soil and there by new area have been brought under cultivation. The work on check dams, spill ways and culvert are yet to be initiated.

7.1.3 Gradings of Evaluated Projects

The grading of aforesaid evaluated project and their evaluating agency's are as under.

Status of Evaluation against 20% released Amount
Sanction in Year 2009-10

SI. NO.	Name of District	Name of PIA	Name of Project	Agency by which Evaluation Conducted	Categorization of Evaluation Report
Bundelkhand					
1	BANDA	Banda-1	IWMP I	Krishi Prashar Prashikshan Gram Vikas Sansthan,Lucknow	Good & above average
2		Banda-2	IWMP II		Good & above average
3	CHITRAKOOT	Chitrakoot-1	IWMP I		Good & above average
4		Chitrakoot-2	IWMP II		Good & above average
5		Chitrakoot-3	IWMP III		Good & above average
6	HAMEERPUR	Hampeerpur-1	IWMP I		Good & above average
7		Hampeerpur-2	IWMP II		Good & above average
8		Rath-2	IWMP III		Good & above average

9	JALUAN	Orai	IWMP I	Institute for Applied Research And Development Lucknow	Good & above average
10		Orai	IWMP II		Good & above average
11		Jaluan-2	IWMP III		Good & above average
12		Jaluan-2	IWMP IV		Good & above average
13		Kalpi	IWMP V		Good & above average
14	JHANSI	Jhansi-2	IWMP I	**Mr. N.S. Dhama**	Good & above average
15		Moth	IWMP II		Good & above average
16		Jhansi-1	IWMP III		Good & above average
17	LALITPUR	Lalitpur-1	IWMP I		Good & above average
18		Lalitpur-2	IWMP II		Good & above average
19		Lalitpur-3	IWMP III		Good & above average
20	LALITPUR	Lalitpur-4	IWMP IV	**Mr. N.S. Dhama**	Good & above average
21	MAHOBA	Mahoba-1	IWMP I	Institute for Applied Research And Development Lucknow	Good & above average
22		Mahoba-3	IWMP II		Good & above average
23		Charkhari-2	IWMP III		Good & above average
24		Charkhari-1	IWMP IV		Good & above average
25		Mahoba-2	IWMP V		Good & above average
26		Mahoba-3	IWMP VI		Good & above average
27		Mahoba Panwari	IWMP VII		Good & above average

Status of Evaluation against 20% released Amount Sanctioned in year 2009-10

S. No.	Name of District/PIA	Name of Project	Agency by which Evaluation Conducted	Categorization of Evaluation Report
1	2	3	4	5
Non Bundelkhand				
1	Aligarh	IWMP I	K.V.K Aligarh, CSA, Kanpur	Good & above average
2	Ambedkar Nagar	IWMP I	ND Agriculture University	Satisfactory & Average
3	Azamgarh	IWMP I	ND Agriculture University	Satisfactory & Average
4	Badaun	IWMP I	SIRD,Lucknow	Satisfactory & Average
5	Barabanki	IWMP I	ND Agriculture University	Satisfactory & Average

6	Bareilley	IWMP I	SIRD,Lucknow	Satisfactory & Average
7	Basti	IWMP I	SIRD,Lucknow	Satisfactory & Average
8	Buland Shahar	IWMP I	SVBP Agriculture University	Satisfactory & Average
9	Deoria	IWMP I	SIRD,Lucknow	Satisfactory & Average
10	Etah	IWMP I	K.V.K Aligarh, CSA, Kanpur	Good & above average
11	Faizabad	IWMP I	ND Agriculture University	Good & above average
12	Fatehpur	IWMP I	Agriculture University,Nani	Satisfactory & Average
13	Firozabad	IWMP I	NRCAF	Good & above average
14	Ghazipur	IWMP I	ND Agriculture University	Satisfactory & Average
15	Gorakhpur	IWMP I	SIRD,Lucknow	Satisfactory & Average
16	Hathras	IWMP I	SVBP Agriculture University	Satisfactory & Average
17	J.P Nagar	IWMP I	SVBP Agriculture University	Satisfactory & Average
18	Kannauj	IWMP I	K.V.K Kannuaj,CSA Kannpur	Good & above average
19	Kanpur Nagar	IWMP I	K.V.K Dileepnagar,CSA Knpur	Satisfactory & Average
20	Kaushambhi	IWMP I	Agriculture University,Nani	Satisfactory & Average
21	Khushi Nagar	IWMP I	ND Agriculture University	Satisfactory & Average
22	Lakhimpur Khiri	IWMP I	SIRD,Lucknow	Satisfactory & Average
23	Mainpuri	IWMP I	NRCAF	Good & above average
24	Meerut	IWMP I	SVBP Agriculture University	Good & above average
25	Mirzapur	IWMP I	Agriculture University,Nani	Satisfactory & Average
26	Moradabad	IWMP I	SVBP Agriculture University	Good & above average
27	Muzaffar Nagar	IWMP I	SVBP Agriculture University	Good & above average
28	Pratapgarh	IWMP I	Agriculture University,Nani	Satisfactory & Average
29	Raebareli	IWMP I	SIRD,Lucknow	Satisfactory & Average
30	Rampur	IWMP I	SVBP Agriculture University	Good & above average
31	Saharanpur	IWMP I	SVBP Agriculture University	Satisfactory & Average
32	St. Kabir Nagar	IWMP I	SIRD,Lucknow	Satisfactory & Average
33	Shahjahanpur	IWMP I	SIRD,Lucknow	Satisfactory & Average
34	Siddharth Nagar	IWMP I	SIRD,Lucknow	Satisfactory & Average
35	Sultanpur	IWMP I	ND Agriculture University	Satisfactory & Average
36	Unnao	IWMP I	SIRD,Lucknow	Satisfactory & Average

37	St.Ravidas Nagar	IWMP I	SIRD,Lucknow	Satisfactory & Average
38	Hardoi	IWMP I	SIRD,Lucknow	Poor
39	Auriya	IWMP I	Not Reported	-

7.1.4 Action Taken by State on Findings of Evaluation Reports

On the basis of recommendations and suggestions in evaluation reports the followings steps were taken for future improvement in the quality and enhanced pace of work.

1- Hon'ble Ministers, Principal Secretary and C.E.O. called numbers of meeting of senior officers (Dy. Directors, Bhoomi Sanrakshan Adhikari) and highlighted the suggestions and recommendations in their respective projects and directed to rectify them accordingly and work efficiently and effectively in future.

2- Orders have been issued by principal Secretary to all Dy. Directors and PIAs to implement the project work in accordance with location, quantity, quality and time specific as mentioned in DPRs. Violating the norms mentioned in DPRs, PIAs will be responsible.

3- DPRs have been modified accordingly and uploaded.

4- As suggested by Evaluating Agencies regarding technical enriching of various levels of stake holders, numbers of Capacity Buildings Programmes from various CBOs were organized for Dy. Directors PIAs, JEs, Soil Conservation Inspectors, Accountants, Watershed Committee members UGs and SHGs etc. in addition to large numbers of beneficiaries.

5- Principal Secretary, Commissioners and Administrators along with Technical Officers of both Ramganga and Sharda Command Area have also visited some projects sites and sought feedback from beneficiaries and directed concerned staff to correct the short comings, accordingly.

6- WCDC is regularly monitoring the activities of project of their respective district. Principal Secretary and C.E.O maintain continuous touch with district Magistrates who are Chairman of their respective WCDC and get feedback from them regarding physical and financial functioning of IWMP.

7- Principal Secretary and C.E.O has very close contact with both Commissioner and Administrator of Ramganga Command Area Sharda Command Area (both Head of deptt.) of their respective Command and take regular feedback from them on each and every activity of IWMP.

8- Principal Secretary and C.E.O has very close contact with both Head of deptt. of their respective Command and take regular feedback from them.

9- Shortcomings highlighted in the evaluation reports have been taken very seriously by Hon' ble Principal Secretary in turn he has directed both the Administrators of Commands to look into it and take remedial measures to rectify these shortcomings and also identify erring officials who were responsible for the same so that they should be taken to the task.

8. Conclusion and Recommendation

8.1.1 Conclusion

On the basis of evaluation report following points has emerged out.

1. Participatory approach is gaining momentum in Watershed Management Programme.
2. Now villagers are realizing that Natural Resource Management based projects cannot be sustainable and useful unless collective and cooperative approach is applied on watershed basis.
3. To get the work throughout the year particularly and to avoid migration from their villages, landless labour, class, marginal farmers and even small farmers are realizing to opt micro enterprises and livelihood options for getting employment throughout the year and enhanced income.
4. Farmers are realizing that the stagnation in crop productivity is dangerous for future and now inclined for improving soil health through green manuring and diversification in farming system.
5. Now farmers are taking interest to bring their waste land under alternative land use like tree plantation, horticultural fruit trees, agro forestry etc.
6. Gram Panchayats are motivated to bring community waste land under plantation for fuel, fodder, poles,timber,thatching material for tangible benefits and intangible benefits as eco-development.
7. People have become aware about the importance of natural resource management and are co-operating in watershed developmental activities.
8. Villagers are looking keen to adopt breeding and nutritional programme for their Animals to make them more productive.

8.1.2 Recommendations & follow up actions

Salient observations made by the Evaluating teams and subsequent action taken by the state are as under :

S.N.	Recommendations & Suggestions	Follow up actions
1	Most of the watershed committees do not have their designated office. Team of evaluators emphasized on immediate action for the same. The office must operate on daily basis.	**Action was already in progress now it has been completed and working is going satisfactory**.
2	Display boards showing annual activities plan of IWMPs must be placed at the office **THIS WAS ALREADY IN PROCESS.**	**PIAs have been directed and they have done through wall painting and charts.**
3	Watershed committees meeting should be regular with quorum presence and proceedings must be recorded.	**This is being done regularly now.**
4	Similarly, in case of SHGs, regular meetings and recording mi6nutes need to done.	**This is being done.**
5	Bye-laws of all WCs, UGs and SHGs must be prepared and kept in respective files.	**These all are being prepared and files are maintained.**
6	Most of the secretaries of WC and nearly all secretaries of SHGs need training for cash book maintenance, record handling and preparation of minutes. Secretary of WC also needs training for physical measurement of earth work and its entry in M. book. M.B. should be signed by president and secretary besides PIA nominee.	**At all level comprehensive capacity building program have been organized.**
7	Greater emphasis on formation of Women SHG is required.	**More emphasis is being laid on this issue**.
8	Suitable livelihood activities should be identified and expedited for execution at the earliest.	**Those have been identified and execution is being done as per availability of grant. These have also been mentioned in DPRs.**
9	Due care should be taken at the time of joining of WDT members with regards to qualification and experience.	**Action has already been taken as per guideline and need of project work**.
10	Convergence needs to be rigorously expedited.	**This is properly explored, grant obtained and work executed.**
11	To safe guard earthen structures in the watershed provision of	**Where ever it is necessary provision is being**

	field drainage structures (spillways) should be mandatory.	**made.**
12	Documentation of participatory crop demonstration trials, success stories and impact assessment of different activities is lacking. There is a need to train WDT and PIA in this direction.	**Practical manual on the basis of feedback of planning and execution has been prepared and given to PIA,s. Documentations, materials, success stories of all important activities have been prepared and further being processed. PIAs and WDT members have been trained through various capacity building programmes.**
13	Basic resource data collection for net planning through WDT members must be expedited.	**This is being done.**
14	Animal husbandry is the major subsidiary occupation. The development of animal husbandry component through animal health camps, forage production systems and breed improvement need to be addressed.	**This is being done at large scale.**
15	SHGs and UGs are not formed properly.	**Directions have been issued to rectify the shortcomings of these groups.**
16	SGHs bank linkage needed open bank account.	**PIAs have been instructed to get it done promptly.**
17	Budget should be provided to PIAs timely for continuation of project work.	**Principal Secretary is directing regularly to district Magistrates for quick disbursal of grant. To get released grant for DOLR, GOI, proposals have been submitted.**
18	WC with the help of the WDT shall facilitate resource use agreements among the user groups based on the principles of the equity and sustainability.	**This is being managed.**
19	Conditions should be laid down for the user groups before the concerned work is undertaken.	**This is being done.**
20	Details of exiting user groups and SHGs should be listed and they should be motivated by IWMP projects.	**The lists have been prepared.**

21	SHGs should be given revolving fund as early as possible.	**This is being followed.**
22	There is need of improvement in the DPRs.	**DPRs have been modified.**
23	Internal loaning should be prompted within SHG.	**Arrangement is being made.**
24	WDT should be more effective.	**Actions have been taken.**
25	Value of weightage should be mentioned in DPR.	**This has been taken up in DPRs.**
26	Needed more people participation	**C.B Prog. on this issue has been organized.**
27	User participation in execution of NRM works needed more attention.	**Participation of UGs. are been taken.**
28	Proper coordination are needed with W.C for working properly. Constitution of UGs for the specific activity from which they are to be benefited.	**This is being taken affectively.**

Impact of Watershed Programme:

1- The areas where contour bunding work was done, additional area was brought under cultivation.
2- As the project has been started even one year before so no changes in cropping pattern, productivity and intensity was observed. Similarly, no change in fodder and fuel wood availability was observed. The PIA,s have done the work of Entry Point Activity (EPA) appreciably on participatory approach basis buy construction of kharanja, kishan manch, toilets, drainage channels, boundaries etc. and maintenance of wells, hand pumps, roads, boundaries, ponds, etc. People are feeling motivated for future cooperation.
3- As the project has started only one year before so it is very difficult to say about the changes in incomes for each household category but it is sure that certain increase/changes in incomes for each household will be seen at the end of the project.

