

DISTRICT PROFILE

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UTTAR PRADESH

Aligarh

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Farming system/enterprise
Agriculture+ Animal Husbandry
Agriculture+ Horticulture+ Animal Husbandry

2. Description of Agro-climatic Zone & major agro ecological situations

Agro-climatic Zone	Characteristics
South-Western Semi-Arid Plain Zone	The soils are alluvial in nature and affected by salts. Average annual rainfall is 662 mm and the temperature ranges from 4°C to 47°C. The average relative humidity ranges from 32 to 82%. Cropping intensity of the zone is 146 %. Pearl millet, maize, rice, wheat, rapeseed and mustard are the major field crops of the zone. Potato, vegetable pea, garlic, onion, and flowers are also cultivated.

Agro ecological situation	Characteristics
AES I	Salt affected soils, low soil fertility, tube-well and canal irrigation.
AES II	Sandy loam, poor in soil fertility, canal & tube-well are the major irrigation source.
AES III	Loam soils, low in fertility, poor drainage, tube well irrigation.
AES IV	Clay loam soils, brackish ground water and canal water.

3. Soil types

Soil type	Area in ha.	Area (%)
Sandy soil	Poor in soil fertility	12,581
Sandy loam	Low in fertility, well drained	73,141

4. Area, Production and Productivity of major crops cultivated in the district

Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
KHARIF			
Paddy	79,239	2108549.79	26.61
Pearl millet	83772	1438365.20	17.17
Maize	26381	419721.70	15.91
Pigeon pea	70930	641916.50	9.05
Urdbean	730	4095.30	5.61
Mungbean	593	3095.50	5.22
RABI			
Wheat	222714	6360711.80	28.56
Barley	14643	408246.80	27.88
Field pea	411	3974.40	9.67
Lentil	2191	19828.50	9.05
Mustard	24760	274340.80	11.08
Potato	5313	1266194.20	238.32
Sugar cane	12617	7531844.30	596.96

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
October, 08	00	14.92	33.39	15.08	71.86
November, 08	00	0.26	28.74	9.89	74.50
December, 08	0.3	0.62	23.11	4.67	75.03
Jan, 09	00	29.10	5.4	95	30
Feb, 09	1.1	29.2	9.0	96	32
March, 09	2.2	35.5	9.2	81	18
April, 09	5.7	45.9	16.8	80	10
May, 09	6.8	46.3	22.9	99	10
June, 09	4.7	47.5	23.7	99	10
July, 09	54.3	44.6	21.3	99	16
August, 09	147.0	41.7	25.1	99	43
Sept, 09	51.2	39.1	23.1	99	40

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	143750		
Buffalo	716174		
Sheep	9587	----	----
Goats	145471	----	----
Pigs	23527	----	----
Poultry	72326		

7. Details of Operational area / Villages

Sl. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1. 2.	Iglas Koil	Gonda, Iglas, Lodha, Jawan, Dhanipur	Pipali khurd, Simandhari, Bhankari, Amarpur, Kalupura, Bhojpur, Bhehrampur, Baroatha	Paddy, Pearl millet, Maize, Pigeon pea, Urdbean, Mungbean, Wheat, Barley, Field pea, Chickpea, Lentil, Mustard Potato, Sugar Cane	i) Unavailability of quality seeds. ii) Imbalance use of fertilizer in wheat crop. iii) Over dosing of fertilizer in potato and zinc & sulphure deficiency in mustard. iv) Infestation of weeds in pearl millet and wheat crops. v) No use of biofertilizer vi) No use of seed treatment vii) Insect and disease attack in pulses.	1. Quality seed production 2. Seed replacement 3. Resource conserving technology 4. Timely sowing 5. Integrated plant nutrient management 6. Introduction of vegetable & horticulture crops 7. Introduction of summer pearl millet 8. Integrated Weed management 9. Integrated Pest management 10. Inadequate & untimely support services. 11. Non-availability of potential short duration varieties.

8. Priority thrust areas

Crop/Enterprise	Thrust area
Sorghum/Bajra	Soil and Water Conservation
Rice/Wheat	Integrated Plant Nutrient Management
Rice/Vegetables/ Pulses	Integrated Pest Management
Rice/Vegetables/ Pulses	Integrated Disease Management
Wheat	Integrated Weed Management
Wheat	Quality seed production
All crops	Extension Strategies and Research for Agricultural Intensification and Diversification
Rice	Usar Reclamation
NA	Bee Keeping
Plantation Crops	Aonla Plantation
Animal husbandry	Colostrums feeding to newly born calves
Animal husbandry	Animal Nutrition
Animal husbandry	In case of Livestock sector, inadequate Health services, Epidemics of H.S. and F.M.D.
Animal husbandry	Poor existing Breeds.
	Non-availability of Fodder in wasteland/forest land, non-availability of Milk collection center.
Home Science	Women is also vital part of agriculture sector, which increase the vegetable and livestock production and management but their role in this area almost hidden.
Home Science	Value addition in Fruit & Vegetable crops
Home Science	Lack of food grain Storage facilities.
Home Science	Low market price of produce

Fatehpur

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	AES III is most crop intensive. Rice-wheat, paddy-potato/chillies; wheat-sugarcane; etc are grown in this AES. In AES I, the mixed cropping combinations of jowar + arhar + moong, / urd + til is practiced. Fallow-gram / lentil is also grown in AES I. In AES IV, (affected with sodicity) mostly Rice-wheat is grown.
2	Potato & chillies are important vegetable crops grown in AES III & H in the cropping systems of dhaincha – potato moong -fallow; paddy-potato-moong; chillies-gram / wheat; etc.
3	Aonla & banana are new introductions grown along the river Gangs, now expanding to other areas also. The market support is good where grown in pockets.
4	Muskmelon & watermelon are grown in riverbeds. Sugarcane grown for juice purpose, growing buffalo heifers for sale; and gur making in Dhata are special components of the existing farming systems.
5	District lacks the high value agro forestry plantations and the existing plantations like Mahua, do not have technical & developmental support.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1.	Central Plane Zone "V" of U.P.	District Fatehpur lies between the parallel of 35o 26' and 26o 16' north latitude & between 80o 14' and 81o 20' east longitude spreading about 104 km from west to east longitude ,and about 40 km from south to north. The district is characterized by semi-humid as per standard climatic classification. Average rainfall of the district is 904 mm(Normal)maximum temperature 42OC to 43OC & minimum temperature average goes up to 6Oc, relative humidity of the district is 66, longitude's factor 34.28 and Mayer's (NS) quotient 104. The climate of the district could be described as semi arid.

Topography

S. No	Agro ecological situation	Characteristics	%age Area Coverage
1	AES-1(Yamuna upland)	Developed from yamuna alluvium partially mature Loamy sands to gravelly reddish brown to brownish reddish low soluble salts, neutral to alkaline with excessive drainage.	10.14
2	AES-2(Ganga Upland)	Developed from Gange alluviam mature, sandy loan, yellowish brown to reddish brown, iron nodules, slightly acidic to neutral.	14.38
3	Ganga Yamuna Flats	Development from ganga alluvium, nature, loam to clay loam, light yellowish average to very high soluble salts, Alkaline with adequate drainage.	72.16
4	Usar	Usar soils spread over on 12,624 ha in the district soil with sodicity	3.29

3. Soil types

S. No	Soil type	Characteristics	Crop	Area in ha
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			Association	
1	Ganga Alluvium Recent Alluvium (Fatehpur Type-1)	Developed from Ganga alluvium, mature, loam, greyish brown to brow, Iron nodules and calcareous cherries, loose, moderate high soluble salts, moderately alkaline and fairly drained. Respond to fertilizer application	Jowar, bajra, Arhar, barley, Mustard.Gram	Occurs on the banks of Ganga covering an area of 41,508 ha.
	b) Ganga Flats (Fatehpur type 2A Fatehpur type 2B).	Developed from Ganga alluvium mature, loam to clay loam, light yellowish brown to grayish brown, brown ferruginous mottling, hard below, average very high soluble salts, alkaline with adequate drainage slightly responds to fertilizer application.	All Crops.	Constitute 191588 ha. Of the district area
	(c) Ganga uplands Fatehpur type-3)	Developed from Ganga alluvium, mature, sandy loam, yellowish brown to reddish brown, Iron nodules below, loose, low soluble salts, slightly acidic to neutral, having excessive drainage, soils responsive to fertilizer treatment	All important crops except Paddy.	Intensity of this type is limited to only 60420 ha.
	Ganga low lands Fatehpur Type-4)	Developed from Ganga alluvium, mature clay loam to clayey, grey brown, ferruginous mottling, hard and compact, low soluble salts slightly acidic to neutral imperfect drainage.	Rice, Wheat, Mustard, Gram and Sugarcane	Spread over Bindki and atehpur, Kora of Khajuha block Tehsil. Total area is 42964 ha. and Ghazipur of Fatehpur
2	Yamuna Alluvium Khadar Uplands Fatehpur type-5) (Rakar)	Developed from Yamuna alluvium, partially mature, loamy sand to gravelly, reddish brown to concretions, loose, low soluble salts, neutral to alkaline with excessive drainage.	Jowar, Gram, mustard and Castor.	occupy an area of about 42,652 ha.
3	Yamuna flats (Fatehpur type 6A) (Parwa)	Developed from Yamuna alluvium, mature sandy loam, dark grayish brown, ferruginous concretion, loose, low soluble salts, neutral to slightly alkaline with excessive drainage	Castor, wheat and gram	Occupy an area of about 40932 ha

	Yamuna low lands. Fatehpur type 6B) (kabar)	Developed from yamuna alluvium, partially mature clay loam, light brownish gray to black, few kanker nodules, average soluble salts, moderately alkaline with imperfect drainage.	Castor, gram, wheat, and rice.	
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4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Paddy	80582	38425	17.93
2	Jowar	11459	16139	14.08
3	Urd	10111	4813	4.76
4	Moong	1035	540	5.22
5	Arhar	23069	26489	11.48
6	Wheat	148080	2880156	19.45

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
Oct				
Nov				
Dec				
Jan				
Feb				
Mar				
Apr				
May				
Jun				
Jul				
Aug				
Sep				

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	6594	5-6 lt. / day	1500 - 1600 lt/lact.
<i>Indigenous</i>	325279	2-2.5 lt./day	450 – 500 lt/lact.
Buffalo	370961	4 – 4.5 lt./day	1300 – 1450 lt/lact.
Sheep			
<i>Crossbred</i>	081		
<i>Indigenous</i>	113493		
Goats	313087	0.5 – 1.0 lt/day	135 – 150 lt./lact
Pigs			
<i>Crossbred</i>	4381		
<i>Indigenous</i>	73808		
Rabbits	1222		
Poultry			
Hens			
<i>Desi</i>	53275	75 – 85 eggs	

<i>Improved</i>	12051	150 – 180 eggs	
Ducks	6390		
Turkey and others	016		
Category	Area	Production	Productivity
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

7. Details of Operational area / Villages

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Bindki	Devmai	Sadipur	Groundnut, Mustard, Gram, Chilli	Old varieties of seed low replacement of seed limited irrigation facilities	Varietals assessment of groundnut
2	Bindki	Malwan	Korsam	Paddy, Wheat & Arhar	Poor farms marginal farmer	IPNM & Varietals assesment
3	Sadar	Hanswa	Sarki	Seed production of Gram & Wheat	Promotion of seed production concept	Weed management seed production vallage
4	Khaga	Airayan	Katoghan	Garlic, Paddy & Wheat	Sodic land imbalance use of fertilizer	Sodic land reclamation varietals assessment
5	Bindki	Malwan	Kunwarpur	Paddy, Wheat, Bajra & Arhar	Rainfed and water logged area	Organic village
6	Bindki	Malwan	Allipur	Tinda, Wheat & Gram	Imbalance use of fertilizer	INM
7	Bindki	Amauli	Dapsaura	Linseed	Old varieties of Linseed	New varieties
8	Sadar	Hanswa	Satonjoga	Mustard , wheat, & gram	Unavailability of seed	Seed production of wheat

8. Priority thrust areas

S. No	Thrust area
1	Production & productivity enhancement of crops through Integrated nutrient, weed & pest management.
2	Introduction of production technologies of Oilseed and Pulses
3	Diversifiacton through introducing pulses, oilseeds, vegetable, mushroom, bee keeping, fruits, & medicinal plant, dairy & poultry etc.
4	Production enhancement conservation of green fodder for livestock feeding

5	Empowerment of rural women
6	Improvement in soil health through inclusion of green manure, legume crop, vermicompost, nadep & biofertilizers, Integrated crop management.
7	Seed replacement.
8	To overcome the low productivity problem in live stock and emphasize breed improvement in buffalo, cattle & goat
9	Promotion of income generating activities of self employment
10	Human capital development
11	Introduction of new cultivars/variatal replacement

Raebareli

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Farming system/enterprise

Major part of Raebareli soils is sodic and in these soils crop cultivation without any modification, becomes very difficult. Under these conditions rice-wheat cropping system emerged as predominant one. Rice is the most important crop of the district followed by moong and urd that are grown during *Kharif* season. Dhaincha is a major green manuring crop. During winter wheat with its salt tolerant varieties is the most important *Rabi* crop. Other important crops of *Rabi* season are bengal gram, pea, mustard etc. During *Zaid* fields usually remain vacant due to unavailability of irrigation water.

Geographical, climatic and edaphic characteristics of the district determine the type of the farming system to be followed. The district comprises a flat gently undulating tract and is characterised by six physiographic tracts namely Ganga khadars, Ganga Recent Alluviums, Ganga flats, Sai uplands Sai low lands and Sai flats. These physiographic divisions have contributed to the development of six specific soils association in the district. Climate is semi arid and is characterized by average rainfall of 923 mm with mean maximum and minimum temperature of 44.2 °C and 2.3 °C, respectively. Loamy sand, sandy loam, clay loam and silt loam soils are found in the district. Loamy sand and sandy loam soils are generally light shallow, low water retentive and deficient in nutrients whereas silt loam and clay loam soils are deep, highly water retentive and medium to highly productive. There are four major farming systems in the district based on nature of soil and degree of assured irrigation. (a) Pure cropping (b) Mixed farming (iii) Agri-horti and (iv) Agri-Silvi. The major crops of this district are paddy, wheat, sorghum, pigeon pea, gram, pea and mustard.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Agro-climatic Zone	Characteristics
AES-I Ganga Khadar region	Light brown sandy loam to sandy, generally structure less, poor in water holding capacity and organic matter, moderately alkaline, restricted drainage, surface soils poor in lime content but the middle layer is calcareous, medium in soluble salts. Carbonates & sulphates practically absent.
AES-II Ganga Recent Alluvium region	Light gray brown at surface to pale brown at lower depth, poor to average water holding capacity neutral in reaction and poor in organic matter. Generally non calcareous with fair drainage, medium in soluble salt contents with predominance of bicarbonates and chlorides.
AES-III Ganga Flat region	Light gray to light brownish gray, sandy loam, average water holding capacity, neutral in reaction, slightly calcareous, low in organic matter content, impeded drainage and prone to salinity in the water logged areas, average in soluble salts but injurious carbonates are absent.
AES-IV Sai Upland region	Brown at surface and lighter brown, sandy loam, average water holding capacity, neutral non-calcareous, fair drainage, low in soluble salts mainly comprising of bicarbonates and chlorides of sodium.
AES-V Sai Low Land region	The colour varies from gray to grayish brown at the surface to slightly light at lower depths. Light texture at surface but becoming heavier below, average water holding capacity, neutral in reaction but lower layers moderately calcareous. High soluble salts that increase with depth.
AES-VI Sai Flat region	Surface soil gray in colour which darkens below, becoming gray again in the third horizon. Texture is clay loam at surface and heavier below, average water holding capacity, neutral in reaction and medium water soluble salts comprising mainly bicarbonates and chlorides of sodium.

