

**AGRICULTURE
AND
ALLIED ACTIVITIES**

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Agriculture

It is imperative to enlarge the area under cultivation by improvement of the degraded land. Efforts will be made to increase cropping intensity and productivity by use of high yielding and hybrid varieties of seeds, to improve soil health and to have efficient water management. Emphasis will also be laid on effective dissemination of technology, especially by establishing agri-clinics and employing rural knowledge workers. Timely availability of various inputs like seeds, fertilizers, pesticides, etc. will be ensured to the farmers.

The State Agriculture Universities (SAUs) have the responsibility of conducting research and extension of technology on specific problems. While there are 9 agro-climatic zones in the State, there are only 3 SAUs in a vast State like U.P. There is a need to establish at least one SAU in each of these zones. The GOI may, therefore, consider giving a one-time grant to establish 6 more SAUs in Uttar Pradesh and also provide financial assistance to strengthen the existing ones.

To ensure that the farmers get remunerative price for their produce, infrastructural facilities for agricultural marketing are proposed to be strengthened. For this, the following schemes are being proposed involving a cost of Rs 10181.11 Cr :-

Project	Amount (Cr. Rs.)
1.1 Reclamation of problematic lands	1500.00
1.2 Seeds production and distribution	3237.24
1.3 Improvement in Soil Health	125.17
1.4 Strengthening of Agriculture Extension And Training	1487.49
1.5 Crop production Programme	409.53
1.6 Plant Protection Programme	30.05
1.7 Strengthening of Infrastructure	45.05
1.8 Strengthening Research and Extension in State Agriculture Universities	750.00
1.9 Strengthening Marketing of Agriculture Produce	2319.25
1.10 Establishment of Agro-Mart	277.33
Total	10181.11

Methodology of Project Implementation

The proposed schemes will be implemented as per their nature of working and appropriate requirement. For example- land reclamation will be implemented through various measures generally from October to mid of June in the year, because during rainy days land reclamation work is not possible. In the

same manner, crop production programme is different from Plant protection programme and both programme will be implemented in different mode. Details of the schemes are given as below :

1.1 Reclamation of problematic Land

Food grain production is almost stagnant during the 10th Plan period, while it is necessary to have a substantial increase in production and productivity of major crop to match the demand of ever increasing population of the state, it is also worth mentioning that about 25 to 30 thousand ha. of agriculture land is diverted every year to non- agricultural use due to urbanization, industrialization, and other infra-structure development activities. In this situation, it is essential to bring additional area under agriculture through land reclamation programme. Besides this, area having low productivity levels due to land degradation, soil sickness and other causes needs to be reclaimed to achieve the desired production and productivity levels.

About 50.73 lakh ha. problem area exists in the state which is yet to be reclaimed. Major problematic lands are as follows:-

1. Alkaline lands
2. Ravine & Barren lands.
3. Water logged lands
4. Ravine & torrents.
5. Lands where ground water is depleting fast.

Schemes for land reclamation and ground water recharging are as follows:-

1. Land Reclamation in Katri area of River Ramganga.
2. Ravine reclamation programme.
3. Ground water recharging programme in Western U.P.

1.2. Seed Production, Distribution and Infrastructure Development.

The importance of quality seed is well established, as by using quality seed only, 20% sustained yield increase in production and productivity can be achieved. For self- pollinated crops like paddy, wheat, pulses and oilseeds except rapeseed and mustard, sunflower, and castor seeds must be replaced once in 4 years. Similarly for cross pollinated crops like Jowar, Bajra, Maize, Castor, Sunflower, Rape seed and Mustard and Cotton the seed must be replaced once in every 3 years. For hybrids of these crops the seed is to be replaced every season. The production & productivity can also be increased by higher distribution of superior varieties / hybrids of major crops which are recommended for the state.

Schemes for production and distribution of Seeds are as follows:-

1. Renovation of existing seed stores and establishment of seed stores at Nyay Panchayat level.
2. Subsidy on certified and Hybrid seed.
3. Project for seed production and multiplication in Govt. Agriculture Farms.

4. Strengthening of U.P. Seed Development Corporation.
5. Strengthening and improvement of U.P. Seed Certification agency.

1.3. Improvement in Soil Health

Soil testing is well recognized as one of the scientific means for quick characterization of fertility status of soil and predicting nutrient requirements of crops. It is an important tool of profitable farming. It is the only way through which actual doses of specific nutrients could be assessed correctly. The problem of low productivity due to deterioration in soil health can only be tackled by replenishing the nutrients in the form of fertilizers and other sources of nutrients to maintain the fertility status of the soil.

Objectives of soil testing :-

The main objectives of soil testing are elucidated below:

- 1- Assessing nutrient status and grouping soils into classes relative to the nutrient levels.
- 2- Predicting the probability of getting profitable response.
- 3- To maintain soil health and helping to evaluate soil productivity by adoption of Integrated Plant Nutrient Management (IPNM) based on soil test recommendation for the balanced use of chemical fertilizers and organic manure's to ensure the availability of major, secondary and micro nutrients.
- 4- Determining specific soil conditions like alkalinity, salinity and acidity.

Schemes for Soil health are as follows:-

1. Strengthening of Soil Testing Laboratories
2. Promotion of use of Gypsum for enhancement of crop production.
3. Establishment of 8 new R.A.T.D.S. and strengthening of 9 existing R.A.T.D.S.
4. Dissemination of new technology through input dealers(From Sellers to Technical Experts)

1.4 Strengthening of Agriculture Extension and Training.

This scheme is proposed for strengthening agriculture extension by training of agriculture graduates, input dealers & sellers and farmers. It will provide useful technical knowledge to the farming community for betterment of their agricultural practices skill. Schemes for extension are as follows:-

1. Enhancing balanced use of fertilizers.
2. Agriculture Technology awareness scheme.
3. Strengthening of agriculture extension and training (SIMA).
4. Strengthening of agriculture extension services through progressive farmer friends/village agriculture officers.

1.5 Crop Production Programmes

The productivity of wheat in U.P. is 26.27 q/ha. whereas the same in Punjab is 41.79 q/ha. during the year 2005-06. The reason for this gap is lesser use of recommended certified seeds, fertilizer and plant

protection measures. It is proposed to achieve higher rank in the country in the field of food grain production through the various crop enhancing measures. Schemes for crop production programmes are as follows:-

1. Scheme for enhancement of production and productivity of wheat in U.P..
2. Oil seed and pulses production programmes.

1.6 Plant Protection Programmes

In U.P. 7.25% losses are reported due to insect pest/diseases and weeds. To reduce the losses chemical pesticides and bio-pesticides are commonly used. To reduce harmful effects due to chemical pesticides and to save the crops from environmental pollution, bio-agents and bio-pesticides are increasingly used in modern era. To strengthen the plant protection services as per the need of time a scheme namely **Strengthening of Plant Protection Services in U.P.** is being proposed.

1.7 Strengthening of Infrastructure Development of agriculture

The key of success to any programme is dependant on the quality and quantity of the infrastructure provided for the project. Department of agriculture is lagging behind in the area of infrastructure and existing facilities also need improvement. A scheme is being proposed for infrastructural development and strengthening of existing infrastructure as per the present day needs.

1.8 Strengthening Research and Extension services in State Agriculture Universities.

Agriculture development in U.P. has to be guided not only by the compulsion of improving the food and nutritional security but also by the concern for environmental protection, sustainability, profitability, employment and even export. The responsibility of carrying out agriculture research in the field of agriculture science, horticulture, veterinary science and animal husbandry, agriculture engineering and agro-forestry are the major thrust areas of State Agriculture Universities. Proposals for zone specific research under the State Agriculture universities are being made for fulfilling the need of research and varietal development

1.9 Strengthening of Marketing of Agriculture Produce.

Post harvest management is being recognized as the most crucial task for providing profitable agriculture to the farmers. Insufficient facility of marketing and storage leads to non profitable nature of agriculture by strengthening the market infrastructure where farmers can sell their produce at a remunerative price. A Scheme at a cost of Rs. 2319.25 crores is proposed in this regard..

1.10 Establishment of 70 Ago-marts.

Launching a Single Window-Multiple Assets concepts in the style of a showroom -AGRI-MART which is proposed to be started in 70 Districts of U.P.. This showroom cum services centre will truly fulfill our dreams of "Agro Ek Sewaen Anek".

Agri Marts will be catering to almost all the needs of the agriculture fraternity where they will find all commodities ranging from Tractors. Diesel Engines, Pump Sets, Agro Farm Implements, Seeds, Fertilizers, Insecticides and pesticides, Vermi Compost, Cattle feed, Grain storage bins, Water Tankers, Wheel Barrows, Trolleys, Tree Guards, Gardening tools and many more. A scheme costing Rs. 277.33 crores is being proposed to establish 70 Agro marts in the State to fulfill the aforementioned object.

Expected Outcome of Plan Schemes

It is the responsibility of the state to cater to the nutritional requirement of the growing population. It is estimated that during 2011-12 the size of population in UP would be 2093 lakh and the requirement of food grain would be around 418 lakh MT. Considering the growth rate of 5.1% per annum in Food grain production, the status of production during the XI Five Year Plan would be as under:-

Particulars	Unit	Year				
		2007-08	2008-09	2009-10	2010-11	2011-12
2	3	5	6	7	8	9
Food Grains Production						
Cereals	Lakh	441.13	463.63	487.28	512.13	538.25
Pulses	(M/T)	24.65	25.91	27.23	28.62	30.08
Oilseed		10.30	10.82	11.37	11.95	12.57

A brief description of expected outcomes of the proposed schemes is given below:-

- 1.35 lac. ha. additional agriculture land will be available through reclamation programmes and increase in productivity of about 3-5qt/ha. and increase in cropping intensity from 35-40% to 140% would help in enhancement of 2.56 lac M.T. food-grain and 1.6 lac M.T. oilseeds and pulses production.
- Promotion of use of certified seed will surely lead to enhancement of agriculture production and resultantly lower the cost of cultivation. It is estimated that use of certified seeds enhances the production and productivity by 15-20%. It is planned to increase Seed replacement rate from 22.46% to 29.14% at the end of XI F.Y.P. Expected requirement of certified seed is 40.05 lac. quintals. It is supposed that the proposed scheme will cater to needs of certified seed for the farmers. Infrastructural development is also very helpful in providing quality seeds in sufficient quantity.

- Improvement of soil health is an urgent need of time due to imbalance in the use of fertilizer and chemical pesticides. Deterioration of soil leads to down trend in production and productivity of agriculture produce. Healthy soil provide profitable environment to the cultivators. It is expected that enhancement in production and productivity of crops by 10-15% to approximately 17500 M.T., additional food grain production can be achieved by the use of gypsum.
- Agriculture extension is a very important tool for propagation of advanced agriculture practice and technology transfer. Weak extension service is always painful for farmers. Strengthened extension services are very helpful to the farmers and their profitable impact is manifold. It is expected that additional 10728 number of employment will be generated at village level.
- All programmes and projects in agriculture sector lead to enhanced crop production. Enhancement of crop production is the mainstay in agricultural activities.
- To protect and preserve the sown crops through eco friendly plant protection measures is very important. Plant protection measures are very helpful for minimization of loss by pest and insects.
- Strengthened infrastructure of any programme leads to its success. Appropriate infrastructure is very helpful in the success of organizational setup and programme implementation.
- Research and development of variety, implements, machinery and farm module is an urgent need of agriculture. Innovative measures are always helpful and profitable to the farming community.
- It is painful for the farmers to sell their produce at miserable prices to the local businessmen and Mahajan. To check this practice, it is necessary to provide them advance post harvest facility which improve their profit sharing.
- Single Window-Multiple Assets concepts in the style of a showroom -AGRI-MART is proposed to be started in 70 Districts of U.P. This showroom cum services centre will truly fulfill our dreams of "Agro Ek Sewaen Anek".

Year wise Financial Requirement

Proposed schemes and their year wise requirement is given below.