Possible Improvements:

EPA work done by PIA,s have been taken appreciably however it does not include many agricultural activities like plantation. On an around flood prone area under the project vermi and nadep composting and rural employment generation should be taken up. **These are seasonal work and are being done on location specific basis.**

Some waste area have been covered by contour bunding to check the run off loss of water and soil and there by new area have been brought under cultivation. The work on check dams, spill ways and culvert are yet to be initiated. **This will be completed after getting the budget of work phase released from DoLR, GOI.**

9. List of Tables

Table 26 a: Detail of GP, WC, SHGs and UGS

S. No.	District	Name of the Project 2009-10	No. of MWS	No. of GP	No. of WC	No. of SHGs	No. of UGs
1	2	3	4	5	6	7	8
Bundelkhand							
1	Banda	IWMP-I	9	9	9	75	55
2		IWMP-II	11	7	7	205	92
3	Chitrakoot	IWMP-I	14	112	112	28	106
4		IWMP-II	10	24	24	75	98
5		IWMP-III	14	15	15	28	346
6	Hameerpur	IWMP-I	9	6	6	22	13
7		IWMP-II	7	7	7	20	94
8		IWMP-III	7	10	10	220	90
9	Jalaun	IWMP-I	5	14	14	42	316
10		IWMP-II	6	18	18	39	18
11		IWMP-III	5	5	5	10	22
12		IWMP-IV	7	7	7	14	25
13		IWMP-V	7	7	7	7	7
14	Jhansi	IWMP-I	2	11	11	20	44
15		IWMP-II	8	8	8	8	7
16		IWMP-III	6	6	6	29	13
17	Lalitpur	IWMP-I	7	6	6	34	143
18		IWMP-II	6	7	7	14	130
19		IWMP-III	11	11	11	20	138
20		IWMP-IV	10	10	10	10	80
21	Mahoba	IWMP-I	11	11	11	315	40
22		IWMP-II	8	8	8	35	540
23		IWMP-III	7	7	7	17	52
24		IWMP-IV	6	6	6	42	32

25		IWMP-V	7	7	7	201	50
26		IWMP-VI	7	12	12	19	82
27		IWMP-VII	7	7	7	14	
	Total (Bundelkhand)		**214**	**358**	**358**	**1563**	**2633**

Table 26 b: Detail of GP, WC, SHGs and UGS

S. No.	District	Name of the Project 2009-10	No. of MWS	No. of GP	No. of WC	No. of SHGs	No. of UGs
1	2	3	4	5	6	7	8
			Non Bundelkhand				
1	Aligarh	IWMP-I	10	18	18	141	16
2	Bulandshaher	IWMP-I	7	11	11	9	65
3	Firozabad	IWMP-I	7	18	18	81	111
4	Etah	IWMP-I	13	19	19	61	92
5	Hathras	IWMP-I	9	17	17	16	13
6	JP nagar	IWMP-I	12	72	72	51	83
7	Kannauj	IWMP-I	10	19	19	38	
8	Kanpur Nagar	IWMP-I	8	12	12		
9	Mainpuri	IWMP-I	7	12	12	71	93
10	Meerut	IWMP-I	14	13	13	31	83
11	Muradabad	IWMP-I	5	68	68	169	324
12	Muzaffernagar	IWMP-I	16	21	21	81	16
13	Rampur	IWMP-I	26	115	115	215	38
14	Saharanpur	IWMP-I	20	3	3	280	237
15	Ambedkar Nagr	IWMP-I	8	35	35	130	152
16	Azamgarh	IWMP-I	5	5	5	80	68
17	Badaun	IWMP-I	10	10	10	10	2
18	Barabanki	IWMP-I	18	86	86	25	86
19	Bareilly	IWMP-I	12	39	39	18	39
20	Basti	IWMP-I	5	32	32	18	18
21	Deoria	IWMP-I	2	38	38	128	57

22	Faizabad	IWMP-I	17	9	9	19	71
23	Fatehpur	IWMP-I	10	10	10	193	28
24	Ghazipur	IWMP-I	2	25	25	55	87
25	Gorakhpur	IWMP-I	6	56	56	55	34
26	Kausambi	IWMP-I	9	79	79	65	
27	Kushi Nagar	IWMP-I	7	45	45	72	34
S. No.	**District**	**Name of the Project 2009-10**	**No. of MWS**	**No. of GP**	**No. of WC**	**No. of SHGs**	**No. of UGs**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
28	Lakhimpur Kheri	IWMP-I	8	14	14	16	55
29	Mirzapur	IWMP-I	10	7	7	10	66
30	Pratapgarh	IWMP-I	11	29	29	198	39
31	Raibareili	IWMP-I	13	13	13	14	12
32	Sant Kabi Nagar	IWMP-I	2	10	10	7	27
33	Shajahanpur	IWMP-I	13	43	43	13	190
34	Siddharthngr	IWMP-I	9	33	33	30	26
35	Sultanpur	IWMP-I	7	42	42	43	21
36	Unnao	IWMP-I	14	31	31	188	77
37	Auraiya	IWMP-I	11	45	45	128	80
38	Hardoi	IWMP-I	6	6	6	20	6
39	Sant Ravidas Nagar	IWMP-I	11	78	78	40	
	Total (Non Bundelkhand)		**390**	**1238**	**1238**	**2819**	**2446**
	Grand Total		**604**	**1596**	**1596**	**4382**	**5079**

Table 28 a: Detail of Convergence

S. No.	District	Name of the Project 2009-10	Amt. of Convergence
1	2	3	4
Bundelkhand			
1	Banda	IWMP-I	261.73
2		IWMP-II	310.69
3	Chitrakoot	IWMP-I	311.43
4		IWMP-II	367.04
5		IWMP-III	204.77
6	Hameerpur	IWMP-I	557.93
7		IWMP-II	246.605
8		IWMP-III	421.16
9	Jalaun	IWMP-I	810.315
10		IWMP-II	888.29
11		IWMP-III	34.65
12		IWMP-IV	8.36
13		IWMP-V	0
14	Jhansi	IWMP-I	354.34
15		IWMP-II	392.362
16		IWMP-III	492.92
17	Lalitpur	IWMP-I	68.957
18		IWMP-II	77.141
19		IWMP-III	103.6
20		IWMP-IV	146.03
21	Mahoba	IWMP-I	233.36
22		IWMP-II	155.62
23		IWMP-III	142.955
24		IWMP-IV	53.94
25		IWMP-V	341.13
26		IWMP-VI	205.13
27		IWMP-VII	58.87

	Total (Bundelkhand)	**7249.325**

Table 28 b: Detail of Convergence

S. No.	District	Name of the Project 2009-10	Amt. of Convergence
1	2	3	4
	Non Bundelkhand		
1	Aligarh	IWMP-I	0.00
2	Bulandshaher	IWMP-I	0.00
3	Firozabad	IWMP-I	104.24
4	Etah	IWMP-I	24.91
5	Hathras	IWMP-I	0.00
6	JP nagar	IWMP-I	46.57
7	Kannauj	IWMP-I	21.70
8	Kanpur Nagar	IWMP-I	412.98
9	Mainpuri	IWMP-I	0.00
10	Meerut	IWMP-I	58.50
11	Muradabad	IWMP-I	0.00
12	Muzaffernagar	IWMP-I	0.00
13	Rampur	IWMP-I	30.89
14	Saharanpur	IWMP-I	0.00
15	Ambedkar Ngr	IWMP-I	0.00
16	Azamgarh	IWMP-I	56.15
17	Badaun	IWMP-I	169.63
18	Barabanki	IWMP-I	81.24
19	Bareilly	IWMP-I	0.00
20	Basti	IWMP-I	0.00
21	Deoria	IWMP-I	77.19
22	faizabad	IWMP-I	78.57
23	Fatehpur	IWMP-I	146.10
24	Ghazipur	IWMP-I	40.00

25	Gorakhpur	IWMP-I	75.02
26	Kausambi	IWMP-I	61.44
27	Kushi Nagar	IWMP-I	0.00
28	Lakhimpur Kheri	IWMP-I	0.00
29	Mirzapur	IWMP-I	0.00
30	Pratapgarh	IWMP-I	54.79
31	Raibareili	IWMP-I	105.56
32	Sant Kabi Nagar	IWMP-I	5.04
33	Shajahanpur	IWMP-I	28.74
34	Siddharthngr	IWMP-I	0.00
35	Sultanpur	IWMP-I	111.22
36	Unnao	IWMP-I	69.81
37	Auraiya	IWMP-I	27.16
38	Hardoi	IWMP-I	0.00
39	Sant Ravidas Nagar	IWMP-I	27.44
	Total (Non Bundelkhand)		**1914.89**
	Grand Total		**9164.218**

Table 29: Details of Capacity Building Programme

S. No.	District	Name of the Project 2009-10	Amount	Amt. Utilized (in lac Rs.)	Category of Training	Capacity Building organisation	No. of Trainees
1	2	3	4	5	6	7	8
Bundelkhand							
1	Banda	IWMP-I	20.12400	7.94000	Integrated Watershed management concept, Common Guidelines, DPR Preparation, Base Line Survey, Social Mobilization, Livelihood planning, Production & Live Stock Bases, Ground water recharge, creation of Water resources, Community organization, Fund management, Benefit sharing, Accounting procedure, UG/SHg, formation, working, different activities of these groups etc .	SIRD BKT,LKO,CSCIRT Chhalesar Agra ,WALMI L.KO. U.P,CSA Kanpur U.P, NDAU, Faizabad , U.P LDWR , Belikala, Lucknow, RIRD / DIRD	304
2		IWMP-II	18.75600	11.81000			1637
3	Chitrakoot	IWMP-I	23.84640	7.97000			491
4		IWMP-II	18.54000	6.59000			1155
5		IWMP-III	18.71280	11.18000			1165
6	Hameerpur	IWMP-I	18.07200	10.75000			1533
7		IWMP-II	17.34120	8.97000			2333
8		IWMP-III	17.35200	7.99000			1444
9	Jalaun	IWMP-I	16.20000	5.67000			514
10		IWMP-II	16.56000	6.80000			614
11		IWMP-III	15.12000	4.64000			202
12		IWMP-IV	15.48000	4.58000			203
13		IWMP-V	16.48080	8.54000			213
14	Jhansi	IWMP-I	22.29840	7.50000			1260
15		IWMP-II	23.54400	7.70000			1250
16		IWMP-III	17.33760	7.57000			965
17	Lalitpur	IWMP-I	13.86000	7.63000			483
18		IWMP-II	13.32000	6.55000			450
19		IWMP-III	18.00000	11.55000			1155
20		IWMP-IV	18.00000	10.43000			894
21	Mahoba	IWMP-I	20.01600	7.96000			666
22		IWMP-II	18.07200	9.44000			959
23		IWMP-III	14.94000	7.70000			737
24		IWMP-IV	18.57600	6.57000			690
25		IWMP-V	16.77600	8.64000			1000
26		IWMP-VI	18.90000	10.49000			854
27		IWMP-VII	19.77480	7.23000			901
	Total (Bundelkhand)		**486.00000**	**220.390**			**24072**