3. Soil types

Soil type	Characteristics	Area in ha
Ganga Khadar	1.Light brown sandy loam to sandy, generally structure less, poor in water holding capacity and organic matter, moderately alkaline, restricted drainage, surface soils poor in lime content but the middle layer is calcareous, medium in soluble salts. Carbonates & sulphates practically absent.	14836
Ganga Recent Alluvium	2.Light gray brown at surface to pale brown at lower depth , poor to average water holding capacity neutral in reaction and poor in organic matter. Generally non calcareous with fair drainage, medium in soluble salt contents with predominance of bicarbonates and chlorides.	14516
Ganga Flat	3.Light gray to light brownish gray, sandy loam, average water holding capacity, neutral in reaction, slightly calcareous, low in organic matter content , impeded drainage and prone to salinity in the water logged areas, average in soluble salts but injurious carbonates are absent.	108392
Sai Upland	4.Brown at surface and lighter brown, sandy loam, average water holding capacity, neutral non-calcareous, fair drainage, low in soluble salts mainly comprising of bicarbonates and chlorides of sodium.	5914
Sai Low Land	5.The colour varies from gray to grayish brown at the surface to slightly light at lower depths. Light texture at surface but becoming heavier below, average water holding capacity, neutral in reaction but lower layers moderately calcareous. High soluble salts that increase with depth.	126556
Sai Flat	6.Surface soil gray in colour which darkens below, becoming gray again in the third horizon . Texture is clay loam at surface and heavier below, average water holding capacity, neutral in reaction and medium water soluble salts comprising mainly bicarbonates and chlorides of sodium.	193116

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Wheat	183488	39447800	21.50
2	Rice	136369	27970900	20.51
3	Gram	6684	695900	10.41
4	Pea	4041	365700	9.05
5	Arhar	10330	1084800	10.50
6	Lentil	303	23100	7.62

7	Urd	19675	739100	4.81
8	Moong	1295	39000	4.61
9	Mustard	10147	928700	9.15
10	Til	1900	31200	1.64
11	Ground nut	2282	183000	8.02
12	Potato	5078	12264900	241.53

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
June 2008	68.72	35.00	26.50	70.00
July 2008	90.89	33.50	22.20	80.00
August 2008	140.78	36.50	21.50	81.00
September 2008	80.42	34.00	19.40	72.00

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population
Cattle	532825
<i>Crossbred</i>	23593
<i>Indigenous</i>	504432
Buffalo	322157
Sheep	39804
<i>Crossbred</i>	598
<i>Indigenous</i>	38206
Goats	288458
Pigs	137495
<i>Crossbred</i>	11612
<i>Indigenous</i>	125883
Poultry	152921
Ducks	4412
Turkey and others	5200

Category	Area (ha)	Production(qt.)	Productivity (Q/ha)
Fish	254.00	5707.00	23.65

7. Details of Operational area / Villages (2008-09)

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Sadar RBL	Sataon	Dedaur	Pea, gram, Toria, Mustard, Rice, fruits, animal husbandry. Wheat.	Imbalance use of nutrient without bio-fertilizer. Lack of vaccination against HS disease.	Popularization of Vermicompost, Nadep to nurish the soil and as a part of IPNM. Popularization of hybrid rice, Scented rice, line sowing, introduction of cross breed cattle.
2	Sadar RBL	Rahi	Uttarpara	Rice, Wheat, Vegetables	No proper control of pest and diseases and imbalance use of nutrient without bio-fertilizer.	Popularization of Vermicompost, Nadep to nurish the soil and as a part of IPNM. Popularization of hybrid rice, Scented rice, line sowing.
3	Sadar RBL	Amawa	Naikani Ka Purva	Pea, gram, Toria, Mustard, Rice, fruits, animal husbandry. Wheat	No proper control of pest and diseases and imbalance use of nutrient without bio-fertilizer.	Popularization of Vermicompost, Nadep to nurish the soil and as a part of IPNM. Popularization of hybrid rice, Scented rice, line sowing, introduction of cross breed cattle.
4	Sadar RBL	Jagatpur	Hewtaha Newadia	Sugarcane, Gra, Pea, Rice, Wheat, Goat	No proper control of pest and diseases and imbalance use of nutrient without bio-fertilizer and no use of deworming medicines.	Popularization of Vermicompost, Nadep to nurish the soil and as a part of IPNM. Popularization of hybrid rice, Scented rice, line sowing.
5	Sadar RBL	Sataon	Pure Ummed	Fruits G.Nut, Animal husbandry	No proper control of pest and diseases and imbalance use of nutrient without bio-fertilizer and lack of proper nutrition to the cow and buffalo.	Popularization of Vermicompost, Nadep to nurish the soil and as a part of IPNM. Popularization of hybrid rice, Scented rice, line sowing, introduction of cross breed cattle.

6	Maharaj Ganj RBL	Bachharawon	Kasrawon	Arhar, Vegetables, Wheat, Rice, Green fodder, animal husbandry	No proper control of pest and diseases and imbalance use of nutrient without bio-fertilizer and lack of proper nutrition to the cow and buffalo.	Popularization of Vermicompost, Nadep to nourish the soil and as a part of IPNM. Popularization of hybrid rice, Scented rice, line sowing, introduction of cross breed cattle and poor feeding of animals.
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8. Priority thrust areas

S. N.	Thrust area
(a)	<p>Following thrust areas were emerged through PRA.</p> <p>Crop production:</p> <p>(1).Popularization of hybrid rice cultivation and scented rice including local scented varieties line sowing/transplanting of rice and other crops needs emphasis .</p> <p>(2).Popularization of Vermicompost, Nadep compost to nourish the soil and as part of Integrated plant nutrient management.</p> <p>(3).Seed production of wheat, rice, ground nut, pigeon pea, sesamum etc.</p> <p>(4).Popularization of wheat sowing with Zeor-till seed cum ferti drill.</p> <p>Horticulture Crops:</p> <p>(1).Hybrid vegetable and spices (chilli) cultivation.</p> <p>(2).Establishment of Aonla and Ber orchards in sodic lands, inter-cropping of turmeric as well as ginger in established mango or other orchards.</p> <p>(3).Popularization of commercial cultivation of flowers viz rose, gladiolus, marigold etc.</p> <p>(4).Medicinal and aeromatic plants cultivation.</p> <p>(5).Popularization of bio-diesel plant (Jatropha) cultivation.</p> <p>(6).Protected nursery raising technique through low-tunnel poly house.</p> <p>Livestock Production:</p> <p>(1).Introduction of cross breed cattle.</p> <p>(2).Popularization of Barbari breed of goat for resource poor families.</p> <p>(3).Knowledge of diseases of animals is essential to the farmers.</p> <p>Home Science:</p> <p>(1) Knowledge of safe grain storage to be imparted to the rural women.</p> <p>(2) Child care and nutrition need emphasis .</p> <p>(4) Kitchen gardening knowledge to be imparted to women.</p> <p>(5) Vegetable and fruits preservation techniques need to be taught.</p> <p>(6) Cutting and tailoring are having vast potentialities for rural women .</p> <p>Plant Protection:</p> <p>(1) IPM in rice and wheat utilizing bio-agents like Trichoderma, B.T., NPV, Trichocard etc.</p> <p>(2) IPM of <i>Heliothis</i> in gram, arhar and tomato.</p> <p>(3) Yellow vein mosaic management is most important in Urd and Moong.</p> <p>(4) Biopesticidal management of plant pests in vegetables and fruits.</p> <p>Agriculture Extension:</p> <p>(1) Formation of self-help groups (SHGs) of farmers and farm women.</p> <p>Motivation to the farmers for participation in farm science club.</p> <p>Soil Science:</p> <p>(1).Imblance use of fertilizers and its placement.</p> <p>(2).No use of optimum dose of phosphorus and potash fertilizer.</p> <p>(3).Soils are deficient in organic matter, nitrogen, zinc and sulpher.</p> <p>(4).No use of micro-nutrient.</p> <p>(5).No use of supher in oilseed crop and pulses.</p> <p>(6).Soil reclamation.</p>

	(7).Increases usar productivity. (8). No uses of Bio-fertilizer
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Jhansi

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	AES – 1 (Rakar irrigated/ rainfed) important farming systems are: Groundnut - Wheat + few plants of local guava + cow / buffalo (3 - 4) is the farming system popular with resource rich farmers and groundnut - wheat/gram/linseed + cow (local 6 - 8 animals) is the farming system popular with resource poor farmers.
2.	AES - 2 (Parwa irrigated / rainfed) the farming systems are: groundnut - wheat / brinjal + goat / buffalo (3 - 4) animals with resource rich farmers and groundnut - wheat + cow / goat (6 - 8) animals with resource poor farmers.
3.	AES - 3 (Kabar irrigated / rainfed) Resource rich farmers follow soybean / paddy - wheat / pea + cow / graded buffalo (3 - 4) and resource poor farmers follow paddy - wheat / gram + cow (6 - 8) farming system.
4.	AES - 4 (Mar irrigated / rainfed) Resource rich farmers follow - soybean / urd - mustard / gram + cow / graded buffalo and resource poor farmers follow paddy-mustard + gram + cow / graded buffalo / goat (6 - 8) animals farming system.
5.	AES - 5 (Totally rainfed) The farmers with or without resources keep their land fallow in kharif and cultivate wheat / gram / linseed / lentil in rabi. They mostly rear goat and sheep but do not have options for horticulture. Most of them earn from wages.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Agro-climatic Zone (Bundelkhand-IV)

S. No	Agro ecological situation	Characteristics
1.	AES – 1	Rakar irrigated/ Rainfed
2.	AES - 2	Parwa irrigated / rainfed
3.	AES – 3	Kabar irrigated / rainfed
4.	AES – 4	Mar irrigated / rainfed
5.	AES – 5	Totally rainfed

3. Soil types

S. No	Soil type	Characteristics	Area in ha (000)
1	Rakar	Coarse & gravelly texture, reddish to brownish in colour. Depth varies from few inches to about two feet with parent rock. The productivity of soil is poor.	45.58 (13.68)*
2	Parwa	Loam to sandy in texture. Colour varies gray to brownish and deep red to reddish gray. Medium depth (40-75cm).	181.21 (53.35)

		These soils are although poor in organic matter but quite productive.	
3	Kabar	Coarse grained in texture. & black in colour. These soils are deep & parent rock lies at greater depth. These soil retain sufficient moisture, which on drying cracks & small fissure develop.	45.58 (13.68)
4	Mar	Soils are black in colour, fine texture & considerable deep. These soils are prone to great extent of swelling and contracting during wet & period. Poor physical conditions due to their peculiar characteristics & behavior towards moisture.	60.77 (18.24)

- Figure. In parenthesis denotes the percentage of total area.

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (q)	Productivity (q /ha)
1.	Wheat	100713	2088788.00	20.74
2.	Gram	62562	477973.70	7.64
3.	Pea	71987	734987.30	10.21
4.	Lentil	25996	134139.40	5.16
5.	Maize	1282	16460.88	12.84
6.	Jowar	5519	25552.97	4.63
7.	Moong & Urd	94762	380943.20	4.02
8.	Til	39679	301957.20	7.61
9.	Groundnut	61400	596194.00	9.71

5. Weather data

Month	Rainfall (mm)	Temperature (^o C)		Relative Humidity (%)
		Maximum	Minimum	
Oct., 2008	0.0	33.2	18.1	68.0
Nov., 2008	28.0	28.0	12.1	75.0
Dec., 2008	0.0	24.2	12.8	88.0
Jan., 2009	6.0	20.2	8.8	92.0
Feb., 2009	0.0	25.2	8.7	94.0
March 2009	0.0	32.6	14.3	56.0
April 2009	0.6	18.9	38.9	51.0
May, 2009	10.0	24.1	43.4	46.0
June, 2009	14.6	26.6	42.1	40.0
July, 2009	217.6	26.0	35.2	72.0
Aug. , 2009	142.0	25.2	34.4	76.0
September	95.8	23.8	34.2	72.0

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	3,11,801	56,944 mt.	1.99 kg
Buffalo	1,87,387	70,547 mt.	3.23 kg

Sheep	0,54,116	55,974 mt wool	0.96 kg
Goats	2,18,818	18,182 mt	0.66 kg
Pigs	0,14,004	---	---
Poultry	1,87,146	65,051 Lacs eggs	149.4 eggs/ bird/yr
Inland Fisheries	13000 (ha)	672q/ month	16.66 q/ ha.

7. Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Jhansi	Babina	Kilchwar a	Wheat, Gram G.nut , Urd & Vermi culture, Cattle & Goat	Low productivity	Dry farming an integrated approach Use of Bio-agents & Organic farming, Animal health & care, Value Addition, Post Harvest Mngement
2.	Jhansi	Babina	Kilchwar a	Wheat, Gram G.nut , Urd & Vermi culture, Cattle & Goat	Low productivity	Dry farming an integrated approach, Soil fertility improvement, IPM Use of Bio-agents & Organic farming .
3.	Jhansi	Baragon	Keshavpur	Vegetables & Cattle	Low productivity	Use of Bio-agents & Organic farming Watershed management Vegetable production, Orchard & Agro-forestry Animal health & care
4.	Jhansi	Baragon	Parsar	Vegetables, Spices, Floriculture & Cattle, Fish	Low productivity	Vegetable production Use of Bio-agents & Organic farming Watershed management Composite fish culture, Value addition and Post harvest, Papaya cultivation, Floriculture
5.	Jhansi	Baragon	Ishagarh Bhojla Mathanpura Keshavpur Mawai Parsar	Maize/Urd Til/Urd Moong Jawar Sorghum Vegetables Toria	Low productivity	Improved varieties Integrated Crop Production, INM, IPM, Vegetable production
6.	Jhansi	Babina	Sijwaha Rajapur Raksha	Wheat, Gram, Pea Moong Urd Jawar Til Groundnut Papaya	Low productivity	Improved Vareities Integrated Crop Production, INM, IPM
7.	Mauranipur	Mauranipur	Baragao n	Durum Wheat, Gram, Linseed Saurgum, Cattle & Goat	Low productivity	Dry farming an integrated approach Value addition Goat farming, Animal health & care

8. Priority thrust areas

S. No	Thrust area
1.	Improved varieties, integrated nutrient management and weed management, integrated crop management, soil fertility improvement and cropping system.
2.	Vegetable production, orchard and agro-forestry
3.	Soil and water conservation, watershed management
4.	Goat farming
5.	Use of bio-agents, integrated pest management & organic farming
6.	Value addition, rural craft and post harvesting technology
7.	Animal health and care (vaccination, de-worming and feeding)
8.	Dry farming an integrated approach
9.	Improvement of existing breed of animals
10.	Entrepreneur development

Kanpur Dehat

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Rice - Wheat, Rice - Mustard
2.	Jowar - Wheat, Bajra - Wheat
3.	Maize - Potato - wheat, Rice - Gram
4.	Jowar + Pigeon pea. Rice – Pea.
5.	Maize – Mustard. Rice - Toria - Wheat
6.	Toria – Wheat, Moong

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	Central Plane Zone V	Semi-arid, Max. Temp 45.6 ⁰ C Min. Temp. 6 ⁰ C, Rainfall 780-825 mm. Alluvial soil, originated from the Ganges and its territories, loamy sand to loam, well drained
S. No	Agro ecological situation	Characteristics
1.	AES-I	Sandy loam texture, light gray to light brown or light yellowish colour, normal to light sodic nature, medium to high sodic nature, medium to high sodic nature, sodic land poorly drained, normal soil well drained, poor fertility status, deficit in nitrogen and organic matter, slope ranges between 1-3% slight to moderate soil erosion.
2.	AES-II	Light loam to silty loam texture, light brown to almost brown colour, light to high sodic nature of soil & and are available in lower parts and depressions, high water soluble salt in sodic soils, sodic soils poor drained, normal soil well drained, good water holding capacity, slope ranges between 1-3%, slight to moderate soil erosion.
3.	AES-III	Silty to silty loam, clay loam texture, grey to dark grey colour, low water soluble salts and less in sodic nature, kankers layer appear after few depth, moderately well drained to well drained, deficient in nitrogen and organic matter, good water holding capacity, medium responsive to fertilizer application, slope ranges between 1-3% slight to moderate soil erosion.
4.	AES-IV	Sandy loam to loam texture (like to parwa), brown to yellowish brown colour, normal to less alkaline, medium water soluble salts, well drained, poor to moderate organic matter, low matter stable, responsive to fertilizer application, slope ranges between 3-1% moderate to severe soil erosion.