Sl. No.	Projects	Year-wise Financial Requirement (Rs. in Crores)					
		2007-08	2008-09	2009-10	2010-11	2011-12	2007-12
1.1	Reclamation of problematic land	150.00	375.00	375.00	375.00	225.00	1500.00
1.2	Seed production, Distribution & Infrastructure Development	380.19	851.26	646.10	660.86	698.83	3237.24
1.3	Improvement in Soil Health	3.60	83.32	13.09	12.85	12.31	125.17
1.4	Strengthening of Agriculture Extension and Training	30.70	347.17	407.52	362.30	339.80	1487.49
1.5	Crop Production Programmes	9.75	66.73	109.80	110.97	112.28	409.53

Sl. No.	Projects	Year-wise Financial Requirement (Rs. in Crores)					
		2007-08	2008-09	2009-10	2010-11	2011-12	2007-12
1.6	Plant Protection Programmes	0.00	9.55	10.25	10.25	0.00	30.05
1.7	Strengthening of infrastructure of agriculture department	4.81	26.40	4.94	4.44	4.46	45.05
1.8	Strengthening research and extension in State agriculture universities	260.19	174.44	130.83	101.60	82.94	750.00
1.9	Strengthening marketing of agriculture produce	457.70	465.48	465.52	485.80	444.75	2319.25
1.10	Establishment of 70 Agro-mart	0.00	110.93	83.20	55.47	27.73	277.33
	Total	1296.94	2510.28	2246.25	2179.54	1948.10	10181.11

Critical Gaps in Purvanchal

A brief description of characteristic and critical gaps is given below:-

This region comprises of 27 districts and 33.64% of the total area of U.P. which has abundant surface and ground water. The main soil types are namely, Alluvial Usar, Diara and Calcareous. The annual average rainfall ranges between 803 to 1240 mm and temperature ranges from 4.9^{0C} to 44.2^{0C}. The relative humidity ranges form 30% to 86%. The major field crops are rice, wheat, maize, gram, peas, pigeon pea, linseed and rapeseed/mustard. The region has plenty of ground-water, however, the surface water is scanty. In few districts like Mirzapur and Sonebhadra the land is undulating, rocky; the soils are black, heavy, red and coarse where mostly single cropping is practiced except for the areas with irrigation facilities and primarily canals. Some districts like Sultanpur, Ajamgarh, Pratapgarh etc. are heavily infested with the problem of usar

Major Constraints-

- Problem of flood and poor drainage system.
- Lack of contingent plan in case of severe flood.
- Late sowing of wheat in rice-wheat cropping system.
- Imbalance in the use of fertilizer and decline in organic matter content.
- Low seed replacement rate.
- Very low or no adoption of IPM and IPNM technologies.
- Lack of suitable varieties of different crops for sodic soil.

- Poor management of canal water.
- Low fertility and irrigation problem.
- Lack of short duration varieties suited to Rainfed cultivation.

Critical Gaps in Bundelkhand

A brief description of characteristic and critical gaps is given below:-

This region comprises of seven districts namely Jhansi, Lalitpur, Banda, Hamirpur, Jalaun, Mahoba and Chitakoot and characterized by hot climate, undulating topography, residual and low depth of soil, poor exploitation of ground water because of hard impermeable rocks on the surface. It has semi arid climate with average rainfall of 867 mm and the temperature ranges from 3⁰ C to 47.8⁰ C. The relative humidity in this zone ranges from 26% to 88%. The zone has four broad soil groups, namely, Rakar, Parwa, Kabar and Mar. The prominent crops are wheat, gram, Bajra and sorghum. Pigeon-Pea, lentil, linseed and rice are also grown in this zone.

Major Constraints-

- The yield of major crops is low due to residual and shallow soils, water management problems and aridity of climate.
- The principal constraints relate to poor irrigation as only 25% of total net cropped area is irrigated; hence, mostly mono cropping is practiced.
- Short duration varieties of different crops are not available for growing under Rainfed conditions.
- Lack of suitable varieties of Soyabean and Durum wheat.
- Incidence of wilt in gram, sterility mosaic in Pigeon-pea, Pod borer in Jowar, Arhar and gram are posing serious problems.
- Lack of improved implements particularly seed cum ferti-drill in this area for precise and timely operation for problematic soil is another constraint affecting the productivity.
- Very low ground water table
- Highly undulating topography which hampers cultivation.

Requirement of Bundelkhand and Purvanchal

Rs in Cr.

	Project	Total Amount for the State	Bundelkhand Region	Poorvanchal Region
1.1	Reclamation of problematic land	1500.00	200.00	200.00
1.2	Seed production, Distribution and Infrastructure Development	3237.24	109.42	1084.93
1.3	Improvement in Soil Health	125.67	11.46	47.53
1.4	Strengthening of Agriculture Extension and Training	1487.49	87.42	640.00
1.5	Crop Production Programmes	409.53	105.00	140.00
1.6	Plant Protection Programmes	30.05	17.68	13.36
1.7	Strengthening of infrastructure of agriculture department	45.05	4.98	23.02
1.8	Strengthening research and extension in State agriculture universities	750.00	68.6	341.94
1.9	Strengthening marketing of agriculture produce	2319.25	150.97	434.72
1.10	Establishment of 70 Agro-mart	277.33	27.9	107.60
	Total	10181.11	783.43	3033.10

Irrigation

There is a need to augment the existing irrigation potential by rehabilitation and modernization of the existing infrastructures. Present guidelines of the Accelerated Irrigation Benefit Programme (AIBP) allow substitution of new projects to the extent of completed projects only. As a result, only 9 projects of the State have qualified for Central assistance under the programme. Some important major, medium and minor irrigation projects have been identified, which need to be supported under AIBP. An area of about 73 lac ha is prone to flood, out of which about 40 lac ha area is unprotected. Therefore, additional projects of marginal embankment, anti-erosion and drainage/flood proofing need to be taken up.

An amount of Rs 9303.80 Cr. is required for the projects as per details given below :-

Projects	Amount (Cr. Rs.)
2.1 Major and Medium Projects	6353.80
2.2 Minor Irrigation Works	1950.00
2.2 Flood Control Programme	1000.00
Total	9303.80

Minor Irrigation

(1) As per IIIrd census of minor irrigation works conducted through Government of India, base year 2000-01, 42.72% of private tubewells have been installed in U.P. At Present 38.95 lakh private tubewells in U.P. are irrigating, 90% of the area, irrigated by all minor irrigation works. At present 79% of the total net sown area is being irrigated but there is regional imbalance, while in western U.P. 92.4% net area is irrigated, in eastern U.P. it is only 73.6% and in Bundelkhand it is 49.7%.

(2) In the 11th plan sufficient funds are available for tapping ground water by way of Private tubewells in eastern U.P. & in Bundelkhand, which lacks irrigation facilities but negligible amount of funds are available for following:-

- (i) Construction of Checkdams mainly in Bundelkhand for tapping surface water for irrigation and also for recharge of ground water
- (ii) Construction of Blastwells in rocky areas of Bundelkhand as well as in eastern U.P., where these Blast wells are the only source for tapping ground water in rocky areas.
- (iii) For improving the efficiency of Deep tubewells proposed to be constructed in 11th plan by way of providing distribution system.
- (iv) Construction and renovation of tanks in Bundelkhand and eastern U.P. for irrigation as well as recharge of ground water.

(3) On account of heavy drawal of ground water through Private Tubewells, the ground water level is depleting at a very fast rate and the following 141 block have been identified as problematic blocks from ground water point of view :-

(i)	Over exploited/ Critical	-	50
(ii)	Blocks of Bundelkhand-Vindhyachal Region	-	63
(iii)	Blocks having Water Table more than 8 m. with rate of decline as above 10 cm/year	-	25
(iv)	Blocks near to river banks having deep Water level as more than 15 m		3
Total		-	141

Hence it is necessary to implement Rain Water Harvesting and Ground Water Recharge schemes in these areas so that sustainability of ground water resources can be maintained in order to provide irrigation facilities in future. An integrated proposal for rain water harvesting & ground water recharge programme in the problematic blocks of State has been prepared based on the proposals submitted by seven departments viz. Agriculture, Minor Irrigation, Jal Nigam, Housing, Ground Water Deptt., Irrigation Deptt., Forest deptt., with an estimated cost of Rs. 1977.646 crore.

The following programmes have been taken up under minor irrigation works for central assistance because there is no provision for these programmes in 11th five year plan of the State.

(Amount in Lakh Rs.)

S. No.	Name of work	Proposed No.	Cost in lakh	State Share	Contribution of farmers	Other Sources	Central share
1.	Construction of checkdam with sprinkler/ rain gun	4078	51735.70	6000.00	2260.70	0.00	45735.70
2.	Construction and renovation of tanks	8904	41826.60	0.00	0.00	0.00	41826.60
3.	Distribution system on private Tubewells	12236	1223.60	0.00	1223.60	0.00	1223.60
4.	Construction of Blast well with sprinkler / rain gun	2695	8977.00	0.00	682.50	1375.00	7602.00
	Total		103762.90	6000.00	4166.80	1375.00	96387.90

Contribution of farmers - Rs 4166.80 lakh is not included in the project cost

The region wise breakup of the cost is given below -

(Amount in Crore Rs.)

S. No.	Name of works	Bundel khand Region	Eastern Region	Other Regions	Total
1	2	3	4	5	6
1-	Checkdam with sprinkler unit	248.54	189.89	18.93	457.36
2-	Construction / Renovation of ponds	155.64	142.10	120.53	418.27
3-	Water Distribution system in Private Tubewells	6.12	3.67	2.44	12.23
4-	Blast Wells with sprinkler Unit	32.58	43.44		76.02
	Total	442.88	379.10	141.90	963.88

Details of physical achievements and expected outcomes proposed works is as under :-

S. No.	Name of work	Proposed No.	Additional irrigated area in hect.	Additional recharge to ground water ha.m. / year	Additional Food production in M.T.	Additional Fodder production in M.T.	Additional creation of Man days	% Saving in irrigation water
1.	Construction of checkdam with sprinkler/ rain gun	3478	69560	3130.20	104340	104340	2782400	10%
2.	Construction and renovation of tanks	8904	27648	3456.00	41472	41472	1105920	-
3.	Distribution system on private Tubewells	12236	24472	-	36708	36708	978880	10%
4.	Construction of Blast well with sprinkler / rain gun	2100	6300	-	9450	9450	252000	-
	Total		127980	6586.20	191970	191970	5119200	

Year wise Physical and financial details and distribution of works proposed under project

(Amount in Lakh Rs.)

S. No.	Year	Construction of checkdam with sprinkler/ rain gun		Construction and renovation of tanks		Distribution system on private Tubewells		Construction of Blast well with sprinkler / rain gun	
		Physical	Financial	Physical	Financial	Physical	Financial	Physical	Financial
1-	First Year	870	11440.50	2226	10456.65	3059	305.90	525	1900.50
2-	Second Year	870	11440.50	2226	10456.65	3059	305.90	525	1900.50
3-	Third Year	869	11427.35	2226	10456.65	3059	305.90	525	1900.50
4-	Fourth Year	869	11427.35	2226	10456.65	3059	305.90	525	1900.50
	Total	3478	45735.70	8904	41826.60	12236	1223.60	2100	7602.00

Rain Water Harvesting & Ground Water Recharge Programme

(a) The following programmes have been taken up under Rain Water Harvesting and Ground Water Recharge in the State-

S. No.	Recharge Activity/Work	Proposed Physical Target (No.)	Cost (Rs. Lakh)	State Resources	Institutional finance	Contribution of beneficiary	Anticipated Central Assistance (Rs. Lakh)
1	2	3	4	5	6	7	8
1	In Situ (on farm) Rain Water Harvesting	1379]514 Hect.	77362-00	&	&	&	77362-00
2	Construction/ Renovation of Ponds	9963 Nos.	25345-00	&	&	&	25345-00
3	Masonry Check Dam	878 Nos.	9585-00	&	&	&	9585-00
4	Percolation Tank	1501 Nos.	3752-00	&	&	&	3752-00
5	Bore Blasting/ Hydro fracturing	860 Nos.	2200-00	&	&	&	2200-00
6	Roof Top Rain Water Harvesting	1911 Nos.	4762-50	&	&	&	4762-50
7	Forestation	4121 Hect.	1424-50	&	&	&	1424-50
8	Surface Water Irrigation Schemes	07 Nos.	61473-60	&	&	&	61473-60
9	Public Awareness (IEC), Infrastructure, Impact Assessment and Support Activities	&	11860-00	&	&	&	11860-00
		Total	197764-60				197764-60

The region wise details are given below -

(Amount in Lakh Rs.)

	Department	Proposed Investment For Bundelkhand	Proposed Investment For Eastern U.P.	Proposed Investment For Other Areas	Total
1	2	3	4	5	6
1	Agriculture	15221.00	8373.00	49768.00	73362.00
2	Minor Irrigation	6237.50	2026.50	26218.00	34482.00
3	Jal Nigam	2550.00	1650.00	5810.00	10010.00
4	Housing	275.00	137.50	1237.50	1650.00
5	Ground Water	1600.00	1250.00	9010.00	11860.00
6	Other Govt. Deptt.	90.00	225.00	3187.50	3502.50
7	Forest	874.70	454.60	95.20	1424.50
8	Irrigation	36273.60	-	25200.00	61473.60
	Total	63121.80	14116.60	120526.20	197764.60

The Details of physical achievements and the expected outcome is as given below –

(Amount in Lakh Rs.)