S. No.	District	Name of the Project 2009-10	Amount	Amt. Utilized	Category of Training	Capacity Building organisation	No. of Trainees
1	2	3	4	5	6	7	8
Non Bundelkhand							
1	Aligarh	IWMP-I	17.8524	9.51000	Integrated Watershed management concept, Common Guidelines, DPR Preparation, Base Line Survey, Social Mobilization, Livelihood planning, Production & Live Stock Bases, Ground water recharge, creation of Water resources, Community organization, Fund management, Benefit sharing, Accounting procedure, UG/SHg, formation, working, different activities of these groups etc .	SIRD BKT,LKO,CSCIRT Chhalesar Agra ,WALMI L.KO. U.P,CSA Kanpur U.P, NDAU, Faizabad , U.P LDWR , Belikala, Lucknow, RIRD / DIRD	246
2	Bulandshaher	IWMP-I	15.2244	9.90000			360
3	Firozabad	IWMP-I	18.4752	9.81000			862
4	Etah	IWMP-I	14.6916	8.98000			872
5	Hathras	IWMP-I	14.5404	9.13000			189
6	JP nagar	IWMP-I	19.8828	8.80000			560
7	Kannauj	IWMP-I	17.9604	16.07000			929
8	Kanpur Nagar	IWMP-I	24.1056	11.57000			1022
9	Mainpuri	IWMP-I	14.4144	5.90000			1423
10	Meerut	IWMP-I	17.2044	2.92000			247
11	Muradabad	IWMP-I	22.248	11.80000			1222
12	Muzaffernagar	IWMP-I	25.182	4.43000			285
13	Rampur	IWMP-I	24.3648	11.08000			1630
14	Saharanpur	IWMP-I	24.6564	1.55000			408
15	Ambedkar Ngr	IWMP-I	18.306	13.80000			2042
16	Azamgarh	IWMP-I	24.6204	10.80000			2017
17	Badaun	IWMP-I	18.3744	7.70000			899
18	Barabanki	IWMP-I	25.8768	19.60000			2873
19	Bareilly	IWMP-I	18.1368	10.22000			895
20	Basti	IWMP-I	16.4556	1.81800			507
21	Deoria	IWMP-I	15.4944	8.92000			818
22	faizabad	IWMP-I	18.3744	10.20000			2614
23	Fatehpur	IWMP-I	18.738	10.39000			650
24	Ghazipur	IWMP-I	15.4944	5.30000			2675
25	Gorakhpur	IWMP-I	13.2372	8.47000			737
26	Kausambi	IWMP-I	18.4536	9.40000			1883

27	Kushi Nagar	IWMP-I	21.1104	16.17000			205
28	Lakhimpur Kheri	IWMP-I	24.6132	22.10000			2253
29	Mirzapur	IWMP-I	15.1128	7.27400			666
30	Pratapgarh	IWMP-I	24.0696	11.60000			1983
31	Raibareili	IWMP-I	23.0076	16.25000			2306
32	Sant Kabi Nagar	IWMP-I	13.1976	12.50000			804
33	Shajahanpur	IWMP-I	24.9336	21.61000			3120
34	Siddharthngr	IWMP-I	24.156	4.64000			572
35	Sultanpur	IWMP-I	25.5276	24.25000			5003
36	Unnao	IWMP-I	24.552	15.66000			900
37	Auraiya	IWMP-I	20.75472	2.88000			237
38	Hardoi	IWMP-I	19.37376	13.81000			1998
39	Sant Ravidas Nagar	IWMP-I	17.07552	15.50000			1472
	Total (Non Bundelkhand)		**769.8492**	**390.122**			**50384**
	Grand Total		**1255.84920**	**610.512**			**74456**

Table 30: Details of Fund Received and Distributed

S. No.	District	Name of the Project 2009-10	SLNA to WCDC	WCDC to PIA	PIA to WC
1	2	3	4	5	6
Bundelkhand					
1	Banda	Banda-IWMP-1/2009-10	130.4706	130.4706	50.31000
2		Banda-IWMP-2/2009-10	121.6014	121.6014	46.89000
3	Chitrakoot	Chitrakoot-IWMP-1/2009-10	154.60416	154.60416	59.61600
4		Chitrakoot-IWMP-2/2009-10	120.201	120.201	46.35000
5		Chitrakoot-IWMP-3/2009-10	121.32132	121.32132	46.78200
6	Hamirpur	Hamirpur-IWMP-1/2009-10	117.1668	117.1668	45.18000
7		Hamirpur-IWMP-2/2009-10	112.42878	112.42878	43.35300
8		Hamirpur-IWMP-3/2009-10	112.4988	112.4988	43.38000
9	Jalaun	Jalaun-IWMP-1/2009-10	105.03	105.03	40.50000
10		Jalaun-IWMP-2/2009-10	107.364	107.364	41.40000
11		Jalaun-IWMP-3/2009-10	98.028	98.028	37.80000

12		Jalaun-IWMP-4/2009-10	100.362	100.362	38.70000
13		Jalaun-IWMP-5/2009-10	106.85052	106.85052	41.20200
14	Jhansi	Jhansi-IWMP-1/2009-10	144.56796	144.56796	55.74600
15		Jhansi-IWMP-2/2009-10	152.6436	152.6436	58.86000
16		Jhansi-IWMP-3/2009-10	112.40544	112.40544	43.34400
17	Lalitpur	Lalitpur-IWMP-1/2009-10	89.859	89.859	34.65000
18		Lalitpur-IWMP-2/2009-10	86.358	86.358	33.30000
19		Lalitpur-IWMP-3/2009-10	116.7	116.7	45.00000
20		Lalitpur-IWMP-4/2009-10	116.7	116.7	45.00000
21	Mahoba	Mahoba-IWMP-1/2009-10	129.7704	129.7704	50.04000
22		Mahoba-IWMP-2/2009-10	117.1668	117.1668	45.18000
23		Mahoba-IWMP-3/2009-10	96.861	96.861	37.35000
24		Mahoba-IWMP-4/2009-10	120.4344	120.4344	46.44000
25		Mahoba-IWMP-5/2009-10	108.7644	108.7644	41.94000
26		Mahoba-IWMP-6/2009-10	122.535	122.535	47.25000
27		Mahoba-IWMP-7/2009-10	128.20662	128.20662	49.43700
	Total (Bundelkhand)		**3150.9**	**3150.900**	**1215.000**
S. No.	**District**	**Name of the Project 2009-10**	**SLNA to WCDC**	**WCDC to PIA**	**PIA to WC**
1	**2**	**3**	**4**	**5**	**6**
Non Bundelkhand					
1	Aligarh	Aligarh-IWMP-1/2009-10	115.74306	115.74306	44.63100
2	Bulandshaher	Bulandshahar-IWMP-1/2009-10	98.70486	98.70486	38.06100
3	Firozabad	Firozabad-IWMP-1/2009-10	119.78088	119.78088	46.18800
4	Etah	Etah-IWMP-1/2009-10	95.25054	95.25054	36.72900
5	Hathras	Hathras-IWMP-1/2009-10	94.27026	94.27026	36.35100
6	JP nagar	Jyotiba Phule Nagar-IWMP-1/2009-10	128.90682	39.76500	49.70700
7	Kannauj	Kannauj-IWMP-1/2009-10	116.44326	116.44246	44.90100
8	Kanpur Nagar	Kanpur Nagar-IWMP-1/2009-10	156.28464	156.28464	60.26400
9	Mainpuri	Mainpuri-IWMP-1/2009-10	93.45336	93.45336	36.03600

10	Meerut	Meerut-IWMP-1/2009-10	111.54186	62.77586	43.01100
11	Muradabad	Moradabad-IWMP-1/2009-10	144.2412	144.24120	55.62000
12	Muzaffernagar	Muzaffarnagar-IWMP-1/2009-10	163.2633	163.26330	62.95500
13	Rampur	Rampur-IWMP-1/2009-10	157.96512	157.96512	60.91200
14	Saharanpur	Saharanpur-IWMP-1/2009-10	159.85566	159.85566	61.64100
15	Ambedkar Ngr	Ambedkar Nagar-IWMP-1/2009-10	118.6839	118.68390	45.76500
16	Azamgarh	Azamgarh-IWMP-1/2009-10	159.62226	159.62226	61.55100
17	Badaun	Badaun-IWMP-2/2009-10	119.12736	119.12736	45.93600
18	Barabanki	Barabanki-IWMP-1/2009-10	167.76792	167.76792	64.69200
19	Bareilly	Bareilly-IWMP-1/2009-10	117.58692	117.58692	45.34200
20	Basti	Basti-IWMP-1/2009-10	106.68714	106.68714	41.13900
21	Deoria	Deoria-IWMP-1/2009-10	100.45536	100.45536	38.73600
22	faizabad	Faizabad-IWMP-1/2009-10	119.12736	76.56000	45.93600
23	Fatehpur	Fatehpur-IWMP-1/2009-10	121.4847	121.48470	46.84500
24	Ghazipur	Ghazipur-IWMP-1/2009-10	100.45536	23.25000	38.73600
25	Gorakhpur	Gorakhpur-IWMP-1/2009-10	85.82118	52.72818	33.09300
26	Kausambi	Kaushambi-IWMP-1/2009-10	119.64084	119.64084	46.13400
S. No.	**District**	**Name of the Project 2009-10**	**SLNA to WCDC**	**WCDC to PIA**	**PIA to WC**
1	**2**	**3**	**4**	**5**	**6**
27	Kushi Nagar	Kushinagar-IWMP-1/2009-10	136.86576	110.81000	52.77600
28	Lakhimpur Kheri	Kheri-IWMP-1/2009-10	159.57558	159.57558	61.53300
29	Mirzapur	Mirzapur-IWMP-1/2009-10	97.98132	97.98132	37.78200
30	Pratapgarh	Pratapgarh-IWMP-1/2009-10	156.05124	156.05124	60.17400
31	Raibareili	Rae Bareli-IWMP-1/2009-10	149.16594	149.16594	57.51900
32	Sant Kabi Nagar	Sant Kabir Nagar-IWMP-1/2009-10	85.56444	85.56444	32.99400
33	Shajahanpur	Shahjahanpur-IWMP-1/2009-10	161.65284	161.65284	62.33400
34	Siddharthngr	Siddharthnagar-IWMP-1/2009-10	156.6114	156.61140	60.39000
35	Sultanpur	Sultanpur-IWMP-1/2009-10	165.50394	84.66654	63.81900

36	Unnao	Unnao-IWMP-1/2009-10	159.1788	159.17880	61.38000
37	Auraiya	IWMP-I	114.17118	114.17118	55.59300
38	Hardoi	IWMP-I	134.57844	134.57844	51.89400
39	Sant Ravidas Nagar	IWMP-I	118.61388	118.61388	45.73800
	Total (Non Bundelkhand)		**4869.06600**	**4222.64888**	**1934.83800**
	Grand Total		**8019.96600**	**7373.54888**	**3149.83800**

Table 31: Details of Fund Demand & Received (PIA)