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1.	Ganga recent alluvial soil	Sandy loam – loam, grey to brown colour, Normal to light soil nature, poorly drained, poor fertility, soil-slop-1-3%	2.20 lakh ha

2.	Ganga flate soil	Loam to silty loam texture, brown to almond brown colour light to high sodic nature, well drained, good water holding capacity, slope ranges between 1-3%	
3.	Ganga up land	Loamy sand to sandy loam, brown colour, medium to good water holding capacity, well drained, slope ranges between 1-5%	
4.	Ganga low land	Silty to silty loam, grey to dark grey colour, kanker layer appear after few depth, moderately well drained to well drained, good water holding capacity, slope range 1-3%	0.32 lakh ha
5.	Yamuna flate soil	Sandy loam to loam soil, medium alkaline, water soluble salt, calcarius up to few depth, moderately well drained moderate water holding capacity slope range – 3 – 10%	0.63 lakh ha
6.	Yamuna recent alluvial soil	Sandy loam to loamy texture, brown to yellowish brown colour, medium water soluble salt, well drained, low water table, slope ranges between 3-10% moderate to severe soil erosion.	

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qt)	Productivity (Qtl /ha)
1.	Wheat	102255	36336.3	33.53
2.	Rice	23585	49882	21.15
3.	Maize	14787	2276.0	15.39
4.	Bajra	9460	1421.3	15.02
5.	Jowar	14979	2497.0	16.67
6.	Moong	84	24.0	2.86
7.	Gram	23538	3063.1	13.01
8.	Pea	8299	1642.3	19.79
9.	Arhar	10465	2382.1	22.76
10.	Rape seed/ Mustard	29973	4242.2	14.15
11.	Potato	1801	5646.1	313.50

5. Weather data

Month	Rainfall (mm)	Temperature (^o C)		Relative Humidity (%)
		Maximum	Minimum	
July to September	825	45.6 ^o C	6 ^o C	76%

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	137950		
<i>Crossbreed</i>			
<i>Indigenous</i>			
Buffalo	185952		
Sheep	32421		
<i>Crossbreed</i>			
<i>Indigenous</i>			
Goats	391748		
Rabbits			
Poultry	81897		

7. Details of Operational area / Villages

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Akbarpur	Maitha	Pratappur, Devipur, Kadari, Salempur, Rudapur, Bagulahi, Nursujha, Jugrajpur Bithoor	Wheat, Paddy, Rai, Gram, Maize, Moong, Jowar	Use of old variety, No use of gypsum, No use of plant protection measures	Availability, distribution and production of quality seed
2.	Rasoolabad	Rasoolabad	Gahadeva, Sahtavanpurva, Hanspur, Makarandpur, Aurangabad, Chatur Niwada, Kasturi Niwada, Jyoti.	Wheat, Paddy, Rai, Til, Gram, Arhar, Moong, Maize, Jowar, Bajra	Use of local varieties, No use of Rhizobium Culture, No Seed treatment	Availability, distribution and production of quality seed
3.	Akbarpur	Akbarpur	Bhoganiyapur, Kripalpur, Puttipurwa, Kurian purwa, Manjumau, Shyampur, Andaya	Wheat, Paddy, Gram, Moong, Til, Maize, Jowar, Bajra, Field pea	Imbalance use of fertilizer, Late sowing, No use of weedicides	Introduction of bio-fertilize & fertilizer scheduling for oilseeds, pulses and other crops

8. Priority thrust areas

Crop Production	
S. No	Thrust area
1.	Integrated Weed management in different crops.
2.	Availability, distribution and production of quality seeds.
3.	Irrigation scheduling for oil seeds, pulses, cereals and cash crops.
4.	Use of bio-fertilizers and fertilizers scheduling for oil seeds, pulses and other crops.
Plant Protection	
1.	Integrated Pest Management in different crops.
2.	Rat control measure
3.	Seed treatment
Soil Science	
1.	Reclamation of salt affected soils
2.	Improve Productivity of partially reclaimed soil
3.	Use of Bio-fertilizers in different crops grown in different areas of Kanpur district.
4.	Innovation of agro forestry system on normal and degraded soils.
5.	Integrated Plant Nutrient Management.
Animal Science	
1.	Problems of infertility and balanced nutrition in dairy cattle and buffaloes.
2.	Promoting dairy and poultry as main enterprise for the resource rich farmers
3.	Lack of improved breed in animals.
4.	To reduce repeat breeding in milched animals.
Home Science	
1.	Awareness & introduction of drudgery reducing equipments
2.	Awareness regarding drudgery prone activities their remedial measures.

3.	Formation and conduction of self help groups for socio-economic up-liftment.
4.	Need of awareness regarding space management and introduction of good space organization.
5.	Awareness of nutrient safety introduction of nutritional kitchen garden.
6.	Conservation of Household resources and income generating activities.
Horticulture	
1.	Introduction of nursery management and orchard management
2.	Promoting farmers to grow medicinal plants.
3.	Low productivity of Guava fruits
4.	Lack of quality seeds in vegetable crops
5.	Infestation of insect-pest in kharif vegetable
Agriculture Extension	
1.	Need of conducting employment-generating trainings
2.	Need of creating awareness regarding excessive chemical use in agriculture.
3.	Need of conducting trainings of scientific agricultural activities for practicing farmers/farmwomen.
4.	Need of formation of farmers clubs.

Mainpuri

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S.No.	Farming system/enterprise
AES-I	Agriculture + Animal Husbandry (100%)
AES-II	Agriculture + Animal Husbandry (90%), Agriculture + Animal Husbandry + Horticulture (10%)
AES-III	Agriculture + Animal Husbandry (75%), Agriculture + Animal Husbandry + Horticulture (25%)

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S.No.	Agro-climatic Zone	Characteristics
1	South-West Semiarid Zone IV	Semi Arid, with maximum temperature 45.6°C and minimum 7.4°C, Rainfall 620-750 mm, Alluvial soil originated from Ganges and its tributaries. Textural classes varies from Sandy-loam to Silty –clay-loam

S.No.	Agro-climatic situation	Characteristics
1	AES-I	Loam and Sandy loam Soil with ph less than 8.0
2	AES-II	Sandy Loam and Saline Soil with pH more than 8.5, Irrigated through Borewells
3	AES-III	Sandy-loam soil with pH 8-9, with very low water table

3. Soil types

S.No.	Soil types	Characteristics	Area in ha
1.	Sandy	-	85341.00 (31%)
2.	Sandy loam	-	156083.00 (57%)
3.	Others	-	31659.00 (12%)

4. Area, Production and Productivity of major crops cultivated in the district

S.No.	Crop	Area (ha)	Production (Qtl)	Productivity(q/ha)
Kharif	1. Paddy	52337	1154030	22.05
	2. Bajra	12338	234520	18.86
	3. Maize	33959	710420	20.92
	4. G.Nut	18500	1510	8.16
Rabi	1. Wheat	102252	2744990	26.85
	2. Barley	2843	79090	27.82
	3. Gram	1109	12470	11.25
	4. Pea	2408	38620	16.04
	5. Mustard/Toria	8937	107240	12.00

* Datas are on the basis of Agriculture department, Manipuri and SREP-Mainpuri 2006-07

5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Max.	Min.	
April 2008	4.60			
May 2008	92.40			

June 2008	333.90			
July 2008	553.50			
August 2008	396.80			
September 2008	92.40			
October 2008	0.00			
November 2008	0.00			
December 2008	0.00			
January 2009	0.00			
February 2009	0.00			
March 2009	0.00			

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Cross breed	5117	24144 ltr.	5.5 ltr.
Indigenous	76412	133721 ltr.	1.75 ltr.
Buffalo	283528	751350 ltr.	2.65 ltr.
Cross breed	-	-	-
Indigenous	4927	4434 ltr.	0.9 ltr.
Goats	195963	215560 ltr.	1.1 ltr.
Pigs			
Cross breed	2801	-	-
Indigenous	18805	-	-

* Data are as per department of Animal Husbandry, Mainpuri

7. Details of Operational area / Villages

S N	Taluk	Name block	Name of the Village	Major crops & enterprises	Major problem identified	Identifie	Thrust area
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1	Bhogaon	Jagir Sultanganj	Kchhpura , Nagla hariram, Nagla gahiyar, Sahara, Pal	Paddy, Bajara, Pulses Wheat, Mustard, Summer G. Nut, Garlic, vegetables, Potato Keeping of Buffaloes and Goats,	§ Use of local varieties and impure seed materials § No seed treatments § Broadcast sowing § Imbalance fertilizer use § No use of biofertilizer and biopesticides § Local and indigenous breeds. § No use of balance diet	Use of high yielding variety seeds Proper seed treatment Line sowing Judicious and balanced fertilizer application Raising of high yielding cross breed animals Promoting awareness for use of bio fertilizer and bio pesticides. IPM, IDM for pest & diseases management Awareness about health to women
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8. Priority thrust areas

S. No.	Thrust area
1.	Use of high yielding variety seeds
2.	Fertilizer application as per soil analysis report
3.	Use of organic/green manuring
4.	Growing of crops on the basis of crop rotation
5.	Proper seed treatment
6.	Line sowing & weed management
7.	Popularizing use of sulphur in Garlic / oilseed/ Pulses crop
8.	Motivation of farmers to Diversified farming
9.	Promoting IPM, IDM and IPNM in crop production
10.	Breed improvement through AI.
11.	Awareness about animal vaccination, Mineral mixture and green fodder.
12.	Awareness about health and value addition of fruits and vegetables.

Mahoba

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Fallow – Gram + Mustard, Urd – Wheat + Mustard, Sesamum – Pea, Fallow – Pea, Groundnut – Wheat, Pigeonpea – Sorghum, Groundnut – Gram, Pea/Gram – Sugarcane and some vegetable are cropping sequence.
2	People keep poor buffaloes and desi cow with 5-6 goats
3	Poor fruit and agro forestry based farming systems are adopted by farmers.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	Zone VI	<ol style="list-style-type: none"> 1. The most covered area with Vindhyan hills and is also a part of Central India. 2. Net Cultivated land 236000 ha 3. Cropping intensity 111.8 per cent 4. Forest 15.4 per cent.

S. No	Agro ecological situation	Characteristics
1	Bundelkhand, Mahoba having three Tehseels namely Mahoba, Charkhari and Kulpahar is covered in most of the areas with Vindhyans Hills.	Farming system of the district is mostly influenced by the soil types, rainfall and irrigation facilities. These are mono-cropping system and about 75% area is being left fallow during Kharif season. During winter season, about 58% area is sown as rainfed. Important vegetables like tomato, brinjal are grown as cash crops near pump sets of wells and periphery of ponds. Livestock is the backbone of farming systems hence unimproved breeds and poor nutritional management causes low productivity.

3. Soil types

S. No	Soil type	Characteristics	Area in ha (%)
1	Parwa	These soil are deep to very deep textured rich in nutrient and poor in bases with a prepordrem of calcium in the surface.	43%
2	Rakar	Skeletalithic ustorthents and skedetal lithic soils and coarse to medium in texture with more than 35% gravels. Coarse to medium in texture poor inorganic matters, nutrients status and bases they supports rainfed crops are moderately eroded.	7%
3	Kabar	In local parlance these soil called Kabar at present they supporting various Rabi and Kharif crops. Mostly wheat, barley, Jowar, Arhar etc. These soil are very deep light blackish brown to yellowish brown and raddish brown to medium black in colour.	44%
4	Mar	These soil are very deep dark black (the colour chroma less than one) having lower chroma they slightly eroded at places support very good kharif and Rabi crops, mostly Jower and Wheat locally called Mar. Soil having very good water holding capacity.	6%

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Wheat	67182	1007730	14.75
2	Barley	6854	82240	11.67
3	Gram	66850	552181	8.26
4	Pea	39454	362976	9.20
5	Lentil	25340	172565	6.81
6	Mustared /Rai	2977	11163	3.75
7	Rice	940	9841	10.47
8	Pigeonpea	2655	29364	11.06
9	Groundnut	10425	52125	5.00

10	Sunflower	10	83	8.32
11	Potato	87	21750	250

Note : Year 2007-08 data is not available

5. Weather data

Month	Rainfall (mm)	Temperature ° C	
		Minimum	Maximum
Oct. 08	-	24	40
Nov.	-	26	38
Dec.	-	29	36
Jan. 09	-	29	32
Feb	20	29	34
March	-	25	42
April	-	30	42
May	15.2	30	43
June	29	32	43.5
July	87.4	33	44
August	163	29	42.2
September		28	40

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	418748	-	-

7. Details of Operational area / Villages (2008-09)

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
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1	Kulpahar	Jaitpur	Ajanar	Urd, Moong, Arhar, Til, Gram, Pea, Wheat, Mustard, Brinjal and Animal Husbandry	Rainfed farming, in Kharif crops – Broad casting, No use of fertilizer or any organic manure, no seed treatment & no control of pest /weeds. In Rabi crops imbalance use of fertilizer, old/ poor quality seeds, No crop protection.	Line sowing, Use of organic manure with balance fertilizer, Seed treatments with fungicide, Use Improved seeds for Bundelkhand reason Control of disease, insect and weeds, Proper crop protection
2	Kulpahar	Jaitpur	Ladpur	Groundnut, Urd, Moong, Arhar, Til, Gram, Pea, Wheat, Mustard, Brinjal and Animal Husbandry	Rainfed farming, in Kharif crops – Broad casting, No use of fertilizer or any organic manure, no seed treatment & no control of pest /weeds. In Rabi crops imbalance use of fertilizer, old/ poor quality seeds, No crop protection.	Line sowing, Use of organic manure with balance fertilizer, Seed treatments with fungicide, Use Improved seeds for Bundelkhand reason Control of disease, insect and weeds, Proper crop protection

3	Kulpahar	Jaitpur	Atarpatha	Groundnut, Urd, Moong, Arhar, Til, Gram, Pea, Wheat, Mustard, Brinjal and Animal Husbandry	Rainfed farming, in Kharif crops – Broad casting, No use of fertilizer or any organic manure, no seed treatment & no control of pest /weeds. In Rabi crops imbalance use of fertilizer, old/ poor quality seeds, No crop protection.	Line sowing, Use of organic manure with balance fertilizer, Seed treatments with fungicide, Use Improved seeds for Bundelkhand reason Control of disease, insect and weeds, Proper crop protection
4	Kulpahar	Jaitpur	Mangrol Kala	Urd, Moong, Arhar, Til, Gram, Pea, Wheat, Mustard, Brinjal and Animal Husbandry	Rainfed farming, in Kharif crops – Broad casting, No use of fertilizer or any organic manure, no seed treatment & no control of pest /weeds. In Rabi crops, imbalance use of fertilizer, old/ poor quality seeds, No crop protection.	Line sowing, Use of organic manure with balance fertilizer, Seed treatments with fungicide, Use Improved seeds for Bundelkhand reason Control of disease, insect and weeds, Proper crop protection

5	Kulpahar	Jaitpur	Mangrol Khurd	Groundnut, Urd, Moong, Arhar, Til, Gram, Pea, Wheat, Mustard, Brinjal and Animal Husbandry	Rainfed farming, in Kharif crops – Broad casting, No use of fertilizer or any organic manure, no seed treatment & no control of pest /weeds. In Rabi crops, imbalance use of fertilizer, old/ poor quality seeds, No crop protection.	Line sowing, Use of organic manure with balance fertilizer, Seed treatments with fungicide, Use Improved seeds for Bundelkhand reason Control of disease, insect and weeds, Proper crop protection
6	Kulpahar	Jaitpur	Budhaura	Groundnut, Urd, Moong, Arhar, Til, Gram, Pea, Wheat, Mustard, Brinjal and Animal Husbandry	Rainfed farming, in Kharif crops – Broad casting, No use of fertilizer or any organic manure, no seed treatment & no control of pest /weeds. In Rabi crops imbalance use of fertilizer, old/ poor quality seeds, No crop protection.	Line sowing, Use of organic manure with balance fertilizer, Seed treatments with fungicide, Use Improved seeds for Bundelkhand reason Control of disease, insect and weeds, Proper crop protection

8. Priority thrust areas

S. No	Thrust area
1	Unavailability of irrigation facilities during Zaid & Kharif season.
2	Practice of mono cropping system.
3	Imbalance use of fertilizer & its placement.
4	Unawareness of newly recommended varieties of crops for Bundelkhand region
5	Poor water management & poor plant protection measures.
6	High yielding varieties shifted to land condition are not available.
7	No knowledge of parasites & predator insects of plant.
8	No use of bio-pesticides

9	Use of unbalance ration in livestock
10	Unavailability of green fodder
11	Low potentiality of breed in livestock.
12	Educating farmers about ill effects of "Anna Pratha"
13	Low literacy rate in female

Etawah

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Agriculture and Animal Husbandry
2.	Agriculture, Horticulture and Animal Husbandry

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

District Etawah is a part of alluvial tract but its physical features vary considerably determined by the rivers across it. On the basis of natural characteristics, district Etawah is divided in three natural group's viz. Pachar, Ghar and Par.