S. No.	Name of Work/ Recharge Activity	Proposed Physical Target/ Achievement	Proposed Cost	Expected Recharge Potential (HaM/Yr.)
1	2	3	4	5
1	In Situ (on farm) Rain Water Harvesting	13 79 514 Hect.	77362-00	275902-80
2	Construction/ Renovation of Ponds	9963 Nos.	25345-00	1992-60
3	Masonry Check Dam	878 Nos.	9585-00	878-00
4	Percolation Tank	1501 Nos.	3752-00	750-50
5	Bore Blasting/ Hydro fracturing	860 Nos.	2200-00	215-00
6	Roof Top Rain Water Harvesting	1911 Nos.	4762-50	114-66
7	Forestation	4121 Hect.	1424-50	824-20
8	Surface Water Irrigation Schemes	07 Nos.	61473-60	Under Assessment
9	Public Awareness (IEC), Infrastructure, Impact Assessment and Support Activities	&	11860-00	&
		Total	197764-60	

- The proposed action plan of rain water harvesting & ground water recharge, including different line departments, is based on an Integrated Approach.

- In alluvial areas, the targeted aim of rain water harvesting & ground water recharge would be to raise the water level & also to enhance ground water storage in a way that the development stage may be brought to a safe limit of 70%.
- In hard rock areas, the objective of envisaging this programme is to significantly increase ground water storage/availability so that the development/exploitation of ground water may be enhanced for providing adequate irrigation water to the farmers thereby boosting the agricultural productivity.

Year wise break up of proposed physical targets and financial expenditure under the action plan

The proposed recharge activities are to be implemented in a span of 4 years. The year wise break up of physical works & financial expenditure is given below :-

(Amount in Lakh Rs.)

S. No.	Recharge Activity/Works	1 st Year		2 nd Year		3 rd Year		4 th Year	
		Physical	Financial	Physical	Financial	Physical	Financial	Physical	Financial
1	In Situ (on farm) Rain Water Harvesting	344878	19340-00	344878	19340-00	344878	19340-00	344880	19342-00
2	Construction/Renovation of Ponds	2490	6295-00	2491	6350-00	2491	6350-00	2491	6350-00
3	Masonry Check Dam	219	2345-00	219	2345-00	220	2447-50	220	2447-50
4	Percolation Tank	375	937-50	375	937-50	375	937-50	376	939-50
5	Bore Blasting/Hydro fracturing	215	550-00	215	550-00	215	550-00	215	550-00
6	Roof Top Rain Water Harvesting	477	1190-00	477	1190-00	477	1190-00	480	1192-50
7	Forestation	1030	355-00	1030	355-00	1030	355-00	1031	359-500
8	Surface Water Irrigation Schemes	&	15300-00	&	15300-00	&	15300-00	&	15573-60
9	Public Awareness (IEC), Infrastructure, Impact Assessment and Support Activities	&	2800-00	&	2800-00	&	2900-00	&	3360-00

- The total fund under proposed project for Minor Irrigation Works and Rain Water Harvesting & Ground Water Recharge is as given below-

(Amount in Lakh Rs.)

Region	Minor Irrigation Works	Rain Water Harvesting and Recharge Programme	Total
Bundelkhand Region	44288.00	63121.80	107409.80
Eastern Region	37910.00	14116.60	52026.60
Other Regions	14190.00	120526.20	134716.20
Total	96388.00	197764.60	294152.60

- At present Minor Irrigation Programme is not included in AIBP (Accelerated Irrigation Benefit Programme) minor irrigation is contributing about 76% of the net irrigated area in U.P. National Development Council has agreed to provide more funds for irrigation sector. In U.P. 90% of the farmers are of Small and Marginal Category. Development of irrigation facility to these vulnerable sections of farmers is only possible by providing assistance to Minor Irrigation Programme of Uttar Pradesh. Further, the rain water harvesting & ground water recharge activities would augment the depleting ground water resource & as such sustainability of the resource can be maintained, thereby providing adequate ground water for future minor irrigation activities. Hence it is strongly recommended that Minor Irrigation Programme should also be taken up under AIBP and the above proposal for cent percent assistance, may be considered.

Land Development and Water Resource

The State Government has formulated a project for the development of agriculture and other related sectors under the doctrine of development of watershed development by Land Development and Water Resources Department. This project will cover 7,00,000 hect. land in fifty districts of the State. The approximate estimated cost of project is Rs. 650.00 crore. Under the proposed project, soil conservation, water resources development, forestation/horticulture, training and community development work will be executed through rural participatory approach. As a result production and productivity of land will increase and modern agricultural technology will be propagated through training, so that production and productivity of food grains could increase and the ecological balance could be maintained.

During the XIth Five Year Plan, total Central/State assistance required for this project is Rs. 650.00 crores. An amount of Rs 300 crores is proposed. in the XI plan @6000/- per hect.. There is an additional requirement of Rs. 350 crores in which Central share would be Rs 320 crores and State share Rs. 30 crores.

Through this project, the waste and degraded land of the selected area will come under cultivation and by way of training and community work, the poor, jobless and landless villagers belonging to SC/ST living below poverty line will be given jobs at the gross root level and they will be associated with the self help groups for taking care of the created assets. The SHGs will be given proper training. Revolving fund will be created in each project for the purpose of giving interest free loan to the Self Help Groups for the implementation of the employment generating activities.

Funding pattern

In the selected projects workwise allocation has been fixed which is appended below:-

1-Soil Conservation/Water Resource Development/Forestation Work	85%
2-Training and Community Development work	05%
3-Project Administration	10%
Total	100%

Proposed for Additional Central Assistance for Centrally Sponsored Scheme

Cr. Rs.

Name of scheme	Area in lakh Hect.	XIth Plan (Proposed Assistance)			Revised Assistance			Additional Assistance		
		Central	State	Total	Central	State	Total	Central	State	Total
1	2	3	4	5	6	7	8	9	10	11
Watershed Development Programme	7.00	275	25	300	595	55	650	320	30	350

Work Plan at a Glance

1-No. of Districts	:	50
2-Total Area of Project	:	700000 hectare
3-Total estimated cost of the projects	:	Rs. 650.00 crores

Name of Programme	No. of Districts	Components	Area (in Hectare)	Estimated Cost (in crore Rs.)
1	2	3	4	5
Watershed Development Programme	50	1-Soil & Water Conservation 2-Water Resources Development 3- Afforestation/ Horticulture 4-Training,community organization & Project Administration	7,00,000	650.00
			7,00,000	650.00

Physical and Financial Phasing of the Proposed Work Plan

1-Name of Project	:	Watershed Development Programme
2-Total Area of Project	:	7,00,000 hectare
3-Total estimated cost of the project	:	Rs. 650.00 crores

Area in hectare Amount in crore Rs.

Sl. No.	Area/ Amount	2007-08		2008-07		2009-10		2010-11		2011-12		Total	
		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	As per XIth Plan	140000	48.00	140000	63.00	140000	63.00	140000	63.00	140000	63.00	700000	300.00
2	Revised	140000	104.00	140000	136.50	140000	136.50	140000	136.50	140000	136.50	700000	650.00

Energy

- Irrigation facility is one of the most important requirement for ensuring growth of agriculture. Large part of Uttar Pradesh does not have the proper irrigation facility and farmers depend on rains and private pump sets for irrigation. U.P. has largest number of marginal farmers, who are not in a position to pay the cost of energisation of Pump sets and hence they need State support.
- In Uttar Pradesh, there are 35.25 lakh private tube wells out of which 8.56 lakh private tube wells run on electricity and the remaining are diesel operated pump sets. Since it is very costly to run the pump sets on diesel, the farmers want to electrify their pump sets.
- Further Govt. of India has accorded highest priority to the Agriculture Sector in the 11th Plan. Proper irrigation facilities are to be made available either by State Tube wells or by Private Pump sets.
- To achieve this target GoUP has plans for energisation of about 3.15 lakh private pump sets that are located in un-irrigated areas of the State. But the cost of energisation of a pump set ranges between Rs. 80,000.00 to Rs. 1,10,000.00 which the farmers cannot afford.
- U.P. State plans to energise 3.15 lakh private tube wells in un-irrigated areas of the State for which Rs. 3415 crore would be required during the 11th plan period. This will also require additional electricity of 2500 MW. Since the State will take at least 3-4 years to create additional generation capacity, the Govt. of India should allocate additional power from Central Sector Projects to meet this demand.
- At present Rs. 500 crore has been provided in the 11th Plan period, the remaining amount of Rs. 2915 crore is to be provided as additional central assistance to the State. This amount is required in equal yearly allocation during the 11th Plan Period.

Horticulture

There is a need for improving the genetic material used in plantation and for promoting tissue culture techniques in order to achieve about 10% increase in productivity. Field testing and trials of hybrid varieties will be regularly conducted in the Research Centres and upgradation of existing infrastructural facilities will be done with the help of eminent scientists. Marketable surplus of vegetables and fruits requiring temporary storing and long distance transportation require cold chain facilities for reducing the post-harvest losses.

An amount of Rs 476.10 Cr. is required for these projects as per details given below :-

Projects	Amount (Cr. Rs.)
6.1 Infrastructure Development for transfer of technology	85.00
6.2 Quality seed production Infrastructure Strengthen and Mechanization	18.10
6.3 Promotion of Micro Irrigation System	115.00
6.4 Adoption of new technology with hybrid seed	90.00
6.5 Promotion of Self Help Group	4.00
6.6 Post Harvest Management	135.00
6.7 Extension and Publicity of the Programme	9.00
6.8 Administrative Expenses	20.00
Total	476.10

The proposed schemewise details are under:

Infrastructure development for transfer of technology

A. Strengthening of horticultural extension and training centre:-

- Horticultural crops are playing an important role in agriculture sector. This requires a highly technical know-how, but most of the works are being done in agriculture sector like wheat, rice, sugarcane, pulses crops, etc. The area under horticultural crops like fruit, vegetables, spices, flowers, etc. has increased while research/technology development works on these crops are not given much importance.
- Department of horticulture and food processing has five horticultural experiment and training centres, one Pan Sodh Kendra and one Potato Research Centre. Out of these centres two centres are very old i.e. Saharanpur and Basti. Earlier these centres used to function as horticulture research institutes when there was no agriculture university in the state. A lot of work was done on mango, guava and other crops at these centres. Presently these centres are in a silent mode due to non availability of sufficient non-plan budget. It is proposed that these centres should be strengthened and activated for the development of new technology.
- New laboratories will be established in the proposed programme. Strengthening of laboratory, buildings, hostel facilities for farmers, research workers and trainers on stipend basis are proposed in this project.

(B) New Construction of Horticultural Experiment & Training Centre

- During 1988-89, three Horticultural Experiment & Training Centres were established in the state. One of them is at Khushru bagh, Allahabad for Guava development. Earlier it was a nursery and it was then upgraded to a Horticultural Experiment & Training Centre. No extension or modification can be done in these centres as the structures and area under them come under the Archeological Department of Govt. of India. Any type of construction is prohibited in 100 metres circumference of these buildings.

- Department of Horticulture & Food Processing, U.P. has a Govt. farm 20 km. away from the Allahabad at Varanasi Road which is more suitable for the research and training purposes for the farmers. An amount of Rs.200.00 lacs is proposed for construction of Horticultural Experiment & Training Centre, at this site.

(C) Establishment of Four colleges of Horticulture:-

- Horticulture college is an important means for research and technology transfer to the field. In UP, three Agriculture Universities, two Deemed Universities and many agriculture colleges are doing work on agriculture crops, but there is no full-fledged college for horticultural crops. These Universities have only a small part of the horticulture section while horticulture plays an important role in agriculture growth. It is necessary that atleast four colleges of horticulture are established in the state. These colleges will be established in the existing agriculture universities and in the compact cultivated areas under horticulture activities. These colleges will be more helpful in improving production and productivity.