S. No.	District	Name of the Project 2009-10	Demand	Received
1	2	3	4	5
Bundelkhand				
1	Banda	IWMP-I	130.47060	130.47060
2		IWMP-II	121.60140	121.60140
3	Chitrakoot	IWMP-I	154.60416	154.60416
4		IWMP-II	120.20100	120.20100
5		IWMP-III	121.32132	121.32132
6	Hameerpur	IWMP-I	117.16680	117.16680
7		IWMP-II	112.42878	112.42878
8		IWMP-III	112.49880	112.49880
9	Jalaun	IWMP-I	105.03000	105.03000
10		IWMP-II	107.36400	107.36400
11		IWMP-III	98.02800	98.02800
12		IWMP-IV	100.36200	100.36200
13		IWMP-V	106.85052	106.85052
14	Jhansi	IWMP-I	144.56796	144.56796
15		IWMP-II	152.64360	152.64360
16		IWMP-III	112.40544	112.40544
17	Lalitpur	IWMP-I	89.85900	89.85900
18		IWMP-II	86.35800	86.35800
19		IWMP-III	116.70000	116.70000
20		IWMP-IV	116.70000	116.70000
21	Mahoba	IWMP-I	129.77040	129.77040
22		IWMP-II	117.16680	117.16680
23		IWMP-III	96.86100	96.86100
24		IWMP-IV	120.43440	120.43440
25		IWMP-V	108.76440	108.76440
26		IWMP-VI	122.53500	122.53500

27		IWMP-VII	128.20662	128.20662
	Total (Bundelkhand)		**3150.90000**	**3150.90000**
S. No.	**District**	**Name of the Project 2009-10**	**Demand**	**Received**
1	**2**	**3**	**4**	**5**
Non Bundelkhand				
1	Aligarh	IWMP-I	115.74306	115.74306
2	Bulandshaher	IWMP-I	98.70486	98.70486
3	Firozabad	IWMP-I	119.78088	119.78088
4	Etah	IWMP-I	95.25054	95.25054
5	Hathras	IWMP-I	94.27026	94.27026
6	JP nagar	IWMP-I	39.765	39.765
7	Kannauj	IWMP-I	116.44246	116.44246
8	Kanpur Nagar	IWMP-I	156.28464	156.28464
9	Mainpuri	IWMP-I	93.45336	93.45336
10	Meerut	IWMP-I	62.77586	62.77586
11	Moradabad	IWMP-I	144.2412	144.2412
12	Muzaffarnagar	IWMP-I	163.2633	163.2633
13	Rampur	IWMP-I	157.96512	157.96512
14	Saharanpur	IWMP-I	159.85566	159.85566
15	Ambedkar Nagr	IWMP-I	118.6839	118.6839
16	Azamgarh	IWMP-I	159.62226	159.62226
17	Badaun	IWMP-I	119.12736	119.12736
18	Barabanki	IWMP-I	167.76792	167.76792
19	Bareilly	IWMP-I	117.58692	117.58692

20	Basti	IWMP-I	106.68714	106.68714
21	Deoria	IWMP-I	100.45536	100.45536
22	faizabad	IWMP-I	76.56	76.56
23	Fatehpur	IWMP-I	121.4847	121.4847
S. No.	**District**	**Name of the Project 2009-10**	**Demand**	**Received**
1	**2**	**3**	**4**	**5**
24	Ghazipur	IWMP-I	23.25	23.25
25	Gorakhpur	IWMP-I	52.72818	52.72818
26	Kausambi	IWMP-I	119.64084	119.64084
27	Kushi Nagar	IWMP-I	110.81	110.81
28	Lakhimpur Kheri	IWMP-I	159.57558	159.57558
29	Mirzapur	IWMP-I	97.98132	97.98132
30	Pratapgarh	IWMP-I	156.05124	156.05124
31	Raibareili	IWMP-I	149.16594	149.16594
32	Sant Kabir Nagar	IWMP-I	85.56444	85.56444
33	Shajahanpur	IWMP-I	161.65284	161.65284
34	Siddharthnagr	IWMP-I	156.6114	156.6114
35	Sultanpur	IWMP-I	84.66654	84.66654
36	Unnao	IWMP-I	159.1788	159.1788
37	Auraiya	IWMP-I	114.17118	114.17118
38	Hardoi	IWMP-I	134.57844	134.57844
39	Sant Ravidas Nagar	IWMP-I	118.61388	118.61388
	Total (Non Bundelkhand)		**4590.01238**	**4590.012**
	Grand Total		**7740.91238**	**7740.912**

Table 32: Details of Fund Demand & Received (WC)

S. No.	District	Name of the Project 2009-10	Demand	Received
1	2	3	4	5
Bundelkhand				
1	Banda	IWMP-I	50.31	50.31
2		IWMP-II	46.89	46.89
3	Chitrakoot	IWMP-I	59.616	59.616
4		IWMP-II	46.350	46.350
5		IWMP-III	46.782	46.782
6	Hameerpur	IWMP-I	45.18	45.18
7		IWMP-II	43.353	43.353
8		IWMP-III	43.38	43.38
9	Jalaun	IWMP-I	40.50	40.50
10		IWMP-II	41.40	41.40
11		IWMP-III	37.80	37.80
12		IWMP-IV	38.70	38.70
13		IWMP-V	41.2020	41.2020
14	Jhansi	IWMP-I	55.746	55.746
15		IWMP-II	58.86	58.86
16		IWMP-III	43.344	43.344
17	Lalitpur	IWMP-I	34.65	34.65
18		IWMP-II	33.3	33.3
19		IWMP-III	45	45
20		IWMP-IV	45	45
21	Mahoba	IWMP-I	50.04	50.04
22		IWMP-II	45.18	45.18
23		IWMP-III	37.35	37.35
24		IWMP-IV	46.44	46.44
25		IWMP-V	41.94	41.94
26		IWMP-VI	47.25	47.25
27		IWMP-VII	49.437	49.437
	Total (Bundelkhand)		**1215.00**	**1215.00**

S. No.	District	Name of the Project 2009-10	Demand	Received
1	2	3	4	5
		Non Bundelkhand		
1	Aligarh	IWMP-I	44.631	44.631
2	Bulandshaher	IWMP-I	38.061	38.061
3	Firozabad	IWMP-I	46.188	46.188
4	Etah	IWMP-I	36.729	36.729
5	Hathras	IWMP-I	36.351	36.351
6	JP nagar	IWMP-I	49.707	49.707
7	Kannauj	IWMP-I	44.901	44.901
8	Kanpur Nagar	IWMP-I	60.264	60.264
9	Mainpuri	IWMP-I	36.036	36.036
10	Meerut	IWMP-I	43.011	43.011
11	Muradabad	IWMP-I	55.62	55.62
12	Muzaffernagar	IWMP-I	62.955	62.955
13	Rampur	IWMP-I	60.912	60.912
14	Saharanpur	IWMP-I	61.641	61.641
15	Ambedkar Ngr	IWMP-I	45.765	45.765
16	Azamgarh	IWMP-I	61.551	61.551
17	Badaun	IWMP-I	45.936	45.936
18	Barabanki	IWMP-I	64.692	64.692
19	Bareilly	IWMP-I	45.342	45.342
20	Basti	IWMP-I	41.139	41.139
21	Deoria	IWMP-I	38.736	38.736
22	Faizabad	IWMP-I	45.936	45.936
23	Fatehpur	IWMP-I	46.845	46.845
24	Ghazipur	IWMP-I	38.736	38.736
25	Gorakhpur	IWMP-I	33.093	33.093
26	Kausambi	IWMP-I	46.134	46.134
27	Kushi Nagar	IWMP-I	52.776	52.776

28	Lakhimpur Kheri	IWMP-I	61.533	61.533
S. No.	**District**	**Name of the Project 2009-10**	**Demand**	**Received**
1	**2**	**3**	**4**	**5**
29	Mirzapur	IWMP-I	37.782	37.782
30	Pratapgarh	IWMP-I	60.174	60.174
31	Raibareili	IWMP-I	57.519	57.519
32	Sant Kabi Nagar	IWMP-I	32.994	32.994
33	Shajahanpur	IWMP-I	62.334	62.334
34	Siddharthnagr	IWMP-I	60.39	60.39
35	Sultanpur	IWMP-I	63.819	63.819
36	Unnao	IWMP-I	61.38	61.38
37	Auraiya	IWMP-I	55.593	55.593
38	Hardoi	IWMP-I	51.894	51.894
39	Sant Ravidas Nagar	IWMP-I	45.738	45.738
	Total (Non Bundelkhand)		**1934.838**	**1934.838**
	Grand Total		**3149.838**	**3149.838**

Table 33 : Details of HRD with PIAs

S. No.	District	Name of the Project 2009-10	Name of PIAs	No. of Permanent Staff	No. of WDTs members
1	**2**	**3**	**4**	**5**	**6**
Bundelkhand					
1	Banda	IWMP-I	Banda-1	22	4
2		IWMP-II	Banda-2	28	4
3	Chitrakoot	IWMP-I	Chitrakoot-1	31	4
4		IWMP-II	Chitrakoot-2	25	4
5		IWMP-III	Chitrakoot-3	14	4
6	Hameerpur	IWMP-I	Hameerpur-1	26	4
7		IWMP-II	Hameerpur-2	21	5
8		IWMP-III	Rath-2	22	5

9	Jalaun	IWMP-I	Orai	19	8
10		IWMP-II	Orai	19	6
11		IWMP-III	Jalaun-2	27	5
12		IWMP-IV	Jalaun-3	27	5
13		IWMP-V	Kalpi	30	4
14	Jhansi	IWMP-I	Jhansi-2	22	4
15		IWMP-II	Moth	22	4
16		IWMP-III	Jhansi-1	15	2
17	Lalitpur	IWMP-I	Lalitpur-1	16	2
18		IWMP-II	Lalitpur-2	18	3
19		IWMP-III	Lalitpur-3	18	8
20		IWMP-IV	Lalitpur-4	19	3
21	Mahoba	IWMP-I	Mahoba-1	21	5
22		IWMP-II	Mahoba-3	18	16
23		IWMP-III	Charkhari-2	23	4
24		IWMP-IV	Charkhari-1	21	4
25		IWMP-V	Mahoba-2	23	9
26		IWMP-VI	Mahoba-3	18	15
27		IWMP-VII	Mahoba Panwari	18	3
	Total (Bundelkhand)			**583**	**144**
S. No.	**District**	**Name of the Project 2009-10**	**Name of PIAs**	**No. of Permanent Staff**	**No. of WDTs members**
1	**2**	**3**	**4**	**5**	**6**
Non Bundelkhand					
1	Aligarh	IWMP-I	Aligarh	25	7
2	Bulandshaher	IWMP-I	Bulandshaher	13	3
3	Firozabad	IWMP-I	Firozabad	14	4
4	Etah	IWMP-I	Etah	30	6
5	Hathras	IWMP-I	Hathras	25	6
6	JP nagar	IWMP-I	JP nagar	10	4
7	Kannauj	IWMP-I	Kannauj	29	7
8	Kanpur Nagar	IWMP-I	Kanpur Nagar	33	4
9	Mainpuri	IWMP-I	Mainpuri	17	

10	Meerut	IWMP-I	Meerut	14	5
11	Muradabad	IWMP-I	Muradabad	16	10
12	Muzaffernagar	IWMP-I	Muzaffernagar	20	5
13	Rampur	IWMP-I	Rampur	23	6
14	Saharanpur	IWMP-I	Saharanpur	16	5
15	Ambedkar Ngr	IWMP-I	Ambedkar Ngr	15	5
16	Azamgarh	IWMP-I	Azamgarh	14	3
17	Badaun	IWMP-I	Badaun	18	7
18	Barabanki	IWMP-I	Barabanki	20	4
19	Bareilly	IWMP-I	Bareilly	14	14
20	Basti	IWMP-I	Basti	11	10
21	Deoria	IWMP-I	Deoria	16	4
22	faizabad	IWMP-I	faizabad	20	4
23	Fatehpur	IWMP-I	Fatehpur	20	1
24	Ghazipur	IWMP-I	Ghazipur	20	5
25	Gorakhpur	IWMP-I	Gorakhpur	19	4
26	Kausambi	IWMP-I	Kausambi	30	13
27	Kushi Nagar	IWMP-I	Kushi Nagar	25	
28	Lakhimpur Kheri	IWMP-I	Lakhimpur Kheri	30	4
S. No.	**District**	**Name of the Project 2009-10**	**Name of PIAs**	**No. of Permanent Staff**	**No. of WDTs members**
1	**2**	**3**	**4**	**5**	**6**
29	Mirzapur	IWMP-I	Mirzapur	18	13
30	Pratapgarh	IWMP-I	Pratapgarh	22	4
31	Raibareili	IWMP-I	Raibareili	24	4
32	Sant Kabi Nagar	IWMP-I	Sant Kabi Nagar	20	4
33	Shajahanpur	IWMP-I	Shajahanpur	29	19
34	Siddharthngr	IWMP-I	Siddharthngr	23	
35	Sultanpur	IWMP-I	Sultanpur	22	7
36	Unnao	IWMP-I	Unnao	20	4
37	Auraiya	IWMP-I	Auraiya	22	4
38	Hardoi	IWMP-I	St.Ravidas Ngr.	18	4

39	Sant Ravidas Nagar	IWMP-I	Hardoi	28	8
	Total (Non Bundelkhand)			**735**	**205**
	Grand Total			**1318**	**349**

Table – 34 Details of Detailed Project Report (1%)

Amount in Lac.
Area in ha.