S. No	Agro-climatic Zone	Characteristics	Agro ecological situation	Characteristics
1.	South-Western Plain	1. Soil types-Alluvial, calcareous clay, saline, alkaline 2. Rainfall 712 mm 3. Thrust areas-salt tolerant varieties required, wilt and pod borer control, Introduction of HYV and use of Bio-fertilizers. 4. Intensive irrigated farming. 5. Intensive use of cultivable land, multiple cropping 6. Reclamation and management of saline, alkaline land and animal husbandry.	Pachar Region (Bharthana & Takha)	Northern portion of district Etawah is separated by river Senger, called pachar. It presents a level expansion of upland surface broken by sandy ridges of three rivers, Pandu, Arind and Rind and its tributaries i.e. Ahneya and Puraha. Soil is fertile and loam, clay or loamy clay in nature with ussar patches. Jhils are also present in this part.
			Ghar region (Jaswant Nagar, Safai, Maheva and Basrehar)	Ghar is situated Between river Senger and Yamuna. Soils of this area is light red, fertile and sandy. Clays loam soils are also visible with ussar patches. In this part ground rises into hillocks of sand and bhur. Most of the cultivable area is irrigated with lower Ganga canal and its branches. Area is less density populated and village sites are smaller than Pachar. Riverbeds formed due to flood of Yamuna called Diarah which is most fertile land of this area.
			Parpatti Region	This area is situated between

			(Chakarnagar and Barhpura)	Yamuna and Chambal is called par. Soils of this area are sandy, loam, loamy sand, clay and loam clay. Clay is full of holes and fissures like black soil of Bundelkhand. White sandy Kachhar soils are also visible on the bank of Yamuna. Jamunapari goat and Bhadawari buffaloes are prime genetic natural resource of this area
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3. Soil types

S. No	Soil type	Characteristics	Area in ha
1.	Loam, Clay and Loamy clay (Pachar)	<p>Yamuna mixed allurivm (Type 5) These are dark grey loam to clay loam soils forming small to medium fissures on drying resembling black soils of Bundelkhand. They are mildly alkaline and impregnated with ferromanganese concretions up to 2 mm. diameter. The basaltic alluvium of Yamuna is often overlain on Gangetic alluvium or vice-versa, constituting double-story profiles with marked lithological discontinuity. Taxonomically, they key out as vertic ustrochrepts. These soils are located in south of river Yamuna as small patches in Etawah.</p> <p>Sengar flats (type 2B) These are grey to ashgrey soils having loam to silt loam surface and underlain by clay loam and silty clay loam subsoils. The illuviation of clay is marked by the presence of agrillans on horizontal as well as vertical ped faced. They are mildly to moderately alkaline and Calcerous specially at low depths. These are quite productive and cover major part of the District in the tract lying north east of river Sengar.</p> <p>Sengar flats Holomorphic (Type 2A) They are grey to dark grey, silty loam to loam soil underlain by compact, sticky and plastic subsoils and calcic or occasionally petrocalcic horizons from 120 to 180 cm soils depth. They are moderately to strongly and very strongly alkaline soils having moderately high amounts of water soluble salts comprising mainly of CO_3^-, and HCO_3^- of Na^+ with small amounts of Cl^-, SO_4^-, CA^{++}, Mg^{++} and K^+. The surface horizon has fine to medium, moderate, platy structure with common, medium vesicular pores. The sub soils have moderate to strong, medium prismatic structure breaking into subangular blocks. The hydraulic conductivity is very poor. Taxonomically, these soils keyout as typic natrustalfs, Aquic Natrustalfs, Typic natraqualfs and petrocalcic natrustalfs. The soils are studded as small to large user patches with in Sengar flats mostly in Etawah.</p>	56158.00
2.	Light Red, Sandy, Ussar and Clay Loam (Ghar)	<p>Yamuna uplands sandy (Type 3A) These are pale brown to light yellowish brown sandy loam soils with brownish yellow to yellowish brown sandy loam sub soils with little or no evidence of illuviation. They are mildly to moderately calcerous at lower depths. They are mildly to moderately alkaline, permeable soils with problem of water scarcity due to low water table. Taxonomically, these soils are classified as typic</p>	1,10,127.00

		<p>ustochocptes. They are located in areas lying between the river Sengar and Yamuna and Chambal and Yamuna.</p> <p>Recent alluvium. (Type 1)</p> <p>These are light grey to light brownish grey sandy loam to silt loam soils throughout the pedon depth, being neutral to moderately alkaline. The irregular distribution of organic matter content with depth and litho logical discontinuities characterized by widely differing coarse sand/fine sand ratios suggest the young and flaeval character of these soils. They are dounf in narrow strips of low and plains. Subject annual inundation of river Yamuna in Etawah. Taxonomically, these soils key out as ustifluvents.</p>	
3.	Sandy, Loam, Loamy Sand, Clay and Loamy Clay (Par)	<p>Yamuna low lands (Type 4)</p> <p>They are grey to very dark grey loam to clay loam soils at the surface with silty clay loam to clayey sub surfaces. They have fine to medium, distinct reddish brown mottles in the sub soil chroma (2). They are neutral, form soluble salt menace but have severe drainage problems. Talxonomically, they keyout as typic ochraqualfs and aeric ochraqualfs. They are located with in Sengar flats as small patches constitute only a small fraction of the soils of the district.</p> <p>Yamuna uplands loamy (Type 3B)</p> <p>These soils are greyish brown to yellowish brown, sandy to loam soils with some what heavier sub soils enincing illuviation of clay, sesquioxides and occasionally lime. They are neutral to moderately alkaline, moderately permeable and fertile soils. Talxonomically, they key out as ustochrepts and typic Haplustalfs. They are located in areas adjoining type 3A.</p> <p>Yamuna uplands sandy (Type 3A)</p> <p>These are pale brown to light yellowish brown sandy loam soils with brownish yellow to yellowish brown sandy loam sub soils with little or no evidence of illuviation. They are mildly to moderately calcerous at lower depths. They are mildly to moderately alkaline, permeable soils with problem of water searcity due to low water table. Taxonomically, these soils are classified as typic ustochocptes. They are located in areas lying between the river Sengar and Yamuna and Chambal and Yamuna.</p>	79,095.00

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Q)	Productivity (Q /ha)
I	KHARIF			
1.	Paddy	45920	134310	29.25
2.	Pearl millet	37660	73617	19.51
3.	Maize	6243	12172	19.50
4.	Pigeon pea	5090	7260	14.26
5.	Urdbean	3158	2773	8.78
6.	Mungbean	53	21	4.20
7.	Peanut	110	90	8.57
8.	Til	1900	350	1-84

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
June	189.2	26.2	36.93	87.06

August	778	25.13	31.42	88.40
September	264.8	24.43	32.08	64.26
October	-	18.47	32.13	50.11
November	-	16.56	31.08	37.09
December	-	11.98	24.18	58.43
January	-	8.55	21.10	65.48
February	-	11.33	24.47	53.47
March	7mm	35.42	15.62	36.8
April	-	38.04	27.04	34.06
May	-	39.06	28.06	32.04
June	7mm	40.66	28.15	33.02
July	103mm	41.00	27.30	46.02
August	82mm	41.04	27.72	66.00
September	54mm	40.06	26.25	68.00

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	1564.00	16422.00	10.50
<i>Indigenous</i>	46854.00	210843.00	4.50
Buffalo	92649.00	435450.00	4.70
Sheep			
<i>Crossbred</i>			
<i>Indigenous</i>	13335.00	--	--
Goats	224250.00	--	--
Pigs			
<i>Crossbred</i>	532.00	--	--
<i>Indigenous</i>	14907.00	--	--
Rabbits			
Poultry			
<i>Desi</i>	33011.00	--	--
<i>Improved</i>	3003.00	--	--
Category	Area	Production	Productivity
Fish	22.22	50.00q.	--

Popularizing

7. Details of Operational area / Villages (2009-10)

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Deshar mau, Chandanpur & Kakarpur	Barhpura	Bhadapura, Kunaira, Endhauwa, Kakarpur, Fatehpura, Maniamau & Ekdil	Pigeon pea, rice, Pearl millet, Wheat, Chick pea, Potato	i) Ravines ii) Increased Soilerosion iii) Inadequate irrigation iv) Deep water table v) Weak Infrastructure	1. Poor seed replacement ratio 2. Imbalanced fertilizer use 3. Infestation of weeds 4. Infestation of BPH, root weevil & army women Gandhi bug 5. Inadequate & untimely support services.

						6. Heavy infestation of pod borer
2.	Jugsaura	Jashwant Nagar	Nagala Ram Lal, Jainpur Nagar & Nagala Chhatte	Maize, Rice, Wheat, Pearl Millet, Potato, Mustard, Vegetable, Pulses, Cow, Buffalo & Goat.	i) Dense population ii) Soil becoming infertile iii) Water table becoming lower iv) Increased infestation of disease and pest	1. Non-availability of potential short duration varieties. 2. Poor seed replacement ratio 3. Imbalanced fertilizer use 4. Infestation of weeds 5. Heavy infestation of pod borer
3.	Birari	Bharthana	Bhawanjpura Jagmohanpura, Sihuan	Rice, wheat, lentil, urdbean, mungbean, mustard, linseed and potato	i) Uneven topography ii) Water lagging Sodic soil iii) Weak infrastructure iv) Soil becoming infertile v) Increase is infestation of disease and pest	1. Non-availability of quality seed. 2. Non-availability of short duration varieties for sodic lands. 3. Imbalanced fertilizer use. 4. Infestation of BPH, root weevil & Gandhi bug 5. Poor seed replacement.
4.	Chitawani	Saifai	Khushhalpur & Nagala Karan, Kharkouli and Tulsipur	Paddy, Sorghum, Maize, Urdbean, Mungbean, Field pea, Chickpea, Mustard, Potato, Sugar cane & Berseem	i) Dense population ii) Soil becoming infertile iii) Increased infestation of disease and pest iv) Water table becoming lower	1. Non-availability of potential short duration varieties. 2. Poor seed replacement ratio 3. Imbalanced fertilizer use 4. Infestation of weeds 5. Inadequate & untimely support services. 6. Heavy infestation of pod borer, aphid and alternaria blight.
5.	Bina	Basrehar	Bhuta, Gangapura, Naglachatur & Sultanpura	Sorghum, Pearl millet, Paddy, Sugarcane,	i) Dense population ii) Soil becoming infertile	1. Heavy blight incidence. 2. Imbalanced fertilizer use,

				Urdbean, Mungbean, Lentil, Chickpea, Field Pea and Wheat	iii) Increased infestation of disease and pest iv) Water table becoming lower	particularly lower use of organic manures. 3. Fluctuating prices. 4. Lower prices due to heavy incidence of black scurff. 5. Infestation Of hairy cater piller and mosaic. 6. Heavy infestation of pod borer, aphid and alternaria blight.
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8. Priority thrust areas

S. No	Thrust area
1.	Maintenance of soil fertility through IPNM & Biofertilizer & Vermicompost
2.	Popularizing scented Rice
3.	Popularizing conservation tillage in Rice- Wheat system
4.	Promoting seed production
5.	Diversification in farming system
6.	Promoting Hybrid Bazra & Groundnut in summer
7.	To control soil erosion through watershed development plan
8.	To introduce improved varieties of seeds, fruits, vegetables & multipurpose trees
9.	Maximum utilization of farmer land, there is a need for a forestation through Agroforestry & orchard development
10.	To establish small unit viz Poultry, Goatry, Piggery, Mushroom & Honeybee for self production
11.	Breed improvement, health care & feeding management in livestock
12.	Popularizing IPM technologies for management of insect pest
13.	Empowerment of Farm women
14.	Formation of SHG for farmers & farm women

Kannauj

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No.	Farming system/enterprise
1.	Maize-potato-sunflower, Maize-potato-late sown wheat
2.	Maize-potato-sunflower, Maize-potato-summer vegetables
3.	Rice-wheat-summer pulses
4.	Groundnut-potato-sunflower
5.	Maize-Wheat-summer vegetables
6.	Garlic, onion, Vegetable pea for green pods and water melon, cucumber and cucurbits are components of farming system
7.	Mango and guava orchard and riverbed farming system are also in practices

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	South-western plain zone	1 Major crop growing zone of U.P.
		2 Cropping intensity is 160%.
		3 Soil is alluvial, calcareous, saline & alkaline.
		4 Average rainfall is about 753.4 mm. & temperature maximum 42°C and minimum 6°C during winter.
		5 Major crops are maize, potato, sunflower, wheat, groundnut, summer vegetable, summer pulses etc.