(D) Horticulture Technology Transfer Centre

- In UP, seventeen fruit-belts have been notified by the Govt. Out of these fifteen are mango belts, one guava and one aonla belt. Growers of horticulture crops always complain that the technology is not reaching the field level. Therefore, it is proposed that in each fruit-belt and compact areas of horticultural crop i.e. potato, mentha, vegetables, etc. one horticulture technology transfer centre will be established for new technology transfer from university to field. These centres will be operated through NGO's and any other independent organization. The Dept. of Horticulture & Food Processing will have overall supervision on them.

For the above activities an amount of Rs.8500.00 lacs is proposed.

2. Strengthening of Quality seed production infrastructure and mechanization

- Seed is a basic input for the agriculture sector. Production and productivity are based on the quality and standard of the seed. So we should concentrate our efforts on seed production and supply in sufficient quantity to the farmers. Potato is the major crop of the state, having 40% contribution in national production. Potato seed requirement is about 14 to 15 lac ton certified seed which can be achieved through 60,000 quintal breeder seeds after the seed multiplication. Due to lack of availability of funds, most of the farms are not producing according to their efficiency. It is proposed that farm machinery, irrigation facilities, agriculture equipments, fencing, etc. should be provided in the Farms for better seed production.

(b) Tissue-culture Laboratory

- Tissue-culture is a rapid multiplication method of propagation. Banana and Potato crops require a lot of planting material/seed for cultivation. Only two tissue-culture laboratories are established in the state, which are working commercially, but these are not sufficient for supplying planting material as per the farmers demand. Eight tissue-culture labs are proposed in the public and private sector. In private sector 25% subsidy with maximum limit of Rs.10.00 lacs will be given and in public sector it will be 100% subsidy. Tissue-culture laboratory can be operated through the public-private partnership model, in the public sector.

(c) To Promote Mechanization in Horticulture Sector

- Mechanization plays an important role in horticulture crops production specially in potato and mango. Weather plays an important role in the production of potato and mango crops. Mechanization can help in irregular weather conditions. Farmers can complete all necessary works in a very short duration by using machines for activities such as foliar sprays, sowing, harvesting, packing and marketing. Medium farmers cannot buy highly expensive machines/equipments. Therefore, it is proposed that machinery/equipments will be given to the farmers on 50% subsidy basis with a maximum limit of Rs.50,000. An amount of Rs. 500 lacs is proposed as mechanization subsidy.

For the above activities Rs.1810.00 lacs is proposed.

3. Promotion Micro Irrigation System:-

- It is well known that water is very important for the agriculture production. Its scarcity/abundance is harmful for the production. So it should be used in optimal manner. The ground water level is going down day-by-day. Horticulture crops require minimum water which can be provided through sprinklers and drip irrigation systems.
- In drip irrigation system, experience shows that direct drip irrigation system creates problems for farmers in the form of electric motor burn and water does not reach upto the mark. Therefore, the water storage tank is proposed in the project which will be supply water in the absence of electric supply with full pressure. It is proposed to provide 50% subsidy on sprinkler and 75% in drip irrigation with a maximum limit of Rs.10,000 and Rs.50,000 respectively.

For the above activities an amount of Rs.11500.00 lacs is proposed.

4. Adoption of new technology with hybrid vegetable seed:-

- Vegetable production is highest in the state while the productivity is lower than the some other states. The State has a lot of potential in vegetable production specially in tomato, brinjal, chillies and cucurbits. Hybrid seeds of vegetable seeds are very costly which is nearby Rs. 1.50 lac per kg. Small/marginal farmers are using common available seeds having low productivity. Therefore, high productive hybrid seed will be provided to the farmers at subsidized rates.
- Cucurbits and tomato crops have soft/tendrill stem. Therefore, these crops can not grow in an up-right way. These plants require some support for better quality production. Generally, farmers are not using support for these crops resulting in the crop getting affected by insects/diseases when connected with soil surface. In summer season, soil temperature is high and also affect the bearing condition of the vine. In stacking/machan condition, these crops produce two to three times more than the normal condition. It is proposed that subsidy should be provided on simple stacking with bamboo and wares as well as permanent structure with cemented pillars and wires. Subsidy will be provided at 50% with a maximum limit of Rs. 10,000 for bamboo structure and Rs.50,000 for permanent structure.
- Horticulture crops are more sensitive to the essential elements. They show symptoms i.e. die back in mango, internal necrosis in fruit crops, citrus die back, gummosis in mango etc. Most of the experts are giving general recommendations, because soil reports are not available. Farmers are not aware of the nutritional analysis of the soil. Similarly, the soil analysis facilities for the micro-nutrients are not sufficiently available in the state. A survey of the nutritional status of soil is required to solve these problems and experts can then suggest remedial measures to the farmers. An amount of Rs. 2000 lacs is proposed for the survey of the nutrition status of the soil.

For the above programme Rs.9000.00 lacs is proposed.

5. To promote Self Help Groups

- Small farmers are involved in vegetable production. They are doing individually all the activities related to production and marketing. Therefore, everyone is busy in the same work. Due to small holding these growers are not capable of creating infrastructure for value addition and any other facilities which give good returns. It is proposed that farmers groups will be formed for creation of viable infrastructure for them. It will be subsidized upto 75% with a maximum limit of Rs.4.00 lacs. An amount of Rs 400 lacs is proposed in this project.

6. To promote Post Harvest Management

- Horticulture produce is highly perishable. According to the study, it is found that 30-40 percent loss is recorded from the time of harvesting to the time when the produce reach the consumers. Growers are using traditional basket and wooden boxes for packing and transportation. These materials are not suitable and safe for the produce. Plastic crates and corrugated boxes are safe and easily handled but these are costly for medium farmers. It is proposed that subsidy will be for these packing materials.
- Value addition in fresh fruits and vegetables is more profitable than the raw fresh fruits. Grading, washing and packing can improve value of the product and get good realization in the domestic market and improve export potential. European countries demand vapour treated and radiated fruits and vegetables. It is proposed that subsidy will be provided to value addition centres and for vapour treatment in the public sector.

For the above programme Rs.15000.00 lacs is proposed.

7. Extension and Publicity of the programme and technology.

- Extension activity is very important for the transfer of technology from research centres to field. In this connection Documentaries, Gosthies/Seminars, Literature/Hoardings/Others publication programmes will be organized at district and block level for better technology transfer to the farmers.

For the above programme Rs.900.00 lacs is proposed.

8. Financial Requirement:-

The following financial requirement is proposed for improvement in production and productivity of the horticulture crops in the state:-

Sl.No.	Particulars	Amt. (Lac Rs.)
1	Infrastructure development for transfer of technology.	7600
2	Quality seed production Infrastructure Strengthening and Mechanization	1810
3	Promotion of Micro Irrigation System	1150
4	Adoption of new technology with hybrid seed	9000
5	Promotion of Self Help Groups	400
6	Post Harvest Management	4750
7	Extension and Publicity of the programme and technology	900
8	Administrative Expenses	2000
	Total	47610

10. Region-wise Distribution to overcome regional imbalance:-

- Some areas in the State are very backward in horticultural development. It is due to lack of infrastructure i.e. irrigation facilities, technical education and poor adoptability of new technology. Therefore, it is proposed to overcome the regional imbalance in productivity through more emphasis on weak points. The financial allocation in different region is as under:-

Region-wise distribution of financial details

Amount in Lac Rs.

Sl. No.	Particulars	Bundelkhand	Eastern U.P.	Central U.P.	Western U.P.	Total Amount
1	Infrastructure development for transfer of technology.	1500	4500	1000	1500	8500
2	Quality seed production Infrastructure Strengthening and Mechanization	200	610	400	600	1810
3	Promotion of Micro Irrigation System	3000	3000	2000	3500	11500
4	Adoption of new technology with hybrid seed	1500	3500	2000	2000	9000
5	Promotion of Self Help Groups	100	200	50	50	400
6	Post Harvest Management	2000	3000	3000	5500	13500
7	Extension and Publicity of the programme and technology	250	250	200	200	900
8	Administrative Expenses	400	500	500	600	2000
	Total	8950	15560	9150	13950	47610

- The above amount is proposed for the period of 2007-2011. Other activities which are related to productivity have already been taken up in State Horticulture Mission. The proposed amount is in addition to the existing programme. These are new schemes for the development of horticulture.
- After the implementation of this project, production and productivity will definitely increase and create employment directly and indirectly to the unemployed youth.

Activity wise yearly Requirement of Funds

Rs in lakh

S.No.	Activity	2007-08	2008-09	2009-10	2010-11	Total
1	Infrastructure development for transfer of technology.	2000	2100	2100	2300	8500
2	Quality seed production Infrastructure Strengthen and Mechanization	400	400	500	510	1810
3	Promotion of Micro Irrigation System	2500	3000	3000	3000	11500
4	Adoption of new technology with hybrid seed	2000	2000	2000	3000	9000
5	Promotion of Self Help Group	100	100	100	100	400
6	Post Harvest Management	3000	3500	3500	3500	13500
7	Extension and Publicity of the programme and technology	200	200	200	300	900
8	Administrative Expenses	500	500	500	500	2000
	Total	10700	11800	11900	13210	47610

Animal Husbandry

Uttar Pradesh is well endowed with livestock: very large in numbers and very low in productivity across all species. However Livestock is germane to farming systems in Uttar Pradesh: the most preponderant farming system is mixed crop-livestock-farming. Ownership of livestock, unlike that of land, is equitable: over 85 per cent of all species of livestock and poultry are owned by the small holder group (marginal and small farmers along with the landless). The marginal farmers constitute the core livestock production sector in the state. The livestock sector is extremely livelihood intensive: 70 per cent of all rural households own livestock of one species or the other, often a mix of several, in small numbers though; and livestock provides more than half the total household income for marginal and landless households owning livestock. The proposed schemes are as under :

1. Establishment of Veterinary Hospitals: To ensure better health of livestock is mandatory for higher livestock production. Naturally prevention is always better than cure. To go with this principle the department of Animal Husbandry has the very important responsibility of control/containment of diseases. For this better resources have to be provided to procure all kinds of facilities for effective and timely immunisation of livestock. The animal health and veterinary services have to be given greater emphasis during 2007-12. National Commission on Agriculture has recommended provision of one Veterinary Hospitals for 5000 animals, but the present status in U.P. is merely one Vety.Hosp.for 20000 animals. To reduce this vast gap, it is proposed for the time being for having at least one Vety.Hosp.for 15000 animals. Thus additional 2348 Vety.Hosps. would be needed during the XI five-year plan period. Construction of one Vety.Hosp. would cost about 26.48 Lakh. To achieve this goal of establishing the required number of V.H.; the financial assistance of Govt. of India is needed. 2348 hospitals will be established during the XI plan. The financial estimates would be Rs.62175.04 Lakh for the plan period. But a provision of Rs. 20000.00 Lakh has been kept from State resources. Rest Rs. 42175.04 Lakh is required from Government of India as Central Assistance. Out of which Rs. 8435.00 Lakh is required for the current financial year 2007-08.

2. Establishment of Disease Diagnostic Laboratories: The therapeutic management of animal diseases involves timely detection of etiological agent through clinico-pathological diagnosis which curtails the farmer's expenditure and also quickly assists in health management. Besides, knowledge of endemic pattern of diseases in the state is helpful in control of outbreaks, surveillance and eradication programs along with maintenance of zoo-sanitary measures. Therefore, adequate emphasis has to be given for the establishment of required disease diagnostic network in the state. Animal health care is a very important aspect of livestock production in animal husbandry. Precise and cost effective treatment is only possible, if exact disease diagnosis is ensured. At present almost all veterinarians are doing veterinary practice on the basis of symptoms, because of inadequate facilities of disease diagnosis at district level. Establishment of a disease diagnostic laboratory at district level will provide impetus to the disease diagnostic facilities and facilitate treatment besides reducing the cost of treatment to the livestock owners.

Uttar Pradesh being a large state harbors the largest number of animals in the country. With its large cattle and buffalo population approx. 6 crore only 11 disease diagnostic laboratories (10 regional labs and 1 central lab) are there in the State. Hence for providing quality treatment services, to decrease the cost of treatment, maintenance of zoo-sanitary measures, control of epidemic and zoonotic disease and disease monitoring and surveillance a project with the total financial requirement of Rs.2020.00 Lac is proposed for establishing 53 district disease diagnostic laboratories and 7 regional labs in the state during XI Five year plan period. A provision of Rs. 555.00 Lac has to be made in 2007-08 for establishment of 16 disease diagnostic laboratories in the first year of XI plan.