S. No.	District	Name of the Project 2009-10	Area Proposed for treatment	Total Cost	Amount Released under head	Expenditure under head	Balance	Physical Progress
1	2	3	4	5	6	7	8=6-7	9
Bundelkhand								
1	Banda	IWMP-I	5590	670.80000	6.70800	5.10000	1.60800	Online
2		IWMP-II	5210	625.20000	6.25200	5.70000	0.55200	Online
3	Chitrakoot	IWMP-I	6624	794.88000	7.94880	4.50000	3.44880	Online
4		IWMP-II	5150	618.00000	6.18000	6.18000	0.00000	Online
5		IWMP-III	5198	623.76000	6.23760	5.80000	0.43760	Online
6	Hameerpur	IWMP-I	5020	602.40000	6.02400	4.65000	1.37400	Online
7		IWMP-II	4817	578.04000	5.78040	4.25000	1.53040	Online
8		IWMP-III	4820	578.40000	5.78400	2.50000	3.28400	Online
9	Jalaun	IWMP-I	4500	540.00000	5.40000	4.52000	0.88000	Online
10		IWMP-II	4600	552.00000	5.52000	4.65000	0.87000	Online
11		IWMP-III	4200	504.00000	5.04000	3.94000	1.10000	Online
12		IWMP-IV	4300	516.00000	5.16000	4.15000	1.01000	Online
13		IWMP-V	4578	549.36000	5.49360	4.89000	0.60360	Online
14	Jhansi	IWMP-I	6194	743.28000	7.43280	6.03000	1.40280	Online
15		IWMP-II	6540	784.80000	7.84800	6.06000	1.78800	Online
16		IWMP-III	4816	577.92000	5.77920	4.85000	0.92920	Online
17	Lalitpur	IWMP-I	3850	462.00000	4.62000	3.65000	0.97000	Online
18		IWMP-II	3700	444.00000	4.44000	3.60000	0.84000	Online
19		IWMP-III	5000	600.00000	6.00000	2.00000	4.00000	Online
20		IWMP-IV	5000	600.00000	6.00000	5.75000	0.25000	Online

21	Mahoba	IWMP-I	5560	667.20000	6.67200	5.08000	1.59200	Online
22		IWMP-II	5020	602.40000	6.02400	6.02400	0.00000	Online
23		IWMP-III	4150	498.00000	4.98000	4.98000	0.00000	Online
24		IWMP-IV	5160	619.20000	6.19200	4.80000	1.39200	Online
25		IWMP-V	4660	559.20000	5.59200	5.59200	0.00000	Online
26		IWMP-VI	5250	630.00000	6.30000	6.30000	0.00000	Online
27		IWMP-VII	5493	659.16000	6.59160	6.10000	0.49160	Online
	Total (Bundelkhand)		**135000**	**16200.000**	**162.000**	**131.64600**	**30.354**	**27**
				Non Bundelkhand				
1	Aligarh	IWMP-I	4959	595.08000	5.95080	3.45000	2.50080	Online
2	Bulandshaher	IWMP-I	4229	507.48000	5.07480	4.10000	0.97480	Online
3	Firozabad	IWMP-I	5132	615.84000	6.15840	4.71000	1.44840	Online
4	Etah	IWMP-I	4081	489.72000	4.89720	2.92000	1.97720	Online
5	Hathras	IWMP-I	4039	484.68000	4.84680	4.31000	0.53680	Online
6	JP nagar	IWMP-I	5523	662.76000	6.62760	5.55000	1.07760	Online
7	Kannauj	IWMP-I	4989	598.68000	5.98680	3.80000	2.18680	Online
8	Kanpur Nagar	IWMP-I	6696	803.52000	8.03520	6.34000	1.69520	Online
9	Mainpuri	IWMP-I	4004	480.48000	4.80480	4.50000	0.30480	Online
10	Meerut	IWMP-I	4779	573.48000	5.73480	4.50000	1.23480	Online
11	Muradabad	IWMP-I	6180	741.60000	7.41600	5.36000	2.05600	Online
12	Muzaffernagar	IWMP-I	6995	839.40000	8.39400	2.59000	5.80400	Online
13	Rampur	IWMP-I	6768	812.16000	8.12160	3.69000	4.43160	Online
14	Saharanpur	IWMP-I	6849	821.88000	8.21880	2.68000	5.53880	Online
15	Ambedkar Ngr	IWMP-I	5085	610.20000	6.10200	6.00000	0.10200	Online
16	Azamgarh	IWMP-I	6839	820.68000	8.20680	8.20000	0.00680	Online
17	Badaun	IWMP-I	5104	612.48000	6.12480	3.15000	2.97480	Online
18	Barabanki	IWMP-I	7188	862.56000	8.62560	8.60000	0.02560	Online
19	Bareilly	IWMP-I	5038	604.56000	6.04560	6.02000	0.02560	Online
20	Basti	IWMP-I	4571	548.52000	5.48520	4.99000	0.49520	Online
21	Deoria	IWMP-I	4304	516.48000	5.16480	5.10400	0.06080	Online
22	faizabad	IWMP-I	5104	612.48000	6.12480	6.12000	0.00480	Online

23	Fatehpur	IWMP-I	5205	624.60000	6.24600	4.07000	2.17600	Online
24	Ghazipur	IWMP-I	4304	516.48000	5.16480	4.90000	0.26480	Online
25	Gorakhpur	IWMP-I	3677	441.24000	4.41240	3.46000	0.95240	Online
26	Kausambi	IWMP-I	5126	615.12000	6.15120	5.60000	0.55120	Online
27	Kushi Nagar	IWMP-I	5864	703.68000	7.03680	7.03000	0.00680	Online
28	Lakhimpur Kheri	IWMP-I	6837	820.44000	8.20440	7.20000	1.00440	Online
29	Mirzapur	IWMP-I	4198	503.76000	5.03760	4.33000	0.70760	Online
30	Pratapgarh	IWMP-I	6686	802.32000	8.02320	5.05000	2.97320	Online
31	Raibareili	IWMP-I	6391	766.92000	7.66920	5.45000	2.21920	Online
32	Sant Kabir Nagar	IWMP-I	3666	439.92000	4.39920	3.89000	0.50920	Online
33	Auraiya	IWMP-I	6177	741.24000	7.41240	3.88000	3.53240	Online
34	Shajahanpur	IWMP-I	6926	831.12000	8.31120	7.81000	0.50120	Online
35	Siddharthngr	IWMP-I	6710	805.20000	8.05200	7.40000	0.65200	Online
36	Sultanpur	IWMP-I	7091	850.92000	8.50920	7.03000	1.47920	Online
37	Unnao	IWMP-I	6820	818.40000	8.18400	6.25000	1.93400	Online
38	Hardoi	IWMP-I	5766	691.92000	6.91920	4.95000	1.96920	Online
	Sant Ravidas Nagar	IWMP-I	5082	609.84000	6.09840	5.82000	0.27840	Online
	Total (Non Bundelkhand)		**214982**	**25797.840**	**257.978**	**200.80400**	**57.17440**	**39**
	Grand Total		**349982**	**41997.840**	**419.978**	**332.45000**	**87.5284**	**66**

Table 35 Details of Entry Point Activities (4%)

Amount in Lac.
Area in ha.

S. No.	District	Name of the Project 2009-10	Area Proposed for treatment	Total Cost	Amount Released under head	Expenditure under head	Balance	Physical Progress
1	2	3	4	5	6	7	8=6-7	9
Bundelkhand								
1	Banda	IWMP-I	5590	670.80000	26.83200	26.83200	0.00000	54
2		IWMP-II	5210	625.20000	25.00800	25.00800	0.00000	39
3	Chitrakoot	IWMP-I	6624	794.88000	31.79520	30.40000	1.39520	45
4		IWMP-II	5150	618.00000	24.72000	24.30000	0.42000	83
5		IWMP-III	5198	623.76000	24.95040	24.95000	0.00040	124
6	Hameerpur	IWMP-I	5020	602.40000	24.09600	24.09600	0.00000	9
7		IWMP-II	4817	578.04000	23.12160	23.12160	0.00000	78
8		IWMP-III	4820	578.40000	23.13600	23.13600	0.00000	30
9	Jalaun	IWMP-I	4500	540.00000	21.60000	21.10000	0.50000	20
10		IWMP-II	4600	552.00000	22.08000	21.20000	0.88000	45
11		IWMP-III	4200	504.00000	20.16000	19.72000	0.44000	34
12		IWMP-IV	4300	516.00000	20.64000	20.40000	0.24000	28
13		IWMP-V	4578	549.36000	21.97440	21.97000	0.00440	112
14	Jhansi	IWMP-I	6194	743.28000	29.73120	29.73100	0.00020	17
15		IWMP-II	6540	784.80000	31.39200	31.39200	0.00000	16
16		IWMP-III	4816	577.92000	23.11680	23.11680	0.00000	14
17	Lalitpur	IWMP-I	3850	462.00000	18.48000	18.48000	0.00000	26
18		IWMP-II	3700	444.00000	17.76000	17.76000	0.00000	21
19		IWMP-III	5000	600.00000	24.00000	24.00000	0.00000	35
20		IWMP-IV	5000	600.00000	24.00000	24.00000	0.00000	60
21	Mahoba	IWMP-I	5560	667.20000	26.68800	26.68000	0.00800	30
22		IWMP-II	5020	602.40000	24.09600	24.09600	0.00000	37