S. No	Agro ecological situation	Characteristics
1.	AES-I	<ol style="list-style-type: none"> 1. Soil is loam 2. 25% cultivated area located in its agro ecological situation. 3. All the major crops are cultivated.
2.	AES-II	<ol style="list-style-type: none"> 1. Soil is sandy loam 2. 46% cultivated area located in this region. 3. Major crops are Maize, potato, sunflower, wheat summer vegetable, mango, guava, jack fruits, cows, buffaloes
3.	AES-III	<ol style="list-style-type: none"> 1. Soil is clay loam / silty loam. 2. 10% area of district comprise in it. 3. Rice, wheat, pulses, potato, forest trees, cows, buffaloes, goats, pigs
4.	AES-IV	<ol style="list-style-type: none"> 1. Soil is loamy sand . 2. 10% area in its. 3. Major corps and enterprises are Maize, wheat, potato, sunflower, aromatic plants, cows, buffaloes, goats, pigs

5.	AES-V	<ol style="list-style-type: none"> 1. Soil sandy loam/sand. 2. 9% area falls under this regions. 3. Major crops and enterprises are Maize, potato, Wheat summer vegetable guava, Hena, buffaloes, goats
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3. Soil types

S. No	Soil type	Characteristics
1.	Loam	pH 7.8-8.3
2.	Sandy loam	pH 7.3-7.8
3.	Clay loam/silty loam	pH 8.5-10
4.	Loamy sand	pH 7.1-7.3
5.	Sandy loam/sand	pH 7.0

4. Area, Production and Productivity of major crops cultivated in the district

Crop	Area (ha)	Production (M. ton)	Productivity (q/ha)
1. Maize	47944	69755	14.36
2. Rice	18997	49237	24.06
3. Wheat	72942	246929	33.38
4. Potato	35899	758941	211.41
5. Oilseed	16342	19893	12.17
6. Pulses	8952	9684	10.80

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
Oct.08	21.93	Not available	Not available	Not available
Nov.08	Nil	Not available	Not available	Not available
Dec.08	Nil	Not available	Not available	Not available
Jan.09	Nil	Not available	Not available	Not available
Feb.09	Nil	Not available	Not available	Not available
Mar. 09	Nil	Not available	Not available	Not available

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	125752	-	-
<i>Crossbred</i>	8259	-	-
<i>Indigenous</i>	117493	-	-

Buffalo	234779	-	-
Sheep	13715	-	-
Crossbred	218	-	-
<i>Indigenous</i>	13497	-	-
Goats	269687	-	-
Pigs	21963	-	-
<i>Crossbred</i>	454	-	-
<i>Indigenous</i>	21509	-	-
Poultry	81625	-	-

7. Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Kannauj	Kannauj	Salempur Bagia	Maize, rai, potato, wheat, sunflower, urd moong, bela, heena, cows, buffalo, summer vegetable	<ol style="list-style-type: none"> 1. Non availability of short duration HYV 2. Lack of quality seed 3. Imbalance use of fertilizer 4. Lack of feed supplement 5. Infestation of insects & pests 	<ol style="list-style-type: none"> 1. Seed production programme 2. Use of balance fertilizer including sulphur in oil seed 3. Green fodder production 4. IPM Techniques 5. Mushroom production
2	Kannauj	Jalalabad	Hardevpurva	Maize, potato, sunflower, vegetable, tomato, cucumber, cows, buffalo, mango	<ol style="list-style-type: none"> 1. Non availability of quality seeds 2. Use of local seeds 3. Disease incidence 4. Pest attack 5. Imbalance use of fertilizer 	<ol style="list-style-type: none"> 1. Quality seeds 2. Improve variety 3. Insect & pest management through demonstration & OFT 4. Seed treatment 5. Balance use of fertilizer

3	Kannauj	Jalalabad	Digsara	Maize, potato, sunflower, vegetable, tomato, cucumber, cows, buffalo, mango	<ol style="list-style-type: none"> 1. Non availability of quality seeds 2. Use of local seeds 3. Disease incidence 4. Pest attack 5. Imbalance use of fertilizer 	<ol style="list-style-type: none"> 1. Quality seeds 2. Improve variety 3. Insect & pest management through demonstration & OFT
4	Kannauj	Jalalabad	Nekpur Kayasth	Maize, potato, sunflower, vegetable, urd, moong	<ol style="list-style-type: none"> 1. Unavailability of quality seeds 2. Non availability of high yielding short duration variety 3. Disease infestation 4. Lack of industrial support 5. Inadequate knowledge of improved technology 	<ol style="list-style-type: none"> 1. Quality seeds 2. Short duration variety 3. Disease management 4. Knowledge up-gradation through training
5	Kannauj	Jalalabad	Bahelianpurwa	Maize, rai, potato, wheat, sunflower, urd moong, vegetables, cows, buffalo, summer vegetable	<ol style="list-style-type: none"> 1. Non availability of short duration HYV 2. Lack of quality seed 3. Imbalance use of fertilizer 4. Lack of feed supplement 5. Infestation of insects & pests 	<ol style="list-style-type: none"> 1. Seed production programme 2. Use of balance fertilizer including sulphur in oil seed 3. Green fodder production 4. IPM Techniques 5. Mushroom production

6	Kannauj	Jalalabad	Jamala	Maize, potato, sunflower, vegetable, urd, moong & pigeon-pea	<ol style="list-style-type: none"> 1. Unavailability of quality seeds 2. Non availability of high yielding short duration variety 3. Disease infestation 4. Lack of industrial support 5. Inadequate knowledge of improved technology 	<ol style="list-style-type: none"> 1. Quality seeds 2. Short duration variety 3. Disease management 4. Knowledge up-gradation through training
7	Tirwa	Umarda	Agaush	Paddy, wheat, potato, Rai, Chickpea, Field pea, maize, moong, Urd, vegetables, cows, buffalo, goat	<ol style="list-style-type: none"> 1. Non availability of quality seeds 2. Untimely fertilizer availability 3. Infestation of insects & pests 	<ol style="list-style-type: none"> 1. Seed production through FIGs 2. Management of agricultural inputs 3. IPM Technology through training & Demonstration
8	Kannauj	Talgram	Jaishing-purwa	Maize, rai, potato, wheat, fieldpea, vegetable pea, sunflower, urd moong, bela, hena, cows, buffalo, summer vegetable	<ol style="list-style-type: none"> 1. Non availability of short duration HYV 2. Lack of quality seed 3. Imbalance use of fertilizer 4. Lack of feed supplement 5. Infestation of insects & pests 	<ol style="list-style-type: none"> 1. Seed production programme 2. Use of balance fertilizer including sulphur in oil seed 3. Green fodder production 4. IPM Techniques 5. Mushroom production 6. Organic farming

8. Priority thrust areas

S. No	Thrust area
1. Crop production	<ol style="list-style-type: none"> i. Most part of the district is salt affected. ii. Production and availability of quality seeds/seedlings/planting materials. iii. Popularization of high yielding varieties suited to sodic conditions. iv. Popularization of Green manuring, Vermi compost and NADEP compost to nourish the soil.

	v. Popularization of Hybrid & Scented rice
2. Horticulture	<ul style="list-style-type: none"> i. Establishment of Aonla, Ber and Guava Orchard in Sodic Land. ii. Cultivation of hybrid vegetables. iii. Popularization of commercial cultivation of flowers viz., rose & marigold. iv. Cultivation of medicinal & aromatic plants. v. Sustainable production of quality potato for external market.
3. Plant Protection	<ul style="list-style-type: none"> i. Pursuing integrated pest management for sustainable production. ii. Biopesticidal management of plant pests in fruits & vegetable crops. iii. Commercialization of mushroom cultivation. iv. Popularization of seed treatment with seed dresser, bio-fertilizers & bio-pesticides.
4. Animal Science	<ul style="list-style-type: none"> i. Promotion of small dairying and economic enterprises. ii. Improvement of existing breed of animals. iii. Improvement of animal health through vaccination & deworming. iv. Post harvest management of milk & milk products.
5. Home Science	<ul style="list-style-type: none"> i. Create awareness among farm women about time and energy saving home and farm technologies. ii. Formation of self help group for socio-economic up-liftment. iii. Awareness of nutrient safety and introduction of nutritional garden. iv. Knowledge of safe grain storage, imparted to the rural women.
6. Agricultural Extension	<ul style="list-style-type: none"> i. Organizing farmers, farmwomen and rural youth in small functional commodity based groups. ii. Organizing flower growers in to processing and marketing group. iii. Motivation to the farmers for formation of farmers club.

Firozabad

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Agriculture
2.	Agriculture & Horticulture
3.	Agriculture, AH & Horticulture

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1.	South-western Semi Arid Zone	The soil are alluvial in with slight sandy in nature and moderate alkaline. The temp. of the district is about 24°C. The average annual rainfall is around 500 mm. The major crops of the district are paddy, bajra, maize, wheat, mustard, potato, garlic, chillies, urd and moong.

S. No	Agro ecological situation	Characteristics
1.	Tundla, Firozabad, Narkhee	Sandy loam. Low in fertility, tube well irrigated with brakish water
2.	Shikohabad, Madanpur, Etah	Ranges from loam to sandy loam, low in fertility, tube well and canal irrigation.
3.	Hathvant, Aranv, Jasarana	Loam, sandy loam and claying in nature, fertile, tube well and canal irrigation with some area affected from salts.

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1.	Sandy soil	Poor in fertility, well drained	100320.00
2.	Loam soil	Well drained, fertile with patches of salts affected soil	60122.00
3.	Clay loam	Low in fertility, water lodged and poor in drained	20112.00

4. Area, Production and Productivity of major crops cultivated in the district (year 2008-09)

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl/ha)
A	Kharif			
1.	Paddy	18713	56176	30.02
2.	Maize	9153	25299	27.64
3.	Bajra	56580	118479	20.94
4.	Urd	51	28	5.49
5.	Moong	159	59	3.57
6.	Arhar	667	648	9.72
7.	Til	744	123	1.65
8.	Ground nut	--	--	--
B.	Rabi			
1.	Wheat	88042	204153	23.19
2.	Barley	6171	18221	29.53
3.	Gram	505	508	10.06
4.	Pea	572	691	12.08
5.	Masoor	--	--	--
6.	Toria	--	--	--

7.	Mustard	9978	15251	15.29
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5. Weather data (2008-09):

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April	6.23			
May	6.46			
June	--			
July	83.16			
August	191.13			
September	63.66			
October	--			
November	--			
December	--			
January	--			
February	--			
March	--			

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	8660		
<i>Indigenous</i>	20977		
Buffalo			
Sheep			
<i>Crossbred</i>	219		
<i>Indigenous</i>	14069		
Goats			
Pigs			
<i>Crossbred</i>	620		
<i>Indigenous</i>	25109		
Rabbits			
Poultry			
Hens	40450		
<i>Desi</i>	10025		
<i>Improved</i>	1200		
Ducks	--		
Turkey and others	--		
Fish	457.423	1375 mt	30.05 qt/ha
<i>Marine</i>			
<i>Inland</i>			

Prawn			
Scampi			
Shrimp			

7. Details of Operational area / Villages (2008-09)

S. N.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Firozabad	Firozabad Eka	Indomai, Safipur	Bajra, potato, wheat, mustard	1. Imbalance use of fertilizer in wheat crop. 2. Over dosing of fertilizer in potato and zinc & sulphur deficiency in mustard. 3. Infestation of weeds in pearl millet and wheat crops. 4. Insect & disease attack in pulses. 5. Unavailability of quality seeds.	1. Integrated Plant Management 2. Integrated Pest Management 3. Quality seed production 4. introduction of vegetable & hort. Crops 5. introduction of pearl millet 6. inadequate & untimely support service 7. Non-availability of potential short duration varieties. 8. Poor seed replacement ratio.
2.	Sikohabad	Araon, mafanpur, Sikohabad	Sarokh, Kaparawali, G. dansey, nandpur, Araonji, Lokman	Potato, wheat, garlic, paddy, bajra, mustard, potato,		
3.	Jasarana	Jasrana, Hathwans	Salempur, Kutubpur, Kachmai, Inni	Paddy, wheat, bajra, potato, wheat, mustard, bajra		
4.	Tundla	Tundla, narki	N.Udai, Kutubpur, Jarkhi, N.Sikander, Asan	Wheat, potato, mustard, bajra, till, bajra, cayuliflower		

8. Priority thrust areas (major thrust area in agriculture, horticulture and live-stock identified)

S. No	Thrust area
1.	Soil and water conservation.
2.	Integrated plant nutrient management.
3.	Integrated pest management.
4.	Integrated weed management.
5.	Seed treatment with fungicides, insecticides & rhizobium culture.
6.	Quality seed production.
7.	Inadequate knowledge and adoption about improved technology.
8.	Extension strategies and research for agricultural intensification and diversification.
9.	Need of latest HYV according to semi-arid zone.
10.	To introduce improved varieties of fruits & vegetables.
11.	Maximum utilization of ravines land, there is a need for a-forestation through agro-forestry and orchard development.

12.	To overcome the low productivity problem in livestock, KVK emphasize animal nutrition and disease management in livestock.
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Hamirpur

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Sl.No.	Farming system/enterprise	
	Cropping system	Animal
1.	Jowar + Pigeon pea	Deshi Cow
2.	Fallow – Gram	Deshi Buffalo, Deshi Cow
3.	Fallow – Lentil	Deshi Buffalo, Deshi Cow
4.	Mung/ Urd – Wheat	

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S.No.	Agro – climatic Zone	Characteristics
1.	VI	Arid climate

S.No.	Agro – climatic Zone	Characteristics
1.	Plain	Arid climate
2.	Kabar, Mar Soil	Rakar Soil
3.	Degraded	Up and Low Soil

3. Soil types

S.No.	Soil type	Characteristics	Area in ha
1	Rakar	-	21500
2	Panduwa	Sandy Loam	133100
3	Mar	Loamy Soil	16500
4	Kabad	Light Soil	128030

4. Area, Production and Productivity of major crops cultivated in the district

S.No.	Crop	Area (ha)	Production (q)	Productivity q/ha
1	Arhar	15092	138092	9.15
2	Urd	34211	101610	2.97
3	Maize	5	-	-
4	Mung	5446	16992	3.12
5	Groundnut	513	2780	5.42
6	Jowar	28590	158674.5	5.55
7	Paddy	630	5374	8.53
8	Saseme	9790	15762	1.61

9	Bajra	626	5384	8.60
10	Soybean	129	1259	9.76
11	Lentil	32497	204731	6.30
12	Gram	61043	482902	7.96
13	Wheat	79609	1856482.0	23.32
14	Barley	1531	15279.0	9.98
15	Potato	53	-	-
16	Onion	79	-	-
17	Pea	29148	341906.00	11.73
18	Mustard	3617	23800.00	6.58
19	Linseed	3933	175501.00	4.45

5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
June 07	46.53	42.2	27.2	54.00
July 07	279.00	32.2	25.2	90.00
Aug 07	135.50	36.2	26.2	66.00
Sep 07	34.80	35.0	26.2	76.00
Oct 07	7.33	36.2	24.4	39.00
Nov 07	-	218.2	16.2	88.00
Dec 07	-	20.2	12.20	90.00
Jan 08	-	21.2	8.2	67.00
Feb 08	71.02	17.5	12.2	85.00
Mar 08	34.42	34.2	18.2	68.00
Apr 08	-	40.2	24.2	44.00
May 08	1.66	41.2	27.0	45.00
June 08	58.23	35.2	28.2	77.00
July 08	120.47	37.2	27.2	91.00
Aug 08	209.14	28.2	20.2	90.00
Sept 08	61.98	37.2	24.2	65.00

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
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Cattle			
Crossbred	834	NA	NA
Indigenous	265374	NA	NA
Buffalo	133391	NA	NA
Sheep			
Crossbred	310	NA	NA
Indigenous	25562	NA	NA
Goats	128723	NA	NA
Pigs			
Crossbred	2345	NA	NA
Indigenous	22731	NA	NA
Rabbits			
Poultry	80196	NA	NA
Hens	NA	NA	NA
Desi	NA	NA	NA
Improved	NA	NA	NA
Ducks	612	NA	NA
Turkey and others		NA	NA

7. Details of Operational area / Villages

Sl. No	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Hamirpur	Kurara	Sarsai (Ambedkar Gram)	Tomato, Onion, Wheat	Marketing Unavailability of seed	Introduction of production technique of vegetable and fruit crops
2	Hamirpur	Kurara	Padui	Wheat, Groundnut, Brinjal	Unavailability of seed Unavailability of water	Innovation of package of practices of oil seed crops
3	Hamirpur	Kurara	Shitalpur	Jowar, Wheat	Unavailability of water, degraded land	Innovation of agro forestry system on ravine and degraded soil
4	Hamirpur	Kurara	Kharonj	Gram Wheat Mustard	Unavailability of water	Diversification in agriculture for enhancing the total production of village
5	Hamirpur	Kurara	Jalla	Pigeon pea, Til, Wheat, Linseed	Unavailability of seed	Enhanced the seed production of high yielding varieties through "seed plot technique"
6	Maudaha	umerpur	Nadehera	Pigeon pea,	Cracking of	Population of organic

				Wheat	soil water deficit.	farming
7	Maudaha	umerpur	Bidokhar	Til, Gram	Low water level	Population of micro irrigation system
8	Hamirpur	Kurara	Damar	Pigeon pea, Wheat and Gram	Termite and wilt	Enhancement of production to control of termite and wilt
9	Maudaha	umerpur	Saukhar	Jowar, Pigeon pea, Wheat	No irrigation facility	Balance nutrition management for milch cattle and buffalo
10	Maudaha	Maudaha	Tenduhi	Bajara Vegetable, pea, Onion	Lank of knowledge about technology	Introduction of high yielding varieties and improved technology

8. Priority thrust areas

Crop production :

1. Enhance seed production of high yielding varieties through “ Seed plot technique” specially in pulses for rain fed conditions.
2. Emphasis upon cropping system with the consideration of water deficit.
3. Improve the productivity of cereal and pulses in dry land condition.
4. Innovation of package of practices of pulses and oil seed crops.
5. Enhance the maize production.
6. Popularization of micro irrigation system.