3. Modernization of Slaughterhouses: The meat production in the state is being done in an unorganized manner. The meat animals are slaughtered either in the slaughterhouses, managed generally by local bodies, or in open fields. All slaughtering activities are centered towards production of **HOT-MEAT**. It is observed that such slaughters are carried out in unhygienic atmosphere and by untrained persons. Such meat is neither wholesome nor fit for human consumption, and so lower the export potential. It is therefore necessary to organize meat production in the state on International Standards, to ensure the availability of good quality raw material and to maintain the balance between slaughtering activity and animal production. For this purpose, control on slaughters, establishment of slaughterhouses on modern lines, observing zoo-sanitary measures, strict surveillance of diseases in slaughter-house areas and ensuring adequate ante-mortem/post-mortem inspections are required. The following line of action is proposed: -

- Modernization of the registered 17 slaughterhouses of Municipal Corporation under the norms of Animal Husbandry department and as per expert Drawings and estimates and running them under the Public Private Partnership model through private Meat Processing Units. The production and export will be regulated under the legal framework of U.P.Government and A.H. department's fixed norms. They will be permitted relaxation in the number of slaughtering animals per day. The modernization will be done preferably in such towns where the Airports are present but quite away from the Airport site. Meat processing at export centres will be given priority.
- Establishment of male buffalo calf rearing societies in the villages.
- To achieve above goals an amount of Rs. 12505.00 Lac is needed from Government of India during XI plan Period. In this pretext a provision of Rs. 2157.00 Lac has to be made in 2007-08 for Modernization of 3 Slaughterhouses in the first year of XI plan. This scheme will benefit the farmers on one hand and will also enhance the revenue of Municipal Corporations; besides the Wholesome Meat will be available for public and export. It will generate additional employment as well.

4. Fodder Development Scheme: U.P. has the largest human and livestock population. Either of the two requires food from its land resources. Green revolution, in agriculture, has made the farmers turn to producing food grains and vegetables; consequently, the land under fodder crops got reduced to a significant level. It becomes evident from the fact that the livestock population now faces a deficit of 33.80% in green fodder, 3.95% in dry fodder and 45.26% in concentrates (in view of 2003 livestock census). The farmers of the State, who used to rear livestock to add to their income, in such a scenario of commercialization and globalization of market trends, pass through difficult times in nourishing their livestock adequately. The scheme A.H.D. through feed and fodder development schemes, since IV five year plan period, are limited to distribution of improved/certified fodder seeds, demonstrations of minikit packages and feeding of enriched straws / cellulose wastes. These are not sufficient for the well being of our livestock, because without appropriate nutrition none of the species can perform at its optimum level.

To minimize this pressure a scheme on fodder development has been prepared to be implemented with 100% assistance of Government of India. In this scheme the farmers of the state will be motivated to grow green fodder for the livestock of the state. They will be provided certified seeds of fodder in Rabi and Kharif, both Crop seasons. They will be provided help from State Government to grow green fodder on Sodic Land and also on wastelands, especially on the bank of rivers. The farmers will also be trained for fodder development and will also be practically given

Live Demonstration. For this an amount of Rs.1750.00 Lac is required from Government of India during the XIth plan. Out of this amount a sum of Rs. 350.00 Lac is required for the current financial year.

5. Production of Cow/ Buffalo Heifers for Farmers at State Livestock Farms: Sixty percent population in State is in rural area. They depend mainly on Agriculture & Animal Husbandry for their income. It has been observed that most of the rural farmers have no improved bred cattle that's why they are low productive livestock. Such a condition has become miserable because on one hand they have become a burden for the farmers Milk Production is also being hampered. To overcome this very important issue of livestock farmers, a new scheme is proposed in which Heifers of high quality indigenous breeds like Haryana, Sahiwal, Tharparkar, Red Sindhi, Gangatiri etc. will be made available to rural farmers on economic costs in a large number. By which the productive animals will be available in rural areas, resulting in developing interest in livestock rearing, which in turn will create a good number of self employment opportunities apart from enhancing milk production of the state. This will improve the economic condition of farmers. It will provide sufficient nutrition (protein diet) to them resulting in their better health. This will further minimize their investment in medicines.

For this scheme an amount of Rs.503.5165 crore is required from Government of India out of which a sum of Rs.103.5165 crore is required for the current financial year 2007-08

6. Modernization of Biological Products Institute: B.P. Institute, Lucknow is engaged in the production of quality vaccines for last 50 years. In the modern era of scientific advancement, it becomes the responsibility of the Government to enforce preventive measures against various contagious diseases of livestock. In the beginning the institute produced 10 to 15 Lac doses of vaccines, but with concerted and committed efforts now it is producing various types of vaccines to the tune of 300 -350 Lac doses/year. Main emphasis has been given to increase the capacity of the institute for the production of most required vaccines like H.S. and B.Q. Over a period of years there has been substantial increase in the requirement of vaccines. To achieve this, the following steps would be required: -

1. Replacement of old conventional and obsolete machines and equipment.
2. Reorganization of available human resource involved in the vaccine production reducing expenditure on establishment and overheads.
3. To update & upgrade the technical and managerial aspects.
4. Establishment of Quality Control & Research and Development cells at the institute.

The major areas of investment are equipment, instruments and recurrent costs, especially the purchase of Fermenter and other modern equipment for different divisions. The financial support is needed would be Rs. 1000.00 Lac from Government of India. This amount will be required in one installment i.e. in 2007-08 itself. With the modernization of the B.P. Institute, the production will become almost double of the present capacity

Financial Requirements from Government of India for Animal Husbandry

(Financial Amount Rs. in Crore)

	Project	Unit Cost	XI - PLAN PERIOD		2007-08		2008-09		2009-10		2010-11		2011-12	
			Amount	Physical	Amt.	Phy.	Amt.	Phy.	Amt.	Phy.	Amt.	Phy.	Amt.	Phy.
1.	Establishment of Vet. Hospitals	0.2648	421.75	1593 Nos.	84.21	318	84.74	320	84.74	320	84.736	320	83.412	315
2.	Estab.ofDisea sediagnostics Labs	0.3366	20.20	60 Nos.	5.55	16	5.05	15	5.05	15	3.366	10	1.35	4
3.	Modernizatio nofslaughter houses	7.1885	125.05	17 Nos.	21.57	3	29.76	4	29.76	4	22.39	3	21.57	3
4.	Fodder development Scheme	-	17.50	3500 Lakh Qut.	3.5	700	3.50	700	3.50	700	3.5	700	3.5	700
5.	Prod.ofCow heifers for Farmers	-	503.52	5000 Heifer	103.52	1000	100.00	1000	100.00	1000	100.00	1000	100.00	1000
6.	Modernizatio n of Biological Products Institute	-	10.00	1	10.00	-	-	-	-	-	-	-	-	-
	TOTAL		1098.02	-	228.53	-	223.05	-	223.05	-	213.89	-	209.83	-

BUNDELKHAND REGION

(Financial Amount Rs. in Crore)

	Project	Unit Cost	XI – PLAN PERIOD		2007-08		2008-09		2009-10		2010-11		2011-12	
			Amount	Physical	Amt.	Phy.	Amt.	Phy.	Amt.	Phy.	Amt.	Phy.	Amt.	Phy.
1.	Establishment of Vet. Hospitals	0.2648	42.633	161 Nos.	8.474	32	9.268	35	9.268	35	9.268	35	6.355	24
2.	Estab.of Disease diagnostic Labs	0.3366	2.02	6 Nos.	0.3366	1	0.6732	2	0.3366	1	0.3366	1	0.3366	1
3.	Modernization ofslaughter houses	7.1885	14.71	2 Nos.	7.19	1	7.52	1	-	-	-	-	-	-
4.	Fodder development Scheme	-	1.75	350 Lakh Qut.	0.35	70	0.35	70	0.35	70	0.35	70	0.35	70
5.	Prod.of Cow heifers for Farmers	-	100.70	1000 Heifer	20.14	200	20.14	200	20.14	200	20.14	200	20.14	200
6.	Modernization of Biological Products Institute	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	-	161.813	-	36.49	-	37.95	-	30.10	-	30.10	-	27.18	-

PURVANCHAL REGION

(Financial Amount Rs. in Crore)

	Project	Unit Cost	XI – PLAN PERIOD		2007-08		2008-09		2009-10		2010-11		2011-12	
			Amount	Physical	Amt.	Phy.	Amt.	Phy.	Amt.	Phy.	Amt.	Phy.	Amt.	Phy.
1.	Establishment of Vet. Hospitals	0.2648	165.24	624 Nos.	32.84	124	34.425	130	34.425	130	33.10	125	30.45	115
2.	Estab.of Disease diagnostic Labs	0.3366	7.742	23 Nos.	1.683	5	1.683	5	1.683	5	1.683	5	1.01	3
3.	Modernization of slaughter houses	7.1885	36.78	5 Nos.	7.19	1	7.522	1	7.356	1	7.356	1	7.356	1
4.	Fodder development Scheme	-	6.75	1030 Lakh Qut.	1.35	206	1.35	206	1.35	206	1.35	206	1.35	206
5.	Prod.of Cow heifers for Farmers	-	100.70	1000 Heifer	20.14	200	20.14	200	20.14	200	20.14	200	20.14	200
6.	Modernization of Biological Products Institute	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	-	317.212	-	63.203	-	65.12	-	64.954	-	63.629	-	60.306	-

Dairy Development

Uttar Pradesh is the largest milk producing State of the country. The main thrust required is to supplement the income of the small and marginal farmers and landless labourers through dairy development. The existing cooperative dairy societies need to be strengthened and capacity for processing and storing milk for subsequent marketing needs to be augmented. A composite dairy plant is proposed to be established at Lucknow having a capacity of 5 lac litres per day. Commercial dairy farming in the districts of Bundelkhand and Eastern U.P. is also proposed.

An amount of Rs 446.62 Cr. is required for these projects as per details given below :-

Projects	Amount (Cr. Rs.)
8.1 Establishment of Composite Dairy Plants	160.00
8.2 Establishment of chilling Centre	5.62
8.3 Establishment of Cattle Feed plant	11.00
8.4 Modernization, Up-gradation & Value Addition facilities	25.00
8.5 Commercial Dairy Farming in Bundelkhand & Eastern UP	240.00
8.6 Strengthening & 6 Modernization of Cow Breeding Farm	5.00
Total	446.62

UP is the largest milk producing state in the country producing 476.71 lakh liters per day, around 18% of total production of India. After meeting the rural liquid milk demand, 236.88 lakh liters go for manufacturing of milk products and to meet urban liquid milk demand, mainly catering to National Capital Region and western UP.

- *The state tops in milk production with 17.35 million tonnes of annual milk production, accounting for 18% of the total milk production in the country.*
- Handling capacity of co-operative sector is 27.84LL/day and that of private sector is 119.00 LL/day

Urban demand & Net Surplus

The process of urbanization in UP (20.78%) is also far behind the all India average of 27.78%. There is a wide disparity in urbanization among four regions of UP. While the urban population in eastern UP is only 11.78%, the same is 28.25% in western region followed by central (25.11%) and Bundelkhand region (22.46%). Urbanization however is growing at a rapid rate. It is expected that by 2020 about 40% of the population in UP will be in the urban areas. In view of the wide variation in per capita income across the state and in absence of district/zone wise per capita urban milk

consumption estimates, per capita income has been used as a proxy for estimating the per capita urban consumption of milk.

Western U.P. being the most economically developed area in the entire U.P., the urban consumption works out to be around 35-40 lakh Lit. per day. This accounts for more than 50% of the urban demand of the State followed by the central (30%) and eastern UP (13%).

Establishment of Composite Dairy Plant at Chak Gajaria, Lucknow

- Total expected expenditure is Rs.150.00 Crore. The total amount required is being proposed as 100% grant under IDDP Scheme of the Govt. of India. State Federation will chip in with the expenditure being incurred on capacity / skill build up in addition to land acquisition. The cost of land will be borne by the State Govt /State Federation.
- An expenditure of around Rs.121.00 crore is to be made on establishment of composite dairy plant with powder conversion and product manufacturing facility. Further Civil Work for capacity expansion and up gradation will be met by spending around Rs.29.00 Crore. A composite Dairy Unit would be the established.
- The setting up of the proposed Unit requires capital expenditure to the tune of Rs.150.00 crore. As the plant will be run by the local Milk Union of the State Federation. revenue expenditure has not been worked out as it will be the part of routine expenditure of the Union.
- The Project will be benefiting all the distts. Of the Lucknow & Kanpur belt of the Central Zone. Around 2,100 villages are proposed to be covered in the said area during the next 5 years. In addition milk being procured in the Bundelkhand region will be processed at this plant.
- Central U.P. is inhabited by 37508 villages and Milk Production in the year 2005-06 was 130.71 lakh lit. per day contributing 27% of milk production of U.P.. Per village milk production is 348 kg/day. Marketable surplus per village is 173 kg per day.
- The urbanization is growing at a rapid rate and pattern is also changing. Cropping pattern of agriculture is also changing because of urbanization pressure and lack of natural resources like water and organic manures. It is expected that in the next 20 years, in western part of UP urbanization will be higher in the State and its role will shift from production to consumption. High water demanding crops like sugarcane, rice and even green forage will have to be procured from other than western region. Lucknow and Kanpur belt of Central Zone is developing at a

higher pace as State Capital Region (SCR) and this is also becoming a major industrial and consumption center.