23		IWMP-III	4150	498.00000	19.92000	19.86000	0.06000	22
24		IWMP-IV	5160	619.20000	24.76800	24.70000	0.06800	37
25		IWMP-V	4660	559.20000	22.36800	22.36800	0.00000	27
26		IWMP-VI	5250	630.00000	25.20000	25.20000	0.00000	30
27		IWMP-VII	5493	659.16000	26.36640	26.36600	0.00040	64
	Total (Bundelkhand)		**135000**	**16200.000**	**648.000**	**643.98340**	**4.01660**	**1137**
				Non Bundelkhand				
1	Aligarh	IWMP-I	4959	595.08000	23.80320	23.80300	0.00020	10
2	Bulandshaher	IWMP-I	4229	507.48000	20.29920	20.20000	0.09920	7
3	Firozabad	IWMP-I	5132	615.84000	24.63360	24.63360	0.00000	38
4	Etah	IWMP-I	4081	489.72000	19.58880	19.58880	0.00000	24
5	Hathras	IWMP-I	4039	484.68000	19.38720	19.30000	0.08720	9
6	JP nagar	IWMP-I	5523	662.76000	26.51040	26.51000	0.00040	12
7	Kannauj	IWMP-I	4989	598.68000	23.94720	23.89000	0.05720	58
8	Kanpur Nagar	IWMP-I	6696	803.52000	32.14080	32.00000	0.14080	33
9	Mainpuri	IWMP-I	4004	480.48000	19.21920	19.21900	0.00020	20
10	Meerut	IWMP-I	4779	573.48000	22.93920	22.50000	0.43920	27
11	Muradabad	IWMP-I	6180	741.60000	29.66400	29.40000	0.26400	24
12	Muzaffernagar	IWMP-I	6995	839.40000	33.57600	33.57600	0.00000	33
13	Rampur	IWMP-I	6768	812.16000	32.48640	31.54000	0.94640	79
14	Saharanpur	IWMP-I	6849	821.88000	32.87520	32.34000	0.53520	21
15	Auraiya	IWMP-I	6177	741.24000	29.64960	29.65000	-0.00040	42
16	Ambedkar Nagr	IWMP-I	5085	610.20000	24.40800	24.40000	0.00800	36
17	Azamgarh	IWMP-I	6839	820.68000	32.82720	32.82600	0.00120	42
18	Badaun	IWMP-I	5104	612.48000	24.49920	24.49800	0.00120	16
19	Barabanki	IWMP-I	7188	862.56000	34.50240	34.50000	0.00240	39
20	Bareilly	IWMP-I	5038	604.56000	24.18240	24.18000	0.00240	45
21	Basti	IWMP-I	4571	548.52000	21.94080	21.94080	0.00000	20
22	Deoria	IWMP-I	4304	516.48000	20.65920	20.65000	0.00920	39
23	Faizabad	IWMP-I	5104	612.48000	24.49920	24.49520	0.00400	25

24	Fatehpur	IWMP-I	5205	624.60000	24.98400	24.58000	0.40400	30
25	Ghazipur	IWMP-I	4304	516.48000	20.65920	20.65000	0.00920	19
26	Gorakhpur	IWMP-I	3677	441.24000	17.64960	17.64800	0.00160	29
27	Kausambi	IWMP-I	5126	615.12000	24.60480	24.60000	0.00480	31
28	Kushi Nagar	IWMP-I	5864	703.68000	28.14720	28.14720	0.00000	47
29	Lakhimpur Kheri	IWMP-I	6837	820.44000	32.81760	32.81600	0.00160	28
30	Mirzapur	IWMP-I	4198	503.76000	20.15040	20.15040	0.00000	81
31	Pratapgarh	IWMP-I	6686	802.32000	32.09280	32.09000	0.00280	77
32	Raibareili	IWMP-I	6391	766.92000	30.67680	30.67000	0.00680	48
33	Sant Kabir Nagar	IWMP-I	3666	439.92000	17.59680	16.50000	1.09680	118
34	Shajahanpur	IWMP-I	6926	831.12000	33.24480	29.88000	3.36480	45
35	Siddharthngr	IWMP-I	6710	805.20000	32.20800	25.16000	7.04800	42
36	Sultanpur	IWMP-I	7091	850.92000	34.03680	34.03000	0.00680	43
37	Unnao	IWMP-I	6820	818.40000	32.73600	32.73000	0.00600	54
38	Hardoi	IWMP-I	5766	691.92000	27.67680	27.67600	0.00080	63
39	Sant Ravidas Nagar	IWMP-I	5082	609.84000	24.39360	24.39000	0.00360	45
	Total (Non Bundelkhand)		**214982**	**25797.840**	**1031.914**	**1017.3580**	**14.5556**	**1499**
	Grand Total		**349982**	**41997.840**	**1679.914**	**1661.3414**	**18.5722**	**2636**

Table 36 Details of Watershed Development Works (7.5%)

Amount in Lac.
Area in ha.

S. No.	District	Name of the Project 2009-10	Area Proposed for treatment	Total Cost	Amount Released under head	Expenditure under head	Balance	Physical Progress
1	2	3	4	5	6	7	8	9
Bundelkhand								
1	Banda	IWMP-I	5590	670.80000	50.31000	46.86000	3.45000	619
2		IWMP-II	5210	625.20000	46.89000	43.89000	3.00000	788
3	Chitrakoot	IWMP-I	6624	794.88000	59.61600	51.00000	8.61600	759
4		IWMP-II	5150	618.00000	46.35000	40.03000	6.32000	586
5		IWMP-III	5198	623.76000	46.78200	42.95000	3.83200	641
6	Hameerpur	IWMP-I	5020	602.40000	45.18000	45.18000	0.00000	754
7		IWMP-II	4817	578.04000	43.35300	43.35000	0.00300	954
8		IWMP-III	4820	578.40000	43.38000	42.67000	0.71000	448
9	Jalaun	IWMP-I	4500	540.00000	40.50000	35.40000	5.10000	510
10		IWMP-II	4600	552.00000	41.40000	35.91000	5.49000	550
11		IWMP-III	4200	504.00000	37.80000	36.14000	1.66000	772
12		IWMP-IV	4300	516.00000	38.70000	36.59000	2.11000	792
13		IWMP-V	4578	549.36000	41.20200	37.64000	3.56200	625
14	Jhansi	IWMP-I	6194	743.28000	55.74600	54.35000	1.39600	757
15		IWMP-II	6540	784.80000	58.86000	57.40000	1.46000	886
16		IWMP-III	4816	577.92000	43.34400	43.34400	0.00000	661
17	Lalitpur	IWMP-I	3850	462.00000	34.65000	28.00000	6.65000	376
18		IWMP-II	3700	444.00000	33.30000	27.00000	6.30000	362
19		IWMP-III	5000	600.00000	45.00000	42.00000	3.00000	498
20		IWMP-IV	5000	600.00000	45.00000	45.00000	0.00000	677
21	Mahoba	IWMP-I	5560	667.20000	50.04000	45.14000	4.90000	624
22		IWMP-II	5020	602.40000	45.18000	39.70000	5.48000	407
23		IWMP-III	4150	498.00000	37.35000	28.87000	8.48000	420

24		IWMP-IV	5160	619.20000	46.44000	41.62000	4.82000	619
25		IWMP-V	4660	559.20000	41.94000	41.94000	0.00000	394
26		IWMP-VI	5250	630.00000	47.25000	40.65000	6.60000	419
27		IWMP-VII	5493	659.16000	49.43700	47.30000	2.13700	709
	Total (Bundelkhand)		**135000**	**16200.000**	**1215.000**	**1119.924**	**95.076**	**16607**
				Non Bundelkhand				
1	Aligarh	IWMP-I	4959	595.08000	44.63100	44.01000	0.62100	706
2	Bulandshaher	IWMP-I	4229	507.48000	38.06100	38.03000	0.03100	650
3	Firozabad	IWMP-I	5132	615.84000	46.18800	38.20000	7.98800	560
4	Etah	IWMP-I	4081	489.72000	36.72900	36.00000	0.72900	552
5	Hathras	IWMP-I	4039	484.68000	36.35100	35.99000	0.36100	575
6	JP nagar	IWMP-I	5523	662.76000	49.70700	40.80000	8.90700	606
7	Kannauj	IWMP-I	4989	598.68000	44.90100	44.67000	0.23100	760
8	Kanpur Nagar	IWMP-I	6696	803.52000	60.26400	55.20000	5.06400	716
9	Mainpuri	IWMP-I	4004	480.48000	36.03600	35.57000	0.46600	607
10	Meerut	IWMP-I	4779	573.48000	43.01100	34.55000	8.46100	576
11	Muradabad	IWMP-I	6180	741.60000	55.62000	38.20000	17.42000	1264
12	Muzaffernagar	IWMP-I	6995	839.40000	62.95500	62.95500	0.00000	1288
13	Rampur	IWMP-I	6768	812.16000	60.91200	55.00000	5.91200	585
14	Saharanpur	IWMP-I	6849	821.88000	61.64100	60.70000	0.94100	1027
15	Ambedkar Ngr	IWMP-I	5085	610.20000	45.76500	44.70000	1.06500	740
16	Azamgarh	IWMP-I	6839	820.68000	61.55100	53.25000	8.30100	887
17	Badaun	IWMP-I	5104	612.48000	45.93600	45.93000	0.00600	765
18	Barabanki	IWMP-I	7188	862.56000	64.69200	64.69000	0.00200	1077
19	Bareilly	IWMP-I	5038	604.56000	45.34200	45.33700	0.00500	1056
20	Basti	IWMP-I	4571	548.52000	41.13900	41.13900	0.00000	373
21	Deoria	IWMP-I	4304	516.48000	38.73600	34.32000	4.41600	560
22	faizabad	IWMP-I	5104	612.48000	45.93600	45.93000	0.00600	768
23	Fatehpur	IWMP-I	5205	624.60000	46.84500	46.84000	0.00500	781
24	Ghazipur	IWMP-I	4304	516.48000	38.73600	38.10000	0.63600	635
25	Gorakhpur	IWMP-I	3677	441.24000	33.09300	33.09000	0.00300	561

26	Kausambi	IWMP-I	5126	615.12000	46.13400	45.10000	1.03400	628
27	Kushi Nagar	IWMP-I	5864	703.68000	52.77600	52.77600	0.00000	880
28	Lakhimpur Kheri	IWMP-I	6837	820.44000	61.53300	61.53000	0.00300	1063
29	Mirzapur	IWMP-I	4198	503.76000	37.78200	36.72100	1.06100	612
30	Pratapgarh	IWMP-I	6686	802.32000	60.17400	55.25000	4.92400	919
31	Raibareili	IWMP-I	6391	766.92000	57.51900	56.05000	1.46900	830
32	Sant Kabir Nagar	IWMP-I	3666	439.92000	32.99400	32.56000	0.43400	541
33	Shajahanpur	IWMP-I	6926	831.12000	62.33400	62.33000	0.00400	1038
34	Siddharthngr	IWMP-I	6710	805.20000	60.39000	60.38600	0.00400	1127
35	Sultanpur	IWMP-I	7091	850.92000	63.81900	63.81000	0.00900	1350
36	Unnao	IWMP-I	6820	818.40000	61.38000	61.37400	0.00600	924
37	Hardoi	IWMP-1	5766	691.92000	51.89400	43.00000	8.89400	731
38	Auraiya	IWMP-I	6177	741.24000	55.59300	0.00000	0.00000	Eva not reported
39	Sant Ravidas Nagar	IWMP-I	5082	609.84000	45.73800	13.80000	31.93800	230
	Total (Non Bundelkhand)		**214982**	**25797.840**	**1934.838**	**1757.888**	**121.357**	**29547.600**
	Grand Total		**349982**	**41997.840**	**3149.838**	**2877.812**	**216.433**	**46155**