Horticulture:

1. Introduction of production technique of vegetable and fruit crops.
2. Introduction of nursery management of vegetable and fruit plants.
3. Innovation of agro-forestry system on revine and degraded soil.
4. Popularization of sprinkler and drip irrigation system in fruit and vegetable crops.

Plant Protection:-

1. Popularization of IPM techniques in pulses.
2. Use of bio-pesticides.
3. Seed treatment.
4. Enhancement of production to control of pod borer.

Soil Science :-

1. Popularization of organic farming.
2. Popularization of soil testing for use of balance dose of fertilizer.
3. Popularization of soil and water conservation technique.

Live stock production and management ;

1. Balance nutritional management for milch cattle in buffalo.
2. Control of “Anna Pratha”.

Jalaun

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Due to mono cropping, anna pratha and non manageable condition of mar and kabar soil of the district. Mono cropping is the most common farming system. Mixed farming in the combination of agriculture and live stock is also quite common in all the areas.
2	Jowar-wheat, Bajra-wheat, Fallow-wheat, Fallow-chickpea, Fallow-field pea, Fallow-lentil, Soyabean-wheat are the important crop rotations followed in different AESs. Mixed cropping are Sorghum+ Arhar, Barley+Gram+ Mustard is also common.
3	High resource farmers keep one graded buffalo and one or two cows. Whereas low resource farmers commonly have one or two buffalo+3-4 goats. Both high and low resource farmers keep milch animals for home consumption and also for sale. The share croppers also keep one or two desi buffaloes and 5-6 goats.
4	Tomato, onion, vegetable pea and chillies are important. Vegetable crop of the districts cultivated both by resource rich and resource poor farmers.
5	Few farmers have introduced mentha in the existing farming system of fellow-vegetable pea-mentha.
6	In the mahewa and kuthound block river bed farming system is also practiced especially by low resource and land less farmers.
7	In the lower and upper ravines Sorghum-wheat, Bajra-wheat, Fellow-wheat + Mustard, Arhar and Jowar are common cropping systems.
8	Artisians well are found in the belt of river Pahuj in Madhogharh and nadi gaon block in the district. There are ample opportunities for intensification of vegetable cultivation and also diversification to other crops.
9	Bhadawari buffalows are found in ravines of Yamuna and Pahuj as name indicates Jamuna pari goat is found in the villages located in the ravines of Yamuna,
10	Highest net returns is obtained from vegetable pea followed by chickpea, field pea and wheat respectively,

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
Zone VI Bundel Khand		
1		<p>Light brown loam to clay, generally structure less, average in water holding capacity and organic matter, moderately alkaline, restricted drainage, surface soil poor in lime content but the middle layer is calcareous, medium in soluble salts. Carbonates and sulphates practically absent.</p> <p>Light gray brown at surface to pale brown at lower depth, poor to average water holding capacity neutral in reaction and poor in-organic matter. Generally non calcareous with fair drainage, medium in soluble salts content with predominance bicarbonates and chlorides.</p> <p>These are black soils with high water holding capacity, neutral in reaction, slightly calcareous low in organic matter content, impeded drainage and prone to salinity in the water logged areas and average to soluble salts.</p> <p>Brown at surface and lighter brown sandy loam, average water holding capacity, neutral non-calcareous, fair drainage, low in soluble salts mainly comprising of bicarbonates and chlorides of sodium .</p> <p>Light texture at surface but becoming heavier below, average water holding capacity, neutral in reaction but lower layers moderately calcareous , High soluble salts that increase with dept</p>

S. No	Agro ecological situation	Characteristics
1	AES - I	Light brown loam to clay, generally structure less, average in water holding capacity and organic matter, moderately alkaline, restricted drainage, surface soil poor in lime content but the middle layer is calcareous, medium in soluble salts. Carbonates and sulphates practically absent .
2.	AES – II	Light gray brown at surface to pale brown at lower depth, poor to average water holding capacity neutral in reaction and poor in-organic matter. Generally non calcareous with fair drainage, medium in soluble salts content with predominance bicarbonates and chlorides.
3	AES-III	These are black soils with high water holding capacity, neutral in reaction, slightly calcareous low in organic matter content, impeded drainage and prone to salinity in the water logged areas and average to soluble salts.
4	AES-IV	Brown at surface and lighter brown sandy loam, average water holding capacity, neutral non-calcareous, fair drainage, low in soluble salts mainly comprising of bicarbonates and chlorides of sodium .
5	AES-V	Light texture at surface but becoming heavier below, average water holding capacity, neutral in reaction but lower layers moderately calcareous , High soluble salts that increase with depth.

3. Soil types

S. No.	Soil type	Characteristics	Area in ha
1	Parwa soils	Light brown loam to clay, generally structure less, average in water holding capacity and organic matter, moderately alkaline, restricted drainage, surface soil poor in lime content but the middle layer is calcareous, medium in soluble salts. Carbonates and sulphates practically absent .	196000
2.	Kawar Soils	Light gray brown at surface to pale brown at lower depth, poor to average water holding capacity neutral in reaction and poor in-organic matter. Generally non calcareous with fair drainage, medium in soluble salts content with predominance bicarbonates and chlorides.	73700
3	Mar soils	These are black soils with high water holding capacity, neutral in reaction, slightly calcareous low in organic matter content, impeded drainage and prone to salinity in the water logged areas and average to soluble salts.	62700
4	Rakar soils	Brown at surface and lighter brown sandy loam, average water holding capacity, neutral non-calcareous, fair drainage, low in soluble salts mainly comprising of bicarbonates and chlorides of sodium .	31442

5	Yamuna Alluvium	Light texture at surface but becoming heavier below, average water holding capacity, neutral in reaction but lower layers moderately calcareous , High soluble salts that increase with depth.	20458
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4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
(A)	Cereal			
1	Wheat	144156	407990	28.2
2	Barley	8178	8563	1047
3	Paddy	556	845	8.68
4	Jowar	7949	1330	16.77
5	Bajra	14391	26290	18.27
6	Maize	15	145	9.06
(B)	Pulses			
1	Urd	15949	8105	5.08
2	Moong	1298	838	5.66
3	Lentil	28193	17467	6.45
4	Gram	47921	31436	6.56
5	Pea	75373	76460	10.43
6	Arhar	6930	5457	7.87
(C)	Oilseed			
1	Til	49363	7256	1.47
2	Linseed	418	138	3.31
3	Groundnut	49	181	8.98
4	Sunflower	3	166	11.86
5	Soyabean	317	4080	9.51
6	Mustard	7869	61740	4.26
(D)	Others			
1	Sugarcane	2497	100976	404.39
2	Potato	495	10910	220.4
3	Onion	96		
4	Other reg.	5440		
5	Sanai	43	99	2.98
6	Podder	4548		

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
Jun-2009	1.50	48.20	3.1	NA
July-09	112.73			
Aug-09	204.40			
Sep-09	122.95			

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	234157		
<i>Crossbred</i>	2930		
<i>Indigenous</i>	37087		
Buffalo	239167		
Sheep	29870		
<i>Crossbred</i>	178		

<i>Indigenous</i>	30048		
Goats	257389		
Pigs	25520		
<i>Crossbred</i>	1002		
<i>Indigenous</i>	26522		
Rabbits			
Poultry	49884		
Hens	52852		
<i>Desi</i>			
<i>Improved</i>			
Ducks			
Turkey and others	865		

Category	Area	Production	Productivity
Fish	393.499 ha	27-28 q/ha/yr	27q/ha/yr
<i>Marine</i>	-	-	-
<i>Inland</i>	-	-	-
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

7. Details of Operational area / Villages (2009-10)

Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Jalaun	Jalaun	(i) Akorhi Dubey (ii) Mohanpur Kudari iii) Rura Jaitiya (iv) Dharampura, All, Bizwaha	Chickpea, Pigeonpea, Fieldpea, Moong bean and Til Jowar	There was non availability of seeds, lack of appropriate technology and inadequate knowledge on the part of farmers. Imbalanced use of fertilizer, infestation of disease and pest and low market price of produce. In Livestock sector, the major problems are inadequate availability of green fodder, poor health services, low productivity, poor breeding services, and difficulties in loaning and marketing,	Quality seed production of different crop through farmer and organization of need based training, implementation of OFTs verification trial in production of cross breed cattle. Populazation of burbari breed of goat, knowledge of diseases of animal is essential. Formation of SHGs and farm size club.

8. Priority thrust areas

S. No	Thrust area
Crop Production	
1	Testing different method of sowing in major crops (Sorghum, bajra etc,)
2	Popularization of hybrid varieties in different crop needs emphasis
3	Seed production of wheat, field pea, chickpea, lentil, barley, sesmum etc,
4	Popularization of wheat sowing with seed cum fertti drill
5	Rain Water harvesting using water shed technology ,

6	Popularization of short term disease resistant varieties in all the major crops
7	Training of farmers, for effective use of water shed technology for Proper utilization of available rain water .
8	Promotion of seed village production programme
9	Trials for the control of problem weeds like motha, kaans, parthenium spp, chhilwarim zaria etc.
10	Popularization of sterility mosaic virus resistant varieties .
11	Awareness about approved varieties and hybrids .
Soil Science	
1	Popularization of green manuring .
2	Popularization of Vermi and Nadep compost to nourish the soil and as part of integrated plant nutrient management .
3	Awareness about soil based application of micronutrients.
4	Popularization of Summer ploughing
5	Popularization of bio fertilizer and seed treatment .
6	Training and demonstration on application of micronutrients
7	Ensuring the availability of good quality micronutrients at reasonable prices.
Horticulture	
1	Rain water management using watershed approach specially for vegetables.
2	Establishment of Aonla and ber orchards in sodic land .
3	Popularization of commercial cultivation of flowers viz. rose, gladiolas, marigold etc.
4	Diversification for agro forestry.
Plant protection	
1	IPM in rice and wheat utilizing bio-agents like trichoderma, B.T. , NPV, Tricocard etc.
2	Popularization of integrated pest management (IPM) in control of pod borer.
3	Yellow vein mosaic management is most important in Urd and Moong.
4	Biopesticidal management of plant pests in vegetable and fruits.
5	Popularization of diseases free, quality seed production.
Agriculture Extension	
1	Formation of self help groups (SHGs) of farmers and farm women
2	Motivation to the farmers for participation in farm science club.
3	Coordination with different line departments.
4	Educating farmers regarding growing kharif crops.
Agriculture Engg.	
1	Popularization of drip / sprinkler irrigation system.
2	Popularization of small scale processing and value addition.
3	Popularization of Post Harvest Technology.
4	Popularization of new ploughing equipments.
Home Science	
1	Knowledge of safe grain storage to be imparted to the rural women
2	Child care and nutrition need emphasis.
3	Kitchen gardening knowledge to be imparted to women.
4	Vegetable and fruits preservation techniques need to be taught.
5	Cutting and tailoring are having vast potentialities for rural women.

Lakhimpur Kheri

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1-	Pure Cropping
2-	Agri-Horti
3-	Mixed Farming
4-	Agri-Silvi

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Agro ecological situation	Characteristics
1-	Bhawar Evam Tarai	AES-I	Light brownish grey, sandy loam, light sandy loam, average water holding capacity, neutral in reaction, slightly calcareous, low in organic matter content, impeded drainage and water logged areas.
2-	Mid Plains	AES-V	Surface soil grey to dark grey in colour, becoming grey again in the third horizon, Texture in silty clay loam at surface and heavier below, average water holding capacity, neutral in reaction.

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1-	Bhawar Avam Tarai	Light brownish grey, sandy loam, light sandy loam, average water holding capacity, neutral in reaction, slightly calcareous, low in organic matter content, impeded drainage and water logged areas.	292369
2-	Mid Plains	Surface soil grey to dark grey in colour, becoming grey again in the third horizon, Texture in silty clay loam at surface and heavier below, average water holding capacity, neutral in reaction.	213477

4. Area, Production and Productivity of major crops cultivated in the district

Sl. No.	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1-	Rice	180163	429358	23.83
2-	Wheat	203270	580397	28.55
3-	Maize	9148	8622	8.24
4-	Urd	3454	1090	4.38
5-	Lentil	23478	18125	7.72
6-	Pea	742	726	9.79
7-	Pigeon Pea	1709	1138	6.66
8-	Sesame	4081	257	1.40
9-	Mustard	30266	20255	6.69

10-	Ground Nut	5200	3110	5.98
11-	Sugar Cane	219325	10975023	500.40
12-	Potato	1297	19829	152.80

5. Weather data

Rainfall (mm)	Temperature ° C		Relative Humidity (%)
	Maximum	Minimum	
1093	44	4.2	73

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population
Cattle	
<i>Crossbred</i>	4204
<i>Indigenous</i>	217872
Buffalo	117043
<i>Crossbred</i>	22
<i>Indigenous</i>	16187
Goats	319664
<i>Crossbred</i>	1224
<i>Indigenous</i>	30152
Poultry	165373

Category	Area	Production	Productivity
Fisheries	670	1385	

7. Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Gola	Bankeganj	Station purwa	Rice, Wheat, Sugar Cane, and Horticultural Plants	Imbalance use of Fertilizers/bio-fertilizers and lack of technical knowledge	Popularization of organic, inorganic fertilizers and improved varieties Intercropping in horti cultural crops
2.	Lakhimpur	Lakhimpur	Nizampur, Pangikhurd	Rice, Wheat, Sugar Cane, Fruits and Vegetables	Imbalance use of Fertilizers Improper use of Pesticides Lack of technical knowledge	Popularization of balance use of fertilizers and bio-pesticides Intercropping in horti cultural crops
3.	Gola	Gola	Nipaniya	Rice, Wheat, Sugar Cane, and Animal Husbandry	Low productivity, Imbalance use of Fertilizers and Pesticides, use of local varieties.	Application of package of practices for improving production popularize of bio-fertilizers and Kitchen Gardening