- In the above scenario milk production and agricultural activities will have to be accelerated in Eastern and Bundelkhand Regions. For this we will have to pay more attention on Eastern and Bundelkhand Regions to develop them as major production centres of the state.
- For minimizing regional imbalances in milk production, specifically in Bundelkhand & Eastern U.P., Intensive Animal Induction Programme through Backyard Dairy Farming and Commercial Dairy Farming and Proper Policy Support and Facilitation has been planned in the State Sector. The milk production in this area will increase gradually. Hence in the initial stage, as the surplus milk will be less it will have to be processed in the neighboring central zone.
- The State Capital Region (SCR) is the feeder balancing, processing and packaging centre for 10 neighboring districts. As Lucknow unit has to work as feeder balancing unit, drying unit is a must to tide over the surplus milk of the Central, Eastern and Bundelkhand Regions. Late Prime Minister Smt. Indira Gandhi had already laid the foundation of a modern Dairy Plant at Chak Gajaria in 1984, as a gift to the farmer of this region. This dream has to be realized.
- The fast emerging urban population is helping in setting instant economic return for the value added products. A State of art processing and packaging unit is planned for Lucknow. UHT processing and Tetra Packing unit has been included in the project to realize higher return for diversified and extended shelf life for a range of milk products. It would not only cater to central region of U.P. but would also cater to the Bundelkhand and Eastern regions of U.P. along with neighboring States like Bihar, Jharkhand and M.P. etc.

Establishment of Composite Dairy Plant at Mathura

- Total expected expenditure is Rs.10.00 Crore. The total amount required is being proposed as 100% grant under IDDP Scheme of the Govt. of India. State Federation will chip in with the expenditure being done on capacity / skill build up in addition to land acquisition. The cost of land will be borne by the State Govt /State Federation.
- An expenditure of around Rs.5.78 crore is to be incurred Electrical/Mechanical components at the Dairy Unit. Further Civil Work for capacity expansion and up gradation will be met by spending around Rs.4.22 Crore. A composite Dairy Unit would be established.

- The setting up of the proposed Unit requires capital expenditure to the tune of Rs.10.00 crore. As the plant will be run by the local Milk Union of the State Federation, revenue expenditure has not been worked out as it will be the part of routine expenditure of the Union.
- All the districts of the Agra Division and NCR. Around 1000 village are proposed to be covered in the said area during the next 5 years.
- Western Zone is contributing 46% of the State Milk Production and the total handling capacity of the zone is 83.63% as indicated in the table. Of this handling capacity 86% is in private sector and only 14% is in Cooperative/Govt. Sector.
- The private sector operates mainly in flush season and that too for products like SMP, Ghee , Casein and Lactose etc., and the liquid milk and indigenous milk product which is the main requirement of the market is not in their mandate.
- The Cooperative / Govt. Sector is not fully equipped with modern equipments to meet the market demand. The capacity of Agra Plant situated at Bindu Katra is 30 thousand litre per day and the capacity of Mathura plant is 20 thousand litre per day. Both the plants are quite old and obsolete.
- Agra plant is situated in the heart of the city, very near to Taj. Agra being a heritage zone no plants can be upgraded and operated in this region. Mathura plant is having sufficient land (14.6 acre) and its location is very much suited for commissioning of a plant.
- Agra and Mathura are very famous tourist and pilgrim centres. Location of the Mathura Plant is an ideal place to fulfill the needs of National Capital Region Delhi also. The Agra and adjoining region is having sufficient raw milk to meet the requirement of the plant. Agra, Mathura and NCR region are developing as the main consumption centre for processed and packed liquid milk, flavoured milks (pasteurized/sterilized) and various indigenous milk products like Mattha, Chhachh, Dahi, Peda, Laddoo, Cake etc. As this region will be having National and International Tourists, hence a modern plant will not only help in providing the state of art processing and packaging but also take care the safety of food products to the highest degree.
- The Mathura Dairy Plant will even act as the balancing and packaging centre for neighboring districts of the region. The fast emerging urban population is becoming a centre for instant economic return for value added products. The State of art processing and packaging unit will be very useful to realize diversified and extended shelf life for a range of milk products, which would get higher return.

Establishment of Chilling Centre at Shravasti and Rampur

- Expected expenditure is Rs.2.81 Crore for each Chilling Centre. Thus the total amount for the two district is Rs.5.62 Crore. The total amount required is being proposed as 100% grant under IDDP Scheme of the Govt. of India. State Federation will chip in with the expenditure being done on capacity / skill build up in addition to land acquisition. The cost of land will be borne by the State Govt /State Federation.
- For these two Chilling Centre an expenditure of around Rs.1.92 crore is to be incurred on Electrical/Mechanical components. Further Civil Work will be carried out by spending around Rs. 3.70 Crore.
- The setting up of the proposed units require capital expenditure to the tune of Rs.5.62 crore. As the Chilling Centres will be run by the local Milk Union, revenue expenditures has not been worked out as it will be the part of routine expenditure of the Union.
- Around 300 villages of each district are proposed to be covered in the said area during the next 3 years.
- As the dairy activities in these two districts are going on chilling plant / processing facility are not available.
- Regional Imbalances have led to skewed development of the Dairy Sector in the State. The current initiative being planned via this project is proposed to annul the effect of sectoral imbalances through out the State. It is proposed to set up Chilling Centres that will boost the ongoing Dairy Development Programs.
- The Chilling Centres would be benefiting immensely from the proposed units on the operational front.
- Organization/ revival of VDC's will also be targeted.
- Operational Synergies will be generated.
- It would result in direct/ indirect gainful employment to those associated with the Sector.
- In addition we will be able to procure additional quantum of Milk in the said areas thereby generating economic gains for the sector as a whole.

Setting up of a Cattle Feed Plant at Etah

- Total expected expenditure is Rs.11.00 Crore. The total amount required is being proposed as 100% grant under IDDP Scheme of the Govt. of India. State Federation will chip in with the

expenditure being done on capacity / skill build up in addition to land acquisition . The cost of land will be borne by the State Govt /State Federation..

- An expenditure of around Rs.11.00 crore is to be made on establishment of the proposed Cattle Feed Plant. An investment of Rs.5.75 crore is being proposed on equipments. Cost of land is Rs. 0.20 crore. Further Civil Work for capacity expansion and up gradation will be met by spending around Rs.5.05 Crore. An integrated Cattle Feed Plant Unit with a capacity of 100 MT per day would be set up.
- The Project will be benefiting the distts. viz. Agra, Aligarh, Badaun, Bareilly, Etah, Etawah, Firozabad, Farrukhabad, Hardoi, Jalaun, Kannoj,Jhansi, Mainpuri, Mathura, Shahjahanpur, Hathras, Pilibhit and Aurraya districts.
- As mentioned earlier, there is an enormous gap between the availability and demand of green and dry fodder in the State and the animals are deficient in nutrients. The intake of balanced concentrates in the form of cattle feed would help in the productivity of animals apart from improving their health and productivity. The increase in milk yield would go a long way in improving income of the farmers. Moreover, the availability of good quality feed would discourage the production and sale of inferior brands in the private sector. The project would also generate direct employment from various disciplines viz. skilled and semi skilled for operation of the plant and other services.
- Use of balanced cattle feed will ensure that milk animals come in heat on right time and thus decrease intercalving period. This means more productivity and progeny in the the life span of a high milk yield carrying germplasm of good quality milch animals.
- The marked area of operation for the proposed Cattle feed plant, presently has an average milk production of 3.42 lac kgs of milk per day from 2.13 lac farmer members, it is estimated that by the end of 11th five year plan the figures of average procurement and membership will touch 8.39 lac kgs/ day and 5.43 lac farmer members respectively. In order to support this increase in milk procurement additional capacity in cattle feed production is required.
- Over a period of time the performance of the two plants in the Cooperative sector in Uttar Pradesh has steadily taken a dip and there is an urgency to establish a new cattle feed plant in the State at Etah district. The strategic location of the plant at Etah can ensure supply to most parts of Central and Western U.P. at very low transport cost.

- There is also an urgent need of educating and creating awareness in the milk producing farmers about the use of good quality cattle feed produced from reliable manufacturers with good manufacturing practices. Due to price sensitivity, rural producers tend to buy cattle feed being sold at lower rates. As this cattle feed is nutritionally neither balanced nor enriched, it results in wastage of hard earned producers money going down the drain. It brings no improvement in nutritional, health and reproductive status of milk animal.

Modernisation / Upgradation and Establishment of a Value Addition Units at Moradabad, Varanasi, Gorakhpur, Kanpur, Faizabad and Bareilly

- Total expected expenditure is Rs.25.00 Crore. The total amount required is being proposed as 100% grant under IDDP Scheme of the Govt. of India. State Federation will chip in with the expenditure being done on capacity / skill build up.
- An expenditure of around Rs.25.00 crore is to be made on the Strengthening of the proposed Dairy Units. The proposed units will be strengthened as per the requirements to cater to the on growing regional demands for milk & milk products. A total of around 15,421 individuals/families will be given employment via the Kshetriya Rojgar Srijan Kendra Scheme being implemented under the aegis of the Dairy Development Department. The investment details are as follows-

Name of the Unit	Expenditure on Civil Works (Rs. In Lakh)	Expenditure on Plants & Machinery (Rs. In Lakh)	Other Items For Dairy Dev. Activities.	Total Cost (Rs. In lakh)
Varanasi	85.00	315.00	-	400.00
Moradabad	40.00	260.00	-	300.00
Gorakhpur	78.00	122.00	-	200.00
Kanpur	195.00	505.00	-	700.00
Faizabad	32.65	177.60	89.75	300.00
Bareilly	100.00	388.20	111.80	600.00

- The setting up of the proposed Units require capital and revenue expenditure to the tune of Rs. 22.985 crore and Rs. 2.015 crore respectively. As the plant will be run by the local Milk Unions of the State Federation..
- With growing modernization and urbanization, the demand pattern is changing giving place to create modern units to cater to these demands.

- The core idea being answered via this project is to materialise the target being proposed under the Five year Plan. This needs extensive modernization/ Up-gradation to set up value addition units at these dairy plants.
- All the Dists milk Unions selected are potential distts. where-in the projected demand potential & inherent demand for Dairy based Products justifies the placement of modern machinery & value addition units to serve the masses. This would enhance the returns for the Farmers producers affiliated with these distt. level Milk Unions. This would also lead to the developmental plans being finalized under the Eleventh Five-Year plan.
- The said areas would be benefitting immensely from the proposed unit on the operational front but the Economics also tends to favour the unit as value added products would be produced and marketed as per the demand in the area.
- The revenue generated will be utilized for quality incentives to the rural milk producers.
- The area under question will be able to acquire high-tech modern units for efficient processing.
- Organization/ revival of VDC's will also be targeted.
- Operational Synergies will be generated. It would result in direct/ indirect gainful employment to those associated with the sector.
- In addition we will be able to handle additional quantum of Milk in the said areas.

Establishment of Commercial Dairy Farming Units in 24 districts of Eastern/ Bundelkhand/ Naxal affected districts of the State.

- Total expected expenditure is Rs.239.993 Crore. The total amount required is being proposed as 100% grant under IDDP Scheme of the Govt. of India. State Federation will chip in with the expenditure being incurred on capacity / skill build up.
- The Project would be covering 7,920 individuals / families for provision of Animal Health Care facilities.
- The Project Components if implemented in toto would be resulting in the establishment of 31,680 Commercial Dairy Units (Mini Dairies) & would result in gainful employment to 91,680 individual /families. Out of these 31,680 beneficiaries would be provided with direct employment & 60,000 indirect in the project distts.
- An expenditure of around Rs.239.993 crore is being envisaged under the project. Expenditure details cover grant on cattle purchase, training, transportation of milch animal and extension

related work. The break up of expenditure on these heads for one year would be Rs. 55.426 crore, Rs.0.95 crore, Rs.0.576 crore and Rs. 0.144 crore respectively. In addition an amount of Rs. 2.901 crore is to be spent on project monitoring/training and as HO expenditure. The total amount is Rs.59.998 crore for one year and this is being replicated for the consecutive years.