10. Project Photographs

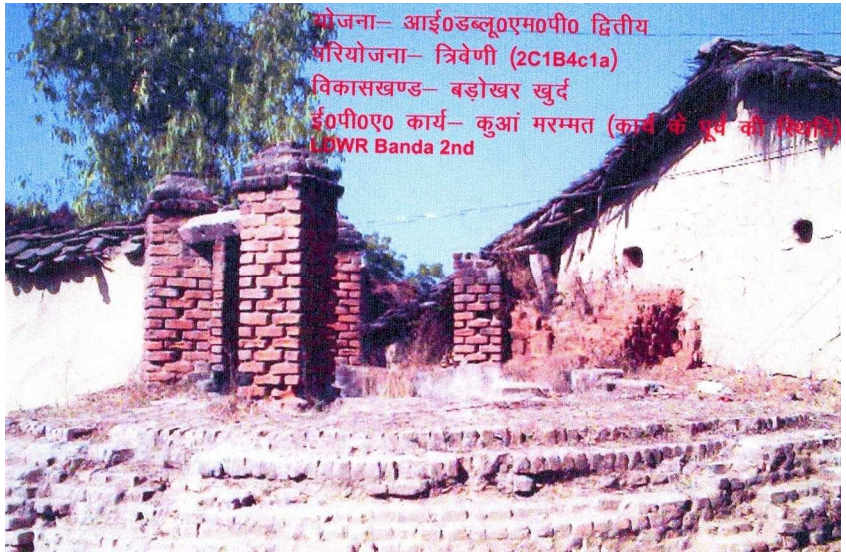
Banda-IWMP-I

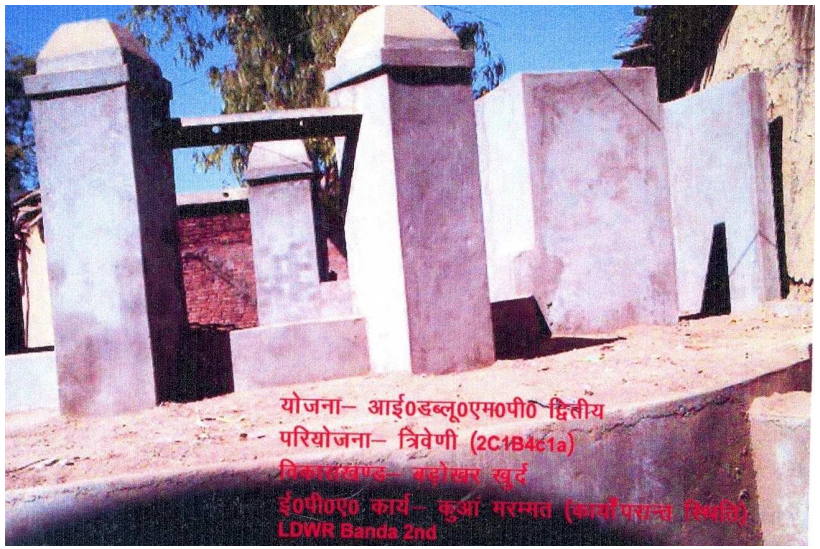
Inspection of Chabutra

Inspection of Toilet

Banda-IWMP-II

Bridge Construction (Before & After)





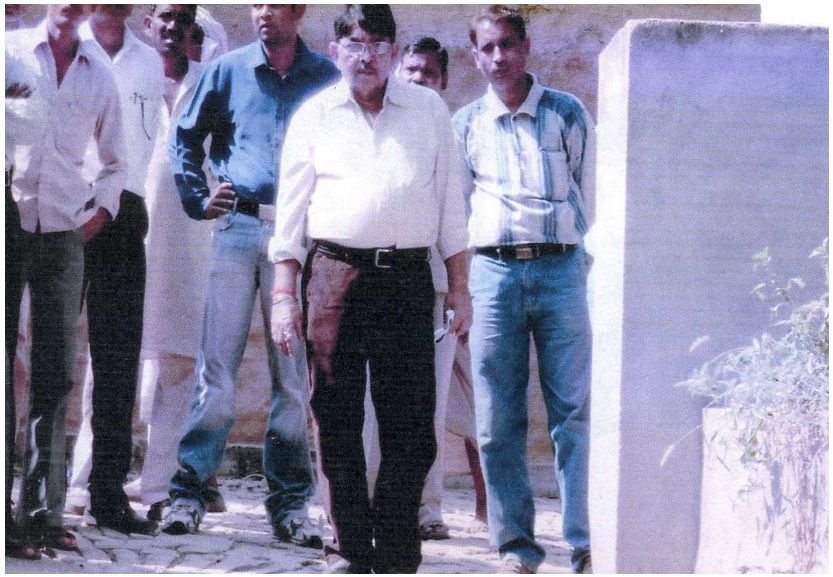
Renovation of Well (Before & After)

Hameerpur-IWMP-I

Verification of project work

Inspection of Contour Bunding

Inspection of Bund



Jhansi-IWMP-I

PRA Exercise

Inspection of EPA work

Bulandsahar-IWMP-I

(भूमि एव जल संरक्षण कार्य का निरीक्षण)

Inspection of Soil Conservation work

(ई0पी0ए0 कार्य का निरीक्षण)

Inspection of Entry Point Activity

(उपभोक्ता समूह के सदस्य से वार्ता)

Discussion with User Group

(कटाव ग्रस्त क्षेत्र का निरीक्षण)

Inspection of Soil Conservation work

Firozabad-IWMP-I

Field bund in IWMP-I, Firozabad

Meeting with SHG members in IWMP-I, Firozabad

E.P.A के अन्तर्गत ब्रहाहिमपुर स्कूल के पास खडंजा कार्य एवं सोखता गढढ़े के निर्माण का निरीक्षण करते हुए **डा. सतेन्द्र कुमार**

भावली सूक्ष्म जल समेट में फील्डबन्ड का निरीक्षण करते हुए **डा. सतेन्द्र कुमार**

पैरारा सूक्ष्म जल समेट में परियोजना में स्वयं सहायता समूह के सदस्यों से वार्ता करते हुए **डा. सतेन्द्र कुमार**

E.P.A के अन्तर्गत ब्रहाहिमपुर स्कूल के पास खडंजा कार्य एवं सोखता गढढ़े के निर्माण का निरीक्षण करते हुए **डा. सतेन्द्र कुमार**

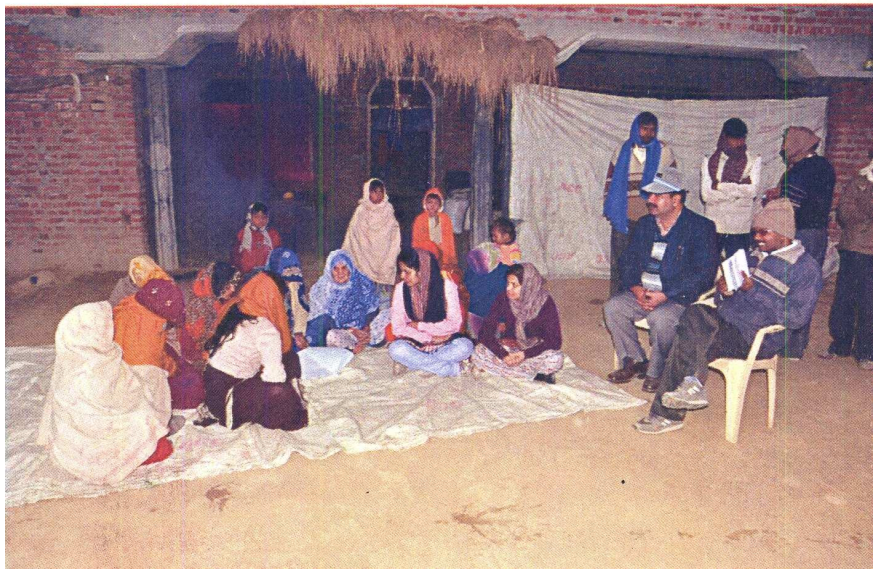
मूल्यांकन समिति द्वारा परियोजना बहादुरपुर मझगवां प्रथम में वाटरशेड विकास कार्यो का निरीक्षण

Mainpuri-IWMP-I

Submergence bund in IWMP, Mainpuri

Participatory crop demonstration trial

Interaction with women SHG in IWMP, Mainpuri

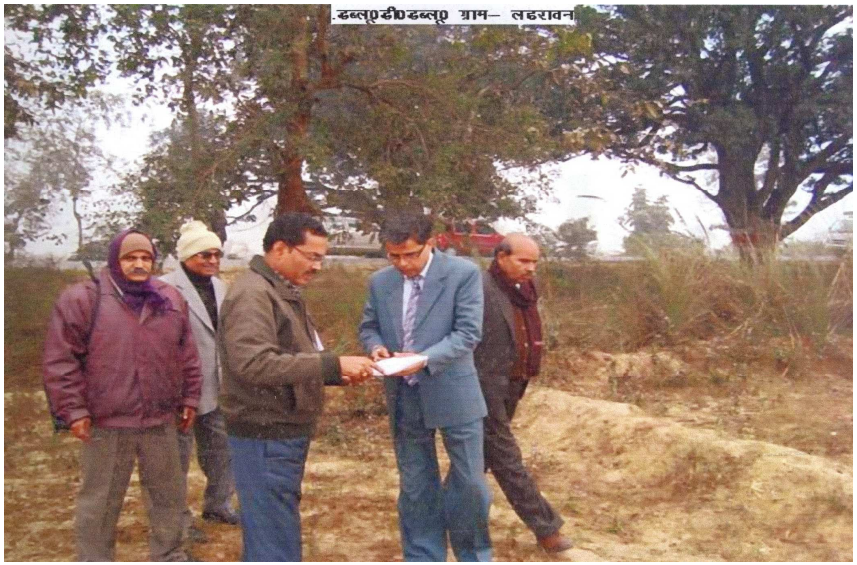


Field bunds in IWMP, Mainpuri

Meerut-IWMP-I

Inspection of project work

Inspection of MNREGA work



Inspection of project work

Discussion with User Group

Muzaffarnagar-IWMP-I

माईक्रो वाटर सैड गोधना मार्जिनल बॉध

माईक्रो वाटर सैड चन्धेडी जल निकास नाला एवं स्कूल बाउन्ड्री

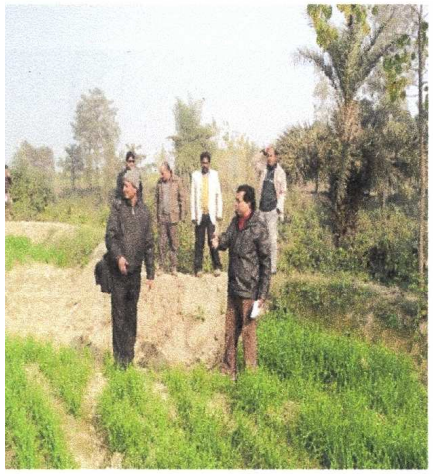
माईक्रो वाटर सैड वैल्ली कंटूर बॉध

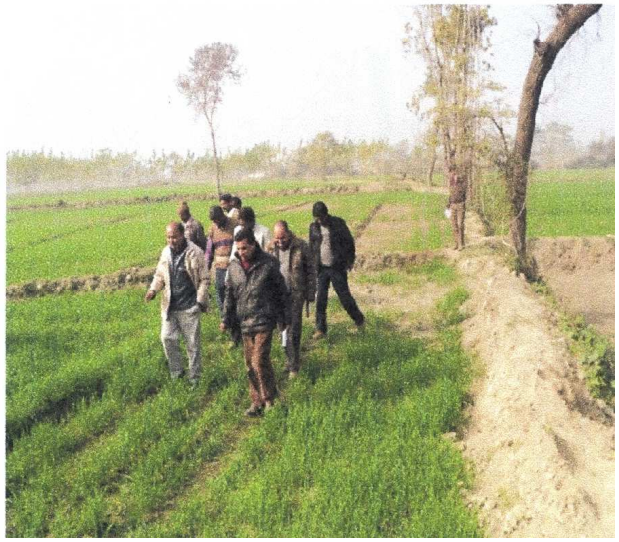
माईक्रो वाटर सैड अटाली अवरोध बॉध

Rampur-IWMP-I

आईडब्ल्युएमपी–प्रथम के अर्न्तगत वर्ष 2009.10 में स्वीकृत प्रथम बैच की परियोजना का मूल्यांकन दि0 19.12.2011 से 21.12.2011
मूल्यांकनकर्ता संस्था का नाम–सरदार बल्लभभाई पटेल कृषि एवं प्रौद्योगिक विश्वविद्यालय, मेरठ।
वाटरसेड डैवलैपमेंन्ट वर्क–वाटरसेड शिकारपुर(ग्राम–महाराजपुर, किशनपुर मौलागढ़)।