4.	Mohammdi	Mohammdi	Dhakhaura	Rice, Wheat, Pigeon Pea, Vegetable and Animal Husbandry	No use of Pesticides and herbicides, imbalance use of nutrients without biofertilizers and lack of proper nutrition for cattle and buffalow	Popularization of IPM techniques, use of selective herbicides, popularize hybrid varieties and introduce cross bred cattle
5.	Lakhimpur	Lakhimpur	Pipra Karamhchandra, Sunsi	Rice, Wheat, Sugar Cane, Lentil, Vegetable and Husbandry	Lack of technical knowledge less improper use of about improved varieties, improper use of herbicides and pesticides, low producing animals	Popularization of recommended package of parctices, popularize IPM techniques, use of herbicides and introduced cross bred cattle and high yielding buffaloes
6.	Lakhimpur	Lakhimpur	Maudaudpur, Malikpur, Pipariya	Rice, Wheat, Lentil, Potato, Pea and Horticultural Crops	Less technical knowledge about improved varieties, conventional method of farming improper use of fertilizers, herbicides and pesticides	Popularize IPM techniques, popularize scientific farming and balance use of fertilizers
7.	Lakhimpur	Behjam	Sakethu	Rice, Wheat Lentil, Pigeon Pea, Til and animal Husbandry	Less knowledge about IPM techniques, traditional farming and frequent use of local varieties, low yielding animals	Popularize IPM techniques, Popularize Scientific farming systems and to familiar with high producing varieties, introduce cross bred cattle and buffalow
8.	Mohammdi	Mitauli	Pipariya	Rice, Wheat, Gram Pea, Potato, Til and Animal Husbandry	Improper use of fertilizers, herbicide and pesticides, frequent use of local varieties rearing of low yielding animals	Popularize balance use of fertilizers, popularize IPM techniques, use of selective herbicides, introduce cross bred cattle and high yielding buffaloes

9.	Lakhimpur	Nakha	Sheetlapur	Rice, Wheat Lentil, Pigeon Pea, Til and animal Husbandry	Less knowledge about IPM techniques, traditional farming and frequent use of local varieties, low yielding animals	Popularize IPM techniques, Popularize Scientific farming systems and to familiar with high producing varieties, introduce cross bred cattle and buffalow
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8. Priority thrust areas

Sl. No	Thrust area
1-	Crop Production Popularization of hybrid and scented rice varieties including SRI technique Popularization of improved planting technique for pulses Popularization of integrated nutrient management Popularization of intercropping in sugar cane and seed production of cereals
2-	Horticulture Popularization of hybrid vegetables and spices cultivation Protected nursery raising techniques Establishment of new orchards and management techniques for old orchards Commercial cultivation of banana & flowers
3-	Animal Husbandry Introduction of balance ration for cattle and buffaloes Popularization of mineral mixture feeding Popularization of improved strains of broiler and layers Introduction of improved breed of goats & control of internal parasite
4-	Home Science Child care and nutritional need emphasis Popularization of storage techniques in cereal and pulses Popularization of value addition & rural craft
5-	Plant Protection Popularization of IPM techniques in gram, pigeon pea and vegetables Introduction of bio-pesticide for pest management To popularize resistant varieties against diseases and pests
6-	Agriculture Extension Leadership development in rural youth Formation of self help groups of farmers To popularize resource conservation technologies

Lalitpur

Introduction

District Lalitpur is situated at 24° 11' latitude and 25° 57' eastern longitude. It is located at national railway track (Delhi –Bombay) of Jhansi commissionaire of Uttar Pradesh. In 1975, it became a separate district from Jhansi. The archeology of the district is of national importance, which focused the historical, cultural, religious and artistic pattern of that era. The boundary of district Lalitpur covered with the districts i.e. Jhansi in north, Sagar in south, Teekamgarh in east and Guna in west. Lalitpur south belt covered with Vindhyavasani hills and in North-west areas Betwa river going towards Lalitpur. It was the playground of ancient nature and archeology of Vindhyaachal and Betwa District. The important rivers of the district are Betwa, Jamni, Sahjad, Sajnum & Lakheri. The important dams are Govind Sagar, Matatila, Sahjad, Jamni, Banderguda, and Sajnum provide drinking water to human population and provide substantial irrigation water.

The District Lalitpur is administratively divided into 6 blocks namely Bar, Jakhoara, Talbehet, Mehroni, Madawara, and Birdha with 3 Tehsils and 340 Gram sabha are in the district with 48 Nayay panchayat.

The total geographical area of the district (507,500 ha) forest area 14.95%, Wasteland 15.76%, uncultivated area 3.42%, and usar, pasture, current fellow, shrubs and other fellow land covering 9% which indicates possibilities for further expansion in the cultivated area. Cultivable waste accounts about 80294 ha, which is significantly high indicating additional opportunity of intensification and diversification. One of the important features and utilization of the district is wasteland and uncultivated land, which can be converted in production system.

Geographical climatic and edaphic characteristics of the district determine the type of farming system to be followed. In Lalitpur soils are rocky, fields are undulated (0.5% to 10%) with hill rocks here and there. Climate is semi-arid with moisture deficiency index being 40 - 60. Erratic rainfall distribution and dry spells are common. Two groups of soils viz. red and black are found in the district. Red soils are generally light shallow, low water retentive, deficient in nutrients mixed with the coarse sand and easily workable, whereas, black soils are deep, highly water retentive, highly productive but difficult to work in rainy season. Broadly speaking, there are three types of holdings, rain fed, partially irrigated and totally irrigated.

The climate of the district is characterized by long and intensive hot summer, low and irregular rainfall and short mild winter.

The summer in Lalitpur district begins by the middle of March when temperature is 33°C and it extends up to May or early June when temperature is 49°C. However, maximum temperature of 47 to 49°C has been experienced; the minimum 5.4°C temperature is recorded in January. The maximum relative humidity recorded in July and minimum in May.

Annual rainfall of the district varies between 456 to 1156 mm. The major portion of rainfall is received during month of July and August and some time in early September. Thus July, August and September are water surplus and remaining months are water deficient months. However, last four years rainfall was very low and erratic in nature, so the area is under drought condition. Low rainfall and droughts are common features of the district. Some time long dry spells during rainy season are also experienced which adversely affect the crops.

The climatic data of 20 years presented in table 3, it is clear from the data that 84% rainfall occurred in the month of July, August and September and April, May and June are hottest months while December, January and February are mild coolest months. The minimum and maximum temperature varies from 5.4 to 28.1 °C and 21.5 to 49.0 °C respectively. Need to be effective use of 15% rainfall of month June and 22% rainfall of September month. 54% rainfall of July and August should be harvested for further use. Rest 9% of rainfall in different months should be judiciously used for better livelihood.

The geographical area of district Lalitpur covered the following centers which showed the architecture and sculpture of that time:

- 1- **Devgarh:** There are 2 Brahmin temples, 33 Jain temples and a lot of statues of these religions.
- 2- **Pali:** There is trimurti of lord Shiva and adjoining to it there is Shiv Barat Ki Kothi.
- 3- **Dudhai:** Very old Brahmin and Jain temples with abundant numbers of statues.
- 4- **Ranchore Ji:** Topless temple, large statues of lord Vishnu, goddess Laxmi ji and lord Shiva
- 5- **Banpur:** Big statue of lord Ganesha, a Jain temple and lot of Jain statues.
- 6- **Andela:** Statue of Sudarshan Chakradhar lord Vishnu.
- 7- **Bar:** Dance posing statues of lord Ganesha.
- 8- **Seron Khurda:** Hundred of statues of Brahmin religion and thousands of Jain religion.
- 9- **Chandpur, Jahajpur and Madanpur:** Statues of Brahmin and Jain religions.
- 10- **Madawara, gundha and Simrai:** Large number of statues.

THE APPROACH

The KVK has developed its action plan based on critical analysis of farming systems prevailing in the district with an aim to deal with the most urgent problems on priority. Brief analyses of the farming system of district Lalitpur and its key features are given here under.

BACKGROUND INFORMATION ABOUT THE DISTRICT

District Lalitpur is located in the Southwest corner of Bundelkhand region between 24.11⁰ to 18.25⁰ latitude and longitude respectively with the geographical area of 503.9 thousand hectares. The district is a part of Vindhyan hills and also a part of Central Indian Plateau. Western areas are covered with hillocks. The important dams on the rivers highlight the irrigation potential of the district.

Land Use Pattern

Particulars	Area '000 ha.
Total Geographical area	503.90
Forest	76.16
Waste land	34.45
<i>Other than cultivated area</i>	<i>39.86</i>
Cultivable waste	79.32
Pastures	3.47
Bushes	1.43
Current Fallow	19.53
Other Fallow	23.14
Agricultural Land	237.48
Land cultivated more than once	86.32
Area sown	398.35
Kharif	170.05
Rabi	223.87
<i>Zaid</i>	<i>4.43</i>
Crop intensity	156.08

Out of total Geographical area of the district 503.9 thousand ha. forest waste land and other than cultivated area constitute about 23.39% which indicates the possibilities for further extension in cultivated area. Cultivable waste is also about 119179 ha. which is significant and further indicates additional opportunities of intensification and diversification of agriculture & related production systems. One of the important features of land utilization of the district is current fallow, which can be converted into production system.

Agro - Ecological Situation:

Agro-ecological situation of the district were indentified through discussions with the consultant SIMA, KVKs and line department Officers on climate, rainfall, variation in temperature topography, irrigation, soil type and its depth affected by erosion and how these factors affected the farming system within the the district. After sound discussion, the district was divided into two Agro-Ecological Situations (AESs) as AES-I is having red soil series as rakar and parwa (local name-Patli soils) with medium slope, AES-II black soil series as mar and kabar (local name-Malwa soils) with slight to medium slope

Major Agro-Ecological Situations (AESs).

List of representative blocks covered under each Agro-Ecological Situation of the district.

Agro-Climatic Zone	Agro-Ecological Situation	Name of Blocks	Remarks
Bundelkhand zone – VI	AES-1 Red Soil Series Rainfed / Irrigated	Talbehet Bar Jakhoara	Rakar and Parawa soils, medium slop Rainfed /Irrigated
	AES-2 Black Soils Series Rainfed/ Irrigated	Mehroani Madawara Birdha	Mar and Kabar soils Slight to medium slop Irrigated / Rainfed

In district Lalitpur, soil strata is rocky, terrain is undulating and slope ranges between (0.5 to 10%) and hillocks spreading here and there. Soils in the district are required in nature and formed in situ. Red soils originate from barren rock genesis granite and some times from sand supton. Black in contrast are formed partly in situ and partly transported with material like lime stone and trap.

S. No.	Type of Soil	Area Covered '000 ha
1.	Rakar	113.78
2.	Parwa	117.25
3.	Kabar	21.21
4.	Mar	2.98
	Total	255.22

Spread of AES in the District Lalitpur

Name of ACZ	Area in hac.	Name of AES	B1	B2	B3	B4	B5	B6
			A	A	A	A	A	A
ACZ-6 Geogr. Area	507500 277994	AES-I	61957	96361	61481	7900	9100	7300

Net Sown Area	AES-II	8050	9350	4720	63452	74638	103186
	Total	70007	105711	66201	71352	83738	110486

Note: AES-I.... B1= Talbehet
B2= Jalkoara
B3= Bar

AES-II.....B4= Mehroani
B5- Madawara
B6= Birdha

Production and Productivity of important commodities under each AES enterprise-wise for the district Lalitpur:

AES	Name of the Commodity	1998			2001			2006		
		A	Y	P	A	Y	P	A	Y	P
AES I	Wheat	8956	22.05	197.4	9676	23.20	224.4	91800	24.00	220.3
	Chickpea	0	7.90	14.55	0	8.90	13.56	12740	7.50	9.55
	Pea	1843	7.00	14.23	1524	6.40	1520	24700	6.80	17.47
	Lentil	0	5.70	4.52	0	4.70	3.48	6650	4.90	3.25
	Maize	2034	5.65	12.37	2375	6.50	15.37	24600	6.80	16.72
	Urd	0	4.10	16.44	0	3.10	12.27	40600	3.50	14.21
	Maize	7930	7.25	3.58	7400	8.00	3.01	3290	7.90	2.59
	Groundnut	2190	7.65	5.63	2365	7.15	4.97	6700	7.50	5.02
	Moong	0	3.60	0.78	0	2.75	0.54	2150	2.90	0.62
	Soybean	4010	8.85	4.78	3960	6.35	2.63	3350	6.80	2.27
	Til	0	1.85	0.57	0	2.05	0.90	4870	2.10	1.02
			4950			3770				
			7360			6960				
		2190			1990					
		5400			4150					
		3100			4410					

AES	Name of the Commodity	1998			2001			2006		
		A	Y	P	A	Y	P	A	Y	P
II	Wheat	41200	23.90	98.46	44360	25.90	114.8	40400	27.00	109.08
	Chickpea	32100	9.40	30.17	31310	8.45	26.45	28800	8.70	25.05
	Pea	29900	7.90	23.62	31760	6.90	21.91	32330	7.10	22.95
	Lentil	29750	6.30	18.74	27600	4.90	13.52	26700	5.40	14.41
	Maize	7760	6.45	5.00	8150	7.35	5.99	8750	7.90	6.91
	Urd	47600	4.32	20.56	49500	3.60	17.82	48000	3.70	17.76
	Maize	3300	7.50	22.47	2960	9.00	2.66	2400	9.50	2.28
	Groundnut	290	7.10	0.20	340	8.40	0.28	240	8.50	0.20
	Moong	2640	4.20	1.10	2160	2.95	0.64	1990	3.10	0.61
	Soybean	4460	6.70	2.98	3360	8.15	2.74	2620	8.40	2.20
	Til	1290	2.15	0.27	1742	2.35	0.40	3260	2.50	0.81

A -Area in '000' ha.

Y - Yield (Productivity) in Kgs./ha.

P -Production '000' mt.

Details on crops and cropping systems in the district Lalitpur (area in ha) (2006-07)

Season	Crops	AES-I			AES-II		
		Talbehet	Jakhaora	Bar	Mehraoni	Madawara	Birdha
Kharif	Urd	7440	19959	13235	16297	10547	21142
	Maize	5917	11015	7688	6071	1205	1478
	G. nut	5248	575	870	49	71	120
	Til	994	1778	2098	870	464	1926
Rabi	Wheat	17802	17860	16140	14022	9432	16989
	Pea	1826	11973	11589	12750	8178	10360
	Chickpea	1629	7556	3559	8159	8046	12621
	Lentil	247	3979	2479	7465	5836	13379

Farming systems in Bundelkhand has been largely influenced by the soil types, rainfall and irrigation factor and endurance against natural calamities like drought and rainfed conditions. The major strength to survive and better returns in Kharif season lie in cultivation of crops like Groundnut and Soybean which are cash crops in this region. Similarly in Rabi season wheat and Pea are important components of the system. However, the cultivation of Pulses and Oilseed like linseed are very much associated with the soil and climatic conditions and there are no better options with the farmers for these crops.

Live Stock is the backbone of the farming systems in the situations prevalent in Lalitpur and these are insurance against natural calamities, hazards and low productivity / return from crop enterprises.

Soil Erosion and Land Degradation :-

Soils in Lalitpur district have ridge to valley formation with slope grades ranging from less than 1% to as high as more than 10% Heavy soil erosion in the district has resulted into loss of fertile surface soils and formation of gullies and ravines. Soil conservation and watershed management programs need to be given priority in the district for raising productivity and income of the farming systems.

Temperatures and Relative Humidity :-

The summer in Lalitpur district begins by the middle of March when temperature is 33°C and it extends upto May or early June when maximum temperature is 42°C. However, maximum temperature of 47° to 49°C has been experienced in the year 98 - 99. The minimum (6.2°C) temperature is recorded in January. The maximum relative humidity occurs in July and minimum in May.

Rainfall Characteristics :-

Annual rainfall of the district varies between 867 to 1062 mm. The major portion of rainfall is received during month of July and August and some time in early September. Thus July, August and September are water surplus and remaining months are water deficient months. The distribution of rainfall is very erratic. Low rainfall and droughts are common features of the district. Some time long dry spells during rainy season are also experienced which adversely affect the crops as experienced from the comparison of rainfall during 1999 and 2000 [Total 1059 & 679 (June 6.4 & 206.9 , July 219.8 & 351.3 , Aug. 334.6 & 91 and in Sept. 498.3 & 29.1)] .