- **Naxal Affected Distts:** - Mirzapur, Deoria, Mau, Chandauli, Sonbhadra, Ghazipur, Ballia & Kushinagar. **Bundelkhand Region:** - Lalitpur, Jhansi, Jallaun, Mahoba, Hamirpur, Banda & Chitrakut. **Eastern Distts:** - Maharajganj, Siddharthnagar, Basti, Gorakhpur, Balrampur, Sant ravidas nagar, Sant Kabir nagar, Azamgarh & Shravasthi.
- Regional Imbalances have led to skewed development of the Dairy Sector in the State. The current initiative being planned via this project is proposed to annul the affect of sectoral imbalances through out the State. It is proposed to set up Commercial Dairy Farming Units in the 24 distts. of the State, which have not really gained from the the ongoing Dairy Development Programs.
- The said areas would be benefiting immensely from the proposed units on the operational front. Organization/ revival of VDC's will also be targeted. Operational Synergies will be generated. It would result in direct/ indirect gainful employment to all those associated with the Sector. In addition we will be able to procure additional quantum of Milk in the said areas to feed the Nearby Feeder Balancing Dairies, thereby generating economic gains for the sector as a whole.
- **Beneficiaries at the rural Level:** - As all the said areas in fact cater to the village based milk societies, any developmental effort that is in the form of Commercial Dairy Farming Components, in the said areas will have a positive effect on the rural milk producer, especially the economically backward & down trodden. He will be getting the benefit in terms of higher incomes at the distt. level Milk Unions will pass on the benefits to the village Producer Societies in the form of bonus & better returns.

Strengthening & Modernization of the Government AH and AGRI Sector Farm at Bharari, Jhansi.

- Total expected expenditure is Rs.5.00 Crore. The total amount required is being proposed as 100% grant under IDDP Scheme of the Govt. of India. State Federation will chip in with the expenditure being done on capacity / skill build up.

- An expenditure of around Rs.05.00 crore is to be made on the Strengthening of the integrated Cow Breeding Farm at Bharari, Jhansi. An investment of Rs. 40.00 Lakh is being assessed as working capital requirement. The major investment areas are building up of a dam near Pahunj river and construction of a pump house to lift water & Boundary wall of the farm area. The Cow Breeding Unit at Bharari, Jhansi will be strengthened to cater to the services that are expected of a farm unit of its stature.
- These inputs in the area of Skill Development would lead to overall renewal of the prevalent systems in the Farm, which would result in a vibrant setup to benefit the region & the milk producers in the region.
- The setting up of the proposed Unit requires capital expenditure to the tune of Rs. 5.00 crore. Recurring expenditure on feed, vaccination and medicines would be Rs. 55.50 Lakh. Strengthening and modernization of the fodder farm requires Rs.29.90 Lakh. Similarly strengthening and modernization of the Bharari Farm requires Rs.25.50 Lakh on civil works. Investment is Rs.340.00 Lakh.
- The said area of Jhansi & nearby districts of the Bundelkhand region would be benefited by the proposed project initiative.
- The Farm at Bharari Jhansi was established in the year 1948-49 for conservation & development of Tharparker Cow Breed. The Farm is situated on the Jhansi Balaji Road round 10 Kms from Jhansi. The Farm needs upliftment & renewal to cater to the services that are expected of a Farm unit of its stature.
- The Availability of land/ Proper irrigation facilities etc. is sufficient to re-launch the Farm on a new high.
- The project clearance would lead to increase in the quality of Male Bulls, which would further lead to make free the availability of Surplus Calf & Cow in the region. As the Tharparker Cow breed is quite popular in the region, it is being proposed to propagate this breed so that the acceptability at the local level is good enough to bring in the desired results.
- It is being felt that the professionals at the Farm Unit need a reorientation program to increase their efficiency & it is being proposed to have an orientation/ capacity build up program under the aegis of IGFRI, Jhansi. Similar personnel working in the Dairy Farm Unit will be going for a reorientation program at NDRI, Karnal.

- These inputs in the area of Skill Development would lead to overall renewal of the prevalent systems in the Farm, which would result in a vibrant setup to benefit the region & the milk producers in the region.

Projects at a Glance

(Rs. In Crore)

.	Project Details	Project Cost	Central Assistance	Financial Requirements for three Years			
				2007-08	2008-09	2009-10	2010-11
1	Establishment of Composite Dairy Plant with Processing, Conversion and Value Addition Facility at Chak Gajaria, Lucknow.	150.00	100%	45.00	60.00	45.00	-
2	Establishment of Composite Dairy Plant with Processing, Conversion and Value Addition Facility at Mathura.	10.00	100%	3.00	4.00	3.00	-
3	Establishment of Chilling Centres at Rampur & Shravasti Districts (Cap.-20 TLPD)	5.62	100%	1.68	2.26	1.68	-
4	Setting up of a Cattle Feed Plant at Etah	11.00	100%	3.30	4.40	3.30	-
5	Modernisation/Upgradation and Establishment of a Value Addition Units at Moradabad, Varanasi, Gorakhpur, Kanpur, Faizabad and Bareilly	25.00	100%	7.50	10.00	7.50	-
6	Establishment of Commercial Dairy Farming Units in 24 districts of Eastern/ Bundelkhand/Naxal affected districts of the State	240.00	100%	60.00	60.00	60.00	60.00
7	Strengthening & Modernization of the Government AH and AGRI Sector Farm at Bharari, Jhansi.	5.00	100%	1.50	2.00	1.50	-
	Total	446.62	100%	121.98	142.66	121.98	60.00

Fisheries

There are large numbers of water bodies and huge untapped potential for fish production. There is need to provide necessary training and quality seeds at reasonable rates to the fish farmers. It is proposed to strengthen the existing hatcheries and create new ones as well as to improve the market facilities.

An amount of Rs 11.65 Cr. is required for these projects as per details given below :-

Projects	Amount (Cr. Rs.)
9.1 Construction of new /additional work at Existing hatcheries	5.74
9.2 Establishment of Ornamental Fishes Production center	0.20
9.3 Maintenance of Departmental Fish farms	1.60
9.4 Establishment of Fish Feed Plant	1.60
9.5 Development of Kauthota lake	2.06
9.6 Establishment of Fish awareness and Training Centre	0.45
Total	11.65

Improvement of 9 existing large size fish seed hatcheries of Matsya Vikas Nigam & Establishment of one large size hatchery.

- The present hatcheries were constructed long ago and their improvement is urgently needed for their complete utilization so that quality fish seed in desired quantity may be produced. Apart from this the state still lacks an appropriate hatchery in western region of U.P. Keeping this in mind one large size hatchery is proposed in western U.P. particularly in Agra division. Presently GOI is providing subsidy for construction of hatcheries in private sector but no financial assistance is available to renovate or for enhancement of existing hatcheries in government sector. Therefore, funds are needed to increase the quality fish seed production. The hatcheries will be run by U.P. Matsya Vikas Nigam Ltd. where adequate technical staff is already available. Particularly the improvement of existing hatcheries will facilitate the seed production work.
- The present production of nine hatcheries of U.P. Matsya Vikas Nigam is 26.36 crore which is expected to increase up to 35.00 crore after renovation work. The capacity of new hatchery will be to the tune of 2.00 crore fish seed production .One new large size hatchery will be established in western U.P. on which expenditure of the order of Rs. 149.00 lac is anticipated. The existing hatcheries in Lucknow, Basti, Faizabad, Sultanpur, Gorkhpur, Allahabad, Shahjhanpur , Jalaun & Meerut will be improved & one new hatchery in westren U.P. in Agra division will be set up.

Establishment of Ornamental Fish Production Centre.

- In the recent past people have been considerably attracted towards colourful ornamental fish in aquarium. There is no production center of these fish in U.P. If these fish are produced in the state itself, they can be a good source of income for farmers as well as U.P. Matsya Vikas Nigam. No financial assistance is available for ornamental fish production centre / hatchery by GOI in government sector. Therefore funds are needed to promote this activity from central government.
- The ornamental fish production centre will be established at Triveni hatchery of U.P. Matsya Vikas Nigam Ltd. at Allahabad where land is already available & this production centre will be run by the trained officials of U.P. Matsya Vikas Nigam Ltd. About one lac seed of ornamental fishes will be produced every year & approximate revenue of Rs five lac will be obtained. The trade of ornamental fishes will create employment opportunity for urban youths.

Requirement of funds to run the fish farms of State Fisheries Department

- Fish seed production of desirable species is a very important activity. At present fish seed production is to the tune of 40 crore in government sector against the demand of 120 crore. The remaining demand is met out by importing fish seed from other states. This proposal is to fulfill requirement of fund to run all the 48 fish farms of the State. These farms will be managed by Fisheries Department of U.P. Recurring expenditure is needed for fish seed production at the departmental fish farms.
- About 10.00 crore fish seed will be produced every year which will be distributed to fish culturists on prescribed rates. This will help in enhancing fish production in the state. As far as out come is concerned it is worth mentioning that annual income of the order of Rs. 75.00 lac will be obtained as the cost of 10.00 crore fish seed. Expenditure will be to the tune of Rs. 40.00 lac per annum and as such net profit of Rs.35.00 lac per year will be obtained.. Only recurring expenditure is needed to run the existing fish farms & no new assets will be created.

Establishment of Fish Feed Plant.

- Supplementary feed plays an important role in aquaculture. Presently there is no appropriate fish feed plant in the state and consequently the availability of quality and balanced fish feed to fish growers is not ensured. It is proposed to establish a fish feed plant in the state which will be managed by U.P. Fisheries Co-operative Federation Ltd.

- Appropriate formulated fish feed will be manufactured in the fish feed plant & distributed to fish farmers at reasonable prices . Establishment of the fish feed plant will be ensured by U.P. Fisheries Cooperative Federation Ltd. Lucknow in Lucknow.
- About 500 ton fish feed will be manufactured every year costing about Rs.70.00 lac. Operating cost is expected to be Rs. 65.00 lac & net profit is anticipated to be Rs. 5.00 lac.

Development of Kathauta tal lake

- Kathauta Jheel is situated in Chinhat, a very important area of the Capital of Uttar Pradesh . Its development from Ecotourism point of view can be a land mark in the present progressive age.
- Development work will be done by U.P. Matsya Vikas Nigam & finally the fisheries department will manage this prestigious water body. Water recharging , environmental upgradation, employment generation & development of recreation site will be indirect benefits & income through boating, entry fee, angling & fish production will be the direct benefits.
- The development of this Jheel will be a good source of recreation for public. In addition this will recharge underground water, upgrade the environment and will generate employment also.

Establishment of Fisheries Awareness & Training Centre in Gorakhpur

- There are ample opportunities of fish culture in eastern region of U.P. and keeping this in view it has become extremely necessary to establish a Fisheries Awareness and Training Center in Gorakhpur.
- Construction work is proposed to be done by either U.P. Matsya Vikas Nigam or any other state agency. Finally the fisheries department will manage the Fisheries Awareness and Training Centre in Gorakhpur ;through Fish Farmers Development Agency. Training to fish farmers, seminars & workshop will be organized from time to time for the benefits of fish farmers.
- Human resource development is the ultimate goal of this centre.
- No revenue will be generated from fisheries awareness & training centre. Capital investment in the form of purchase of land , for construction & furnishing of the fisheries awareness & training centre is proposed at a cost of Rs.45.00 lac. A new asset will be created in the form fisheries awareness & training centre in the state.