गांव –रोशनपुर का जलाशय

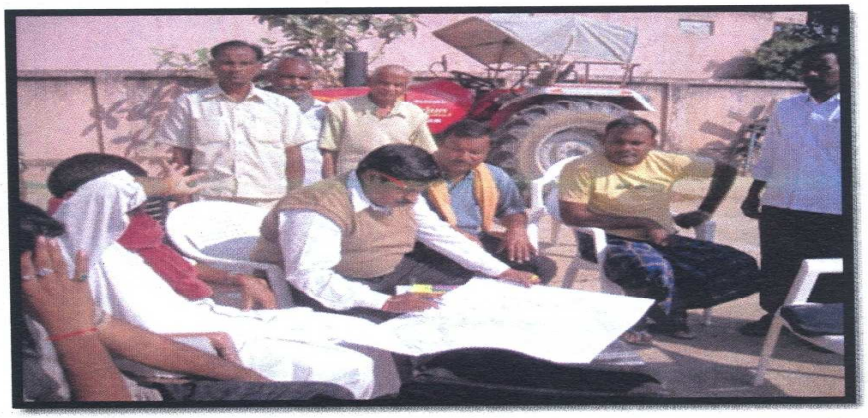
गांव –रोशनपुर का फैरीफेरल बांध

Badaun-IWMP-I

Gorakhpur-IWMP-I

Photographs of PRA Exercise

Group Discussion & Resource Map of Majuri Khas Village



Group Discussion & Resource Map of Reaon Village

Repaire of Well No.2 Vill.-Akusi

Kausambi-IWMP-I

वाटर शेड का नाम : कौशाम्बी प्रथम
माइक्रो वाटर शेड का नाम एवं कोड : मौली 2C4A1d2b
विकास खण्ड का नाम : मूरतगंज
कार्य का नाम : पीवी निर्माण

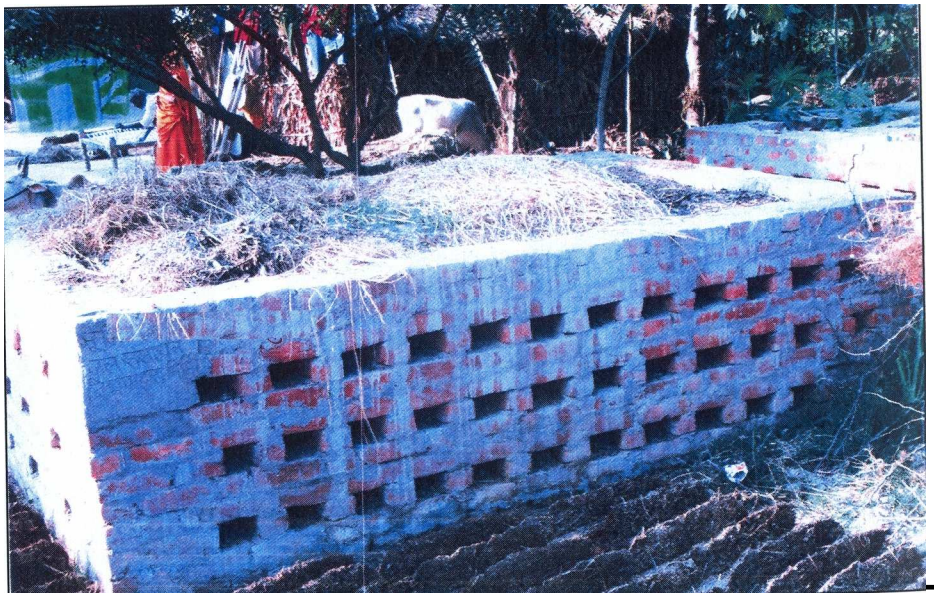
वाटर शेड का नाम : कौशाम्बी प्रथम
माइक्रो वाटर शेड का नाम एवं कोड : मौली 2C4A1d2b
विकास खण्ड का नाम : मूरतगंज
कार्य का नाम : सीडी निर्माण

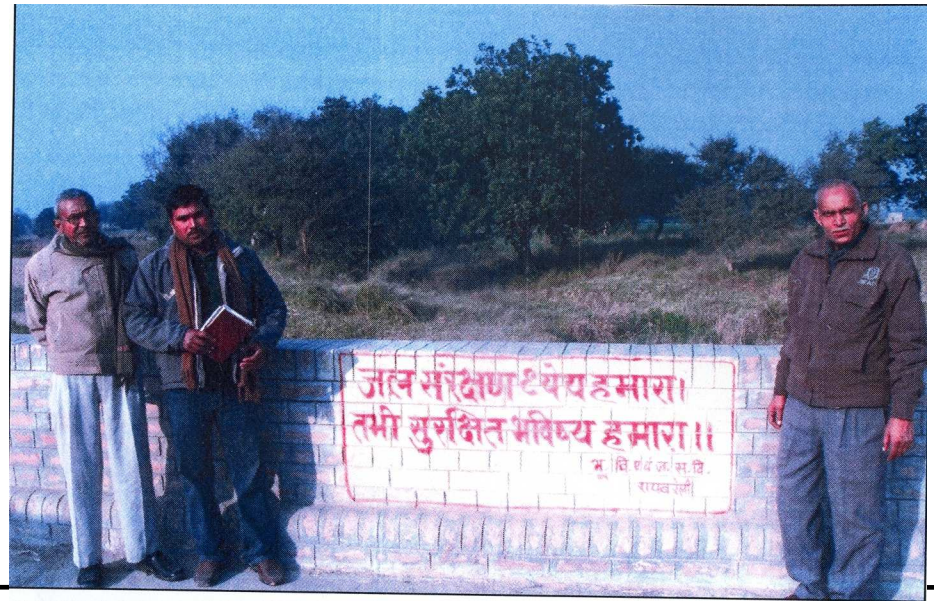
वाटर शेड का नाम : कौशाम्बी प्रथम
माइक्रो वाटर शेड का नाम एवं कोड : मौली 2C4A1d2b
विकास खण्ड का नाम : मूरतगंज
कार्य का नाम : सीडी निर्माण

वाटर शेड का नाम : कौशाम्बी प्रथम
माइक्रो वाटर शेड का नाम एवं कोड : मौली 2C4A1d2b
विकास खण्ड का नाम : मूरतगंज
कार्य का नाम : एमबी निर्माण

Raibareili-IWMP-I

Entry Point Activity Work





State Level Nodal Agency, LD & WR, Govt. of U.P.

Sant Kabir Nagar-IWMP-I

Entry Point Activity Work

Module for IWMP Projects Training of Trainers (Five Days)

1. Concept of Watershed Development.
2. Presentation and discussion on important points of Common Guideline.
3. Theory and Practical regarding Base line survey and Planning of watershed projects.
4. Constitution of SHGs and UGs, record keeping and Bank linkages.
5. Livelihood options, record keeping and constitutions of Watershed Committee (WC).
6. Desired information and discussion on preparation of PPRs, DPRs and AAPs.
7. Management Information System (MIS) in IWMP.
8. Agriculture Production System, Demonstrations, Seed Production, Exchange and new techniques of agriculture.
9. Breeding, nutrition, forage production, disease control for Animal Husbandry development
10. Discussion and feedback on organizing PIA and district level training.
11. Livelihood analysis, planning for micro enterprises as per local need.
12. Equity and Gender Planning and Fund Management.

Module of Training for WCDC, PIA and WDT

1. Importance of Watershed- Watershed development, concept, digitalization, prioritization, delineation and mapping.
2. Important points, procedure and methodology of Common Guidelines of GOI.
3. Importance components of DPRs, watershed development activities, planning, design, estimates, farmer wise description and resource utilization agreement.
4. Collection of data through baseline survey, analysis, Watershed planning, use of Remote Sensing, GPS & GIS.
5. Constitution of WC, SHGs, UGs etc social mobilization, institutional details identification and construction of Entry Point Activities.

6. Training, planning of action plan, implementation of community institutions.
7. Collection of data, analysis and planning of alternate livelihood options. (i)Production based (ii) Animal Husbandry and fisheries (iii) Non timber forest Products (iv) Land based (v) Non land based.
8. Financial planning of Livelihood options and micro enterprises.
9. Water harvesting and ground water recharge.
10. Suitable cropping and horticultural systems in rainfed areas.
11. Income generating suitable agro forestry systems and watershed development.
12. Organic farming, vermi compost and NADEP for sustainable production.
13. Rainfed farming systems for marginal and small farmers.
14. Development and management of community property resources (CPR).
15. Concept, planning and development of animal husbandry in watershed management.
16. Management of feed and fodder for animals in watershed.
17. Estimates of soil and water conservation structures, ponds and fisheries etc.
18. Concept, components and procedure for forest management.
19. Water use efficiency increasing techniques.
20. Off farm micro enterprises, agro processing and marketing.
21. Techniques of project management.
22. Equity analysis for micro planning.
23. Concept, components and management for ridge to valley treatment.
24. Use of computer based MIS for watershed development.
25. Convergence in IWMP.
26. Exposure visit of watersheds.
27. Accounting, book keeping and maintenance of records.
28. Social Audit.
29. Completion of consolidation phase, continuation of successful experiences, fixing of responsibilities to UGs, transfer of properties to GPs, record keeping and preparation of success stories.

Training Module for Computer Operators/ Data Entry Operators

1. Use of MIS in IWMP.
2. Internet, Website browsing and Email practice.
3. User management, project funding, institutional funding plan and achievement.
4. Practice of online, offline and MIS.
5. Discussion, practice about problems during MIS feeding.
6. IWMP management of Data and linkage with information.
7. WCDC User: - Capacity Building Plan and Achievement.
8. PIA User: - Financial Action Plan and Achievement, Physical Action Plan and Achievement.

Training Module of PIA & WDT

1. Watershed Concept, Importance, Necessities and Benefits.
2. An overview on Common Guidelines.
3. Role & Responsibilities of WCDC Expert & WDT.
4.
5. Role & Responsibilities of WDT in preparation of DPR.
6. Different formats and main requirement for preparation of DPR, Baseline Survey, Watershed planning, maintenance of records/ preparation and maintenance of projects files and its importance.

7. Convergence with different plans and projects as MANAREGS, NRLM, BRGF etc.
8. Entry Point Activities.
9. Formation of village level groups as WC, SHGs, UGs. Constitution of these groups, method of formation. Role and responsibilities of member and office bearers.
10. MIS formats and feeding of data's.
11. Book/ Record keeping at different level.
12. Farming System in Rainfed Areas.
13. Soil and water conservation process and mechanism to stop soil erosion.
14. Making, Planning, and Designing of different structure estimation and measurement of techniques and process.
15. Livelihood in Rural areas.
16. Role & importance of Animal Husbandry in Rural Areas & livelihood, Feed & Fodder management of animal.
17. Practical overcoming in Animal Husbandry, Forestry/ Agro forestry in Watershed Areas.

Training Modules for Accountant/ Assistant officials

1. General Accounts Rule.
2. Rules of T.A/D.A.
3. Duties and responsibilities of Accountants personal and disbersing officers.
4. Meaning of Budget, Budget Control & Finance management.
5. M.S office, Internet, Email, Computer Application for Budget Control.
6. Fixation of salaries.
7. Store purchase rules.
8. Dual entry system, maintenance of budget, cash book, accounts management of Bank Accounts & payment.
9. Maintenance of different records IWMP

10. Entry and forwarding of information of accounts to higher officers/H.Q.
11. Filling of account formats information for MIS of IWMP.
12. Rectification of errors, preparation of trial balance, Income tax , expenditure, receipts & payment, profit & loss account and balance sheet.
13. Use of tally package for financial management.
14. Often discussion of problems and rectification.

Training Module for Watershed Committee (WC) & Project Level Stakeholders (2/3 Days)

1. Concept of watershed, necessity, aims constitution of committees, duties as per guidelines of GOI Physical and Financial provision and duty procedure.
2. Watershed management, institutional arrangement, DPR preparation, planning and execution, role, SHGs, UGs representation of women, SC/ST, labour and other deprived class, watershed development fund and contribution.
3. Baseline survey for project, social and physical survey, participatory approach, evaluation process, management of community properties, ground water recharge etc.
4. Livelihood options, income generation programme, animal husbandry, nutrition, fodder production etc.
5. Resource less persons, community development, consolidation phase completion and maintenance of institutional arrangement.