Year wise breakup of funds

Name of Scheme	2007-08			2008-09			2009-10			2010-11			Total		
	Central	state	Total	Central	state	Total	Central	state	Total	Central	state	Total	Central	state	Total
Improvement of 9 existing large size fish seed hatcheries of Matsya Vikas Nigam & establishment of one large size hatchery.	574.33	-	574.33	-	-	-	-	-	-	-	-	-	574.33	-	574.33
Establishment of Ornamental fish production centre.	19.73	-	19.73	-	-	-	-	-	-	-	-	-	19.73	-	19.73
Requirement of funds to run the fish farms of State Fisheries Department	40.00	-	40.00	40.00	-	40.00	40.00	-	40.00	40.00	-	40.00	160.00	-	160.00
Establishment of Fish Feed Plant.	160.00	-	160.00	-	-	-	-	-	-	-	-	-	160.00	-	160.00
Development of Kathauta tal lake	206.00	-	206.00	-	-	-	-	-	-	-	-	-	206.00	-	206.00
Establishment of Fisheries Awareness & Training Centre in Gorakhpur	28.00	17.00	45.00	-	-	-	-	-	-	-	-	-	28.00	17.00	45.00
Total	1028.06	17.00	1045.06	40.00	-	40.00	40.00	-	40.00	40.00	-	40.00	1148.06	17.00	1165.06

Sericulture

- Uttar Pradesh is a major silk consuming state in the country with its silk industry consuming about 5000 MT per annum against raw silk production of 30 MT. U.P. practices Mulberry, Tasar and Eri sericulture, the agro-climatic conditions are suitable for development of sericulture in the state in different pockets. Mulberry sericulture is in practice in Eastern U.P., Tarai, plains of Ganga & Jamuna and Western U.P. whereas Tasar culture prevails in Bundelkhand and Vindhyachal regions of the state. Sericulture is in practice in central U.P.
- Though U.P. is yet to become traditional sericulture state in India, it is famous world over for production of special quality of Varanasi Silk Sarees and silk fabrics. After the separation of Uttaranchal State. The sericultural activities are confined to 51 districts covering 150 blocks.

Mulberry Sericulture, Tasar & Eri culture Statistics of U.P. are as follows :-

1.	Host Plant Area	--	1715.70 hect.
2.	Production of Cocoon	--	213.79 MT
	Tasar cocoon	--	39.165 Lakh
	Eri Cocoon	--	17.49 MT
3.	Raw silk	--	30.67 MT
4.	Cocoon Productivity per ha	--	188 Kg
5.	Renditta	--	9

- The State (U.P.) share in National Production is about 0.22%. There is a huge gap in production and consumption. Although U.P. has good conducive climate for the development of sericulture. The sector is under developed in the State. The state has established infrastructure for the development of sericulture, having 199 mulberry, tasar & eri farms, 5 grainages and 100 CRCs, 7 cocoon markets and 9 reeling units.
- This module of infrastructure contribute negligible percentage of requirement of the state. There is a need to intensify all sericultural activities to meet the demand of silk in the state. For this very purpose seven projects have been submitted to Govt. of India for additional central assistance. (Two projects under Special S.G.S.Y. scheme to rural development, one under ongoing CDP scheme, two projects for tasar, mulberry development, one for strengthening cooperative societies to Ministry of Textile, Govt. of India and one project Mahila Resham vikas parijojna under Ministry of Women & Child Development, Govt. of India. An amount of Rs. 1544.38 crores is required for these projects as per detail given below :-

S.N.	Project	Amount in Crores
1	Mulberry & Tasar Raw Silk production	797.22
2	Development of Mulberry & Tasar Culture	733.35
3	Cocoon production, Silk Reeling and Fabric Marketing	13.81
	Total	1544.38

FUNDING PATTERN

Amt. in crores

S.N.	Project	Funding Source				
		State	Central	Bank	Benefi.	Total
1	Mulberry & Tasar Raw Silk production	79.72	637.78	--	79.72	797.22
2	Development of Mulberry & Tasar Culture	73.34	513.35	73.34	73.34	733.35
3	Cocoon production, Silk Reeling and Fabric Marketing	1.38	12.43	--	--	13.81
	Total	154.44	1163.56	73.34	153.06	1544.38

YEARWISE BREAKUP

Amt. in crores

S.No.	Year	State	Central	Bank	Benefici.	Total
1	2007-08	15.44	116.36	7.33	15.31	154.44
2	2008-09	30.88	232.72	14.66	30.62	308.88
3	2009-10	46.33	349.07	22.00	45.91	463.31
4	2010-11	46.33	349.07	22.00	45.91	463.31
5	2011-12	15.44	116.36	7.33	15.31	154.44
	Total	154.42	1163.58	73.32	153.06	1544.38

- The project will be implemented through govt. agencies like state department & Central Silk Board, private participants, NGOs and cooperative societies in 52 districts.
- During XI Five Year Plan for Bundelkhand and Purvanchal Zones, the proposed physical and financial targets are as follows:-

S.N.	Particulars	Bundelkhand	Purvanchal
1	Plantation (Acre)	28750	35500
2	Raw Silk Production (MT)	17.00	195.70
3	Employment Generation (Man Days)	11500	18636
	Total Project Cost (Rs. in Crores)	473.82	590.11

Physical Targets at the end of XI Five Year Plan.

Plantation of Mulberry, Arjun & Eri	--	75813 acres
Annual Raw Silk production	--	600 MT

Productivity

(a) Mulberry	--	45kg/100 dfls
(b) Tasar	--	60 cocoon/dfls
(c) Eri	--	25 Kg/100 dfls
Employment Generation	--	56000

Expenditure On Infrastructure (Non-Recurring) And Recurring

1. Capital Expenditure	--	Rs. 617.75 Crores
2. Revenue Expenditure	--	Rs. 926.63 Crores
Total		1544.38 Crores

Diversified Agriculture Support Project (DASP)

The first phase of the Project was implemented in the 32 districts of the State during 1998-2004 and has succeeded in increasing productivity enlisting private sector involvement. DASP II aims to increase productivity and production through diversification of crops and market access for these farmers in the XI Plan. An amount of Rs 869.19 Cr. is required for this project.

Cooperatives**Proposal of Financial Assistance for Creation of Additional Storage Capacity for Fertilizer, Seed & Food Grains .**

The storage and distribution of nearly 30 lac M.T. fertilizers, seed and food grains is being done through Cooperative Societies every year in the State. For the distribution of fertilizers to the Cooperative societies situated at Panchayat level, PCF is doing rake -handling and storage. Since the fertilizer is required to be stored in the district level godowns immediately after lifting from the rake point, it is necessary to have godowns of sufficient capacity at every district headquarter. In the recent past the fertilizers could not be made available to farmers from Co-op. societies in time due to absence of godowns of sufficient capacity resulting in an acute shortage of fertilizers in many districts, adversely affecting agricultural production. It is therefore, necessary to build an additional storage capacity of 1,07,000 MT in the 33 districts where PCF does not have sufficient nos. of

godowns. This additional storage capacity would be created in the 33 districts enlisted in the Annexure. An amount of Rs. 2150.70 Lacs would be spent for building 1,07,000 M.T. additional storage capacity in 33 districts.

There are 573 godowns which have been hired by Primary agriculture cooperative societies (PACS) at the Nyay Panchayat level. These godowns are old and in dilapidated condition and their owners are not taking interest in repairs as the rent is also quite low. The owners often pressurize the societies for vacating it. The proper storage of fertilizers, seeds etc. is difficult due to the poor condition of these godowns. This results in the non-availability of fertilizer and seed to farmers in time. Therefore, it is necessary to have 573 godowns of 150 MT. capacity each constructed in these societies. The construction cost of these godowns would be Rs. 2148.75 Lacs.

The details regarding construction of godowns of PCF & PACS for creation of additional storage capacity are as below:-

- 1- In order to construct 33 godowns of 1,07,000 M T capacity for PCF, an amount of Rs.2150.70 Lacs is required and for constructin of 573 godowns of PACS @ Rs. 3.75 Lacs per godown, an amount of Rs. 2148.75 Lacs is required. The total amount of Rs 4299.45 is proposed to be made available by Government of India as subsidy.
- 2- The godowns of PCF will be constructed by its technical staff and godowns for PACS will be constructed by State level cooperative institutions PACSFED and Labour federation.
- 3- After construction of these godowns, an additional storage capacity of 107000 MT. will be created by PCF and 85950 MT.will be created by PACS. Thus 192950 MT. additional storage capacity would be available for storage of fertilizer, seed and other agriculture inputs. This will help in timely availability of agriculture inputs to farmers thereby increasing the agriculture production. Details of proposed godowns of PCF and PACS are enclosed herewith.
- 4- All the proposed godowns would be constructed in one year therefore the financial assistance will be required within one year.
- 5- After construction of all the godowns of PCF and PACS, 192950 MT. additional storage capacity and 573 assets of PACS, 33 of PCF, total 606 assets will be created.
- 6- After construction of godowns , an additional storage capacity of 47000 MT by PCF and 17700 MT by PACS will be created in Poorwanchal and Bundelkhand region of U.P. from

which timely availability of agricultural inputd will be assured to farmers. This will help in increasing agriculture production and development of Poorwanchal and Bundelkhand regions of U.P.

- 7- Thus for creating additional storage capacity in the newly created and other districts and for replacing the old godwons hired by Co-operative societies by newly built godowns, a total cost of Rs. 4299.45 lacs would be required. The Government of India may kindly be requested to make available the said amount as subsidy for creating additional storage capacity in the larger interest of the farmers of the State.

Description of required additional warehouses in the newly created and other districts where PCF lacks sufficient storage capacity

SN	Region	Name of district	Requirement (In MT)	Cost of construction (Rs. In lac)
1		2	3	4
1	Bundelkhand	Hamirpur	5000	100-50
2		Chitrakoot	1000	20-10
		Total	6000	120-60
3	Poorwanchal	Shrawashti	3000	60-30
4		Ambedkarnagar	3000	60-30
5		Sidarthnagar	3000	60-30
6		Santkabirnagar	3000	60-30
7		Kushinagar	3000	60-30
8		Kaushambi	3000	60-30
9		Chandauli	3000	60-30
10		Santravidasnagar	3000	60-30
11		Naini Allahabad	2000	40-20
12		Gazipur	3000	60-30
13		Maharajganj	5000	100-50
14		Mau	3000	60-30
15		Mirzapur	2000	40-20
16		Sonbhadra	2000	40-20
		Total	41000	944.70

SN	Region	Name of district	Requirement (In MT)	Cost of construction (Rs. In lac)
1		2	3	4
17	Other districts	Shikohabad(Firozabad)	3000	60-30
18		Panki, Kanpur	2000	40-20
19		Kankarkhera, Meerut	5000	100-50
20		Pooranpur, Pilibhit	3000	60-30
21		Haathras	5000	100-50
22		Agra	3000	60-30
23		Aligarh	5000	100-50
24		Mathura	5000	100-50
25		Unnao	3000	60-30
26		Bijnour	3000	60-30
27		Bulandshahar	3000	60-30
28		Baagpat	3000	60-30
29		Gautambudhnagar(Dadri)	3000	60-30
30		JOpOnagar	3000	60-30
31		Firozabad	3000	60-30
32		Kannouj	3000	60-30
33		Auraiya	5000	100-50
		Total	60000	964-80
		Grand Total	107000	2150-70

Amendment in existing Interest Subsidy Scheme for crop-loan

- Pursuant to Govt. of India policy to provide crop loan to farmers at **7%** interest rate with an upper limit of **Rs. 3 Lac**, crop loan in U.P. is being made available to the farmers at **6%** in case of regular payees and at **7%** in case of irregular payees. During the year 2006-2007, crop loan of **Rs. 1888.16 crore** was disbursed to the farmers. Interest Subsidy amounting to **Rs. 53.81 crore** was estimated against the crop loan disbursed during the year 2006-2007.
- To meet the credit requirements of the farmers, for their agricultural production programme adequate credit at cheaper rate of interest should be provided to them, so that they may arrange better quality seeds of high yielding variety, agricultural implements & fertilizer as per their requirement. It is therefore,

proposed that crop loan to farmers should be provided at **4%** interest rate instead of **6%** and **7%**. It is worthwhile to mention that out of the total farmers availing crop loan facility from short-term cooperative credit institutions, about **80%** belong to small and marginal farmers including scheduled caste and scheduled tribes category. Thus major beneficiary of the proposed scheme would be small and marginal farmers inclusive of SC/ST category farmers.

- Under the above proposed scheme “Interest Subsidy” of **Rs. 753.13 crore, (Bundelkhand Rs. 39.77 crore + Poorvanchal Rs. 91.28 crore + others Rs. 622.08 crore)** is estimated against the crop loan of **Rs. 15505 crore** to be disbursed through PACS during 11th Five Year Plan 2007-12. Yearwise break-up of crop loan distribution, number of beneficiaries and requirement of interest subsidy may be perused at annexure no. 1. Since the State Govt. of U.P. is not in a position to meet the above burden from their own resources. G.O.I. is requested to provide entire amount of “Interest Subsidy” from their sources.
- By providing crop loan at cheaper rate more and more farmers specially belonging to small and marginal as well as Schedule Caste/Tribe categories will be able to avail of the loan resulting in upliftment of their economic condition thereby boosting agriculture production.