In district Lalitpur the maximum number of droughts are occurred in the month of September and that too in the later half of the month (3rd and 4th week). Thus drought condition in second half of September adversely affects standing Kharif crops and timely preparations and sowing for Rabi crops.

In the district annual rainfall partitioned into surface runoff (24.7%) and deep percolation (18.40%) is lost. 45.6% of the rainfall water is evaporated due to high temperature and only 9.45% of the annual rainfall is stored in the soil profile which is used for farming systems. It is surprising to note that less than 1% of rainfall water is stored in ponds and bundhies etc.

Irrigated Areas With Different Sources:-

S. No.	Description	Area
1.	Canal	55910
2.	Well	68447
3.	Tube well	12565
4.	Ponds	5592
5.	Others	45305
Total		187789

It is noticed that water table fluctuations are to the extent of 3.90 meters in Lalitpur In some Hydro graphical stations like Bar, the water table drops as low as 5.5 meters, thus there are wide fluctuations in the depth of water table recorded in pre and post monsoon periods.

Existing Cropping Patterns In District Lalitpur:-

Cropping Intensity	Net area sown (Lakh Ha.)	Crop season wise(% area sown)			Area sown more than once (%)
		Kharif	Rabi	Zaid	
156.08	255.221	170.05	223.87	4.427	86.323

Fertilizer Consumption (Kg/ha) in District Lalitpur in 2008:-

Description	N	P ₂ O ₅	K ₂ O	Total
Kharif	14.66	11.64	0.02	26.32
Rabi	22.58	23.68	0.57	46.83

It is evident from the above table that Ground Nut, Urd, Maize & Jowar Til & Soybean in Kharif & Wheat, Gram, Pea & Lentil in Rabi are important crops in district Lalitpur. The productivity figures show that Jowar, Groundnut, Soybean, Gram, Pea and Lentil received a set back during last year. Hence, efforts are being made to concentrate on these crops. Fertilizer consumption is also very low in the district.

Details of Operational area / Villages

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Mahrauni	Madawra	Chhiprauni	Wheat, Pea, Cattle & Goat	Low productivity	Improved varieties Animal health & care
2.	Mahrauni	Madawra	Garapadaria	Wheat, Gram, Urd & Vermi culture, Cattle & Goat	Low productivity	Dry farming an integrated approach Use of Bio-agents & Organic farming

3.	Mahrauni	Mahrauni	Khitvans	Lentil , Gram G.nut , Urd & Cattle &Goat	Low productivity	Dry farming an integrated approach Use of Bio-agents .
4.	Lalitpur	Birdha	Barkhera	Wheat, Gram, Lentil, Cattle &Goat	Low productivity	Dry farming an integrated approach Value addition Goat farming,
5.	Lalitpur	Birdha	Patuvar	Vegetables, Spices & Cattle, Fish	Low productivity	Watershed management Vegetable, Orchard Animal health & care
6.	Lalitpur	Birdha	PipariyaBansa	Wheat, Gram, Urd & Vermi culture, Cattle &Goat	Low productivity	Dry farming an integrated approach Use of Bio-agents & Organic farming
7.	Talbehat	Jakhaura	Sursi	Wheat, Gram, Vegetables,Cattle &Goat , Fish	Low productivity	Organic farming Composite fish culture Animal health & care
8.	Lalitpur	Birdha	Jeeraun	Wheat, Gram, Lentil, Cattle &Goat	Low productivity	Dry farming an integrated approach Value addition Goat farming
9.	Talbehat	Talbehat	Dhamna	Wheat, Pea, , Urd & , Cattle Cattle &Goat	Low productivity	Improved varieties culture Animal health & care
10.	Talbehat	Talbehat	Dhamna	Wheat, Pea, , Urd & , Cattle Cattle &Goat	Low productivity	Improved varieties culture Animal health & care

Priority thrust areas

Major Thrust areas of district Lalitpur based on PRA / Survey are as follows:

1. Seed replacement & Seed production
2. Soil health and fertility improvement
3. Watershed Management.
4. Fruit & Vegetable production
5. Composite fish culture.
6. Goat Farming
7. Value addition & Post harvest Technology

Farrukhabad

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	<p>Agriculture/Horticulture/Animal Husbandry: Farrukhabad is located in the western corner of Kanpur division of U.P. with a geographical area of 227050 ha. It is a part of <u>Central Plain Zone</u>. The Distt. has seven development blocks and important rivers are Ganga, Ram Ganga, Kali & Ishan. In the District 56% of the farmers have less than 0.5 ha of land and cumulatively about 78% possess less than 1.0 ha land. 14% of farmers have land between 1-2 ha and remaining 8% have more than 2.00 ha of land.</p> <p>Maize, potato, wheat, vegetables, mango & guava & sugar cane are the important crops. However, major area is covered by maize, potato & wheat crops. Buffalo occupies position number one in population of live stocks in the District followed by cattle & goat respectively. Buffalo population is increasing at the rate of 16 percent per annum against the figure of 10.1% of U.P. The population of cattle has shown a positive growth.</p>

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics	Agro ecological situation	Characteristics	
				Soil	Major enterprises
1.	Central Plain Zone	Irrigated farming Situation having alluvial soils.	AES-I	Loam	Maize, potato, wheat, vegetable, mango, Cows, buffaloes, goat, poultry etc.
			AES-II	Sandy loam	Maize, potato, wheat, summer-vegetable, mango, guava, Cows, buffaloes, goat, etc.
			AES-III	Clay loam	Rice, Wheat, Cows, buffaloes, goat, etc.

3. Soil types

S. No	Soil type	Characteristics/ Major Enterprises	Area (ha)
1.	Loam	Medium to course texture, low water holding capacity, deficient in organic carbon. pH = 7.8 – 8.3; Cultivable corps includes- Maize, potato, wheat, fodder, vegetable, mango, Cows, buffaloes, goat, etc.	148205
2.	Sandy loam	Course to very course texture, very poor in water holding capacity, deficient in nutrients and soil organic carbon. pH = 7.3 -- 7.8; Cultivable corps includes- Maize, potato, wheat, summer-vegetable, mango, guava, Cows, buffaloes, goat, etc	71112
3.	Clay loam	Fine to medium in texture, good water holding capacity, low to medium in soil organic carbon. pH = 8.5 –10.0; Cultivable corps includes- Rice, Wheat, Cows, buffaloes, goat, etc.	7733

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (MT)	Productivity (Q /ha)
1.	Wheat	74240	256054	34.49
2.	Barley	1696	5022	23.16
3.	Gram	1290	2200	17.05
4.	Pea	840	1530	18.21
5.	Lentil	1810	2570	14.20
6.	Mustard	9180	13168	14.34
7.	Paddy	14996	34408	22.76
8.	Maize	38723	55025	14.21
9.	Sorghum	2075	2156	10.39
10.	Pearl millet	3324	4125	12.41
11.	Urd	759	420	5.53
12.	Moong	114	45	3.98
13.	Pigeon pea	936	877	9.37
14.	Groundnut	109	79	7.25
15.	Til	981	165	1.68
16.	Potato	35000	7884	250.00

5. Weather data

Month	Rainfall (mm)	Temperature °C	
		Maximum	Minimum
October,2008	0.00	31.47	18.34
November,2008	0.00	23.93	12.96
December,2008	0.00	20.07	11.08
January,2009	0.00	23.84	5.38
February,2009	0.00	25.27	8.15
March,2009	0.00	30.09	15.22
April,2009	0.00	36.26	18.90
May,2009	0.00	38.72	23.21
June,2009	0.00	38.65	26.29
July,2009	92.80	36.11	27.68
August,2009	204.11	33.56	25.80
September,2009	102.11	33.31	24.83

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	10483	6-7.5 litre/day	N.A.
<i>Indigenous</i>	117672	1-2 litre/day	N.A.
Buffalo	226785	4-5 litre/day	N.A.
Sheep			
<i>Crossbred</i>	Nil	N.A.	N.A.
<i>Indigenous</i>	13353	N.A.	N.A.
Goats	151218	6-8 kg after 6 months	N.A.
Pigs			
<i>Crossbred</i>	510	80 kg after 6 months	N.A.
<i>Indigenous</i>	17962	30-35 kg after 6 months	N.A.
Rabbits	564	N.A.	N.A.

Poultry			
Hens	-	N.A.	N.A.
<i>Desi</i>	53591	N.A.	N.A.
<i>Improved</i>	-	N.A.	N.A.
Ducks	-	N.A.	N.A.
Turkey and others	-	N.A.	N.A.
Others			
Horse	1030	N.A.	N.A.
Dog	61584	N.A.	N.A.
Camel	8	N.A.	N.A.
Mules	3827	N.A.	N.A.

8. Priority thrust areas

Crop/Enterprise	Thrust area
Maize	Integrated Nutrient Management Weed management Conservation of soil and water
Paddy	Integrated Nutrient Management Weed management Integrated pest management Water management
Potato	Integrated Nutrient Management Integrated pest and disease management Varietal evaluation
Wheat	Varietal evaluation for timely late sown condition Integrated Nutrient Management Integrated weed management
Groundnut	Varietal evaluation Integrated pest and disease management Integrated Nutrient Management Crop diversification
Mung / Urd/ Pigeon pea	Varietal evaluation Integrated pest and disease management
Sunflower	Integrated Nutrient Management Water management
Vegetables	Varietal evaluation Integrated pest and disease management Water management Integrated Nutrient Management
Fruit plant	Crop diversification through agro-forestry Integrated pest and disease management Poor fruiting/bearing
Animals	Breed improvement Feed management Disease management
Usar land	Varietal evaluation Usar reclamation

7. Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Kayamganj	Nawabganj	Nawada	Maize, Rice, potato, wheat, Pearl millets, Moong, Urd, vegetable, Cows, buffaloes, goat, poultry etc.	Low productivity. Poor soil health. Waste land. Poor health of animals. Low milk yield in cow and buffaloes. Lack of awareness regarding scientific technologies.	Organic farming and nutrient management. Popularizing high yielding varieties/ technologies Intensive farming/ improvement in production/ productivity. Promotion of income generation activities. Awareness programmes.
2.	Kayamganj	Nawabganj	Arjun Nagla	Maize, Rice, wheat, moong, sunflower, groundnut, Vegetables. Mango. Guava, Dairy,	Low productivity of crops. Alternate bearing in mango.	Organic farming and nutrient management. Popularizing high yielding varieties/ technologies Intensive farming/ improvement in production/ productivity. Awareness programmes
3.	Sadar Farrukhabad	Mohammadabad	Ugarpur	Maize, Rice, wheat, Potato, Vegetables, Dairy,	Low productivity of crops. Poor health and income. Low milk yield in cow and buffaloes. Lack of awareness regarding scientific technologies.	Organic farming and nutrient management. Popularizing high yielding varieties/ technologies Intensive farming/ improvement in production/ productivity. Promotion of income generation activities and formation of SHGs. Awareness programmes
4.	Sadar Farrukhabad	Barpur	Janaiya	Maize, Rice, wheat, Sugarcane, Potato, Vegetables, Dairy,	Low productivity of crops. Poor soil health. Low milk yield in cow and buffaloes. Lack of awareness regarding scientific technologies.	Organic farming and nutrient management. Popularizing high yielding varieties/ technologies Intensive farming/ improvement in production/ productivity. Promotion of income generation activities and formation of SHGs. Awareness programmes
5.	Sadar Farrukhabad	Mohammadabad	Kanhau Yakootpur	Maize, potato, sunflower, moong, urd, mustard,	Low productivity of crops. Poor soil health. Low milk yield	Organic farming and nutrient management. Popularizing high yielding varieties/ technologies

				Vegetables, Dairy,	in cow and buffaloes. Pests and diseases in crops Lack of awareness regarding scientific technologies.	Intensive farming/ improvement in production/ productivity. Promotion of income generation activities and formation of SHGs. Awareness programmes
6.	Sadar Farrukhabad	Barpur	Nagla Jaitpur	Low productivity of crops. Poor soil health. Low milk yield in cow and buffaloes.	Low productivity of crops. Poor soil health. Lack of awareness regarding scientific technologies.	Organic farming and nutrient management. Popularizing high yielding varieties/ technologies Intensive farming/ improvement in production/ productivity. Promotion of income generation activities and formation of SHGs.

Hardoi

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Paddy - wheat, maize - wheat, maize - potato, rice - mustard, maize-potato- vegetable, groundnut – barley - vegetable are cropping sequence.
2.	Area expansion of sugar cane due to number of sugar mill increased
3.	Due to high level of solidarity in AES IV crop rotation with lentil, gram onion and maize are not followed.
4.	Bajara - wheat is associated with AES II and III and ground nut is shown as a important kharif crop but irregular rainfall and irrigation problems area under of groundnut cultivation is day by day decreasing.
5.	The resource rich farmers keep graded buffalo but poor people keep desi buffaloes and 5-6 goats.
6.	Fruit and agro forestry based farming systems are adopted largely by resource rich farmers and river bed farming system are operated big poor and landless farmers.
7.	Garlic, onion, vegetable pea for green pods and watermelon, cucumber and cucurbits are the component of farming system which provides highest net returns.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1.	Mid plain zone - IV	<ol style="list-style-type: none"> 1. Major crop production zone of U.P. 2. Cropping intensity - 142% 3. Climate - Moist, sub-humid and dry sub-humid Rainfall - 1211 - 1470 mm 4. Most of the area occurs in middle of Ganga and Yamuna river 5. Major crops - Wheat, rice, sugarcane, maize, potato, vegetable and pulses etc.

S. No	Agro-ecological situation	Characteristics
1.	AES-I	<ul style="list-style-type: none"> • Soil - Loam/Silty loam/ clay loam/siltyclay loam • 50% cultivated area located in AES-I • All of the major crops are cultivated in this situation. It is comprises ninth block of District HARDOI
2.	AES-II	<ul style="list-style-type: none"> • Soil - Sandy loam • About 45% cultivated area mostly occurred in AES-II and III • Major crops - Jowar, wheat, barley, groundnut, vegetable pea, mustard and sunflower. • It is comprises seven block and area 24%

3.	AES-III	<ul style="list-style-type: none"> Loam sand Major crop - Arhar, jwar, bajara, urd, sunflower, pea, potato, vegetable pea etc. It is comprises only two block of the district and area under this AES 19%
4.	AES-IV	<ul style="list-style-type: none"> Soil sodic (2.99%) and waste land (3.71%) Major crop - rice, wheat, gram, berseem, mustard, jwar Number of block three and some others

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1.	Sandy loam	Light gray to light brownish gray, neutral to mildly, alkaline, fair water holding capacity and fertilizer responsive	103492
2.	Loam	Light gray to light greenish, sandy loam to loam calcareous, impregnate with big kankars. Good water holding capacity and nitrogen responsive.	95530
3.	Low land and clay loam	Brownish gray to gray white, very strongly alkaline, water soluble salt pre-dominated, poor in organic matter and nitrogen & zinc water table. Fertilizer responsive only water reclamation.	199022

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1.	Rice	147130	34553700	23.48
2.	Wheat	312973	82188600	26.26
3.	Maize	46920	8204300	17.49
4.	Jowar	9371	898400	9.59
5.	Bajra	4328	464300	10.73
6.	Barley	3082	491300	15.94
7.	Urd/Mung	22986	13062	12.42
8.	Ground nut	5244	617700	11.78
9.	Arhar	2427	183700	7.57
10.	Til	10707	250500	2.34
11.	Sunflower	924	181600	19.65
12.	Mushroom	12579	1963000	7.29
13.	Sugercane	25856	130510700	504.76
14.	Potato	9835	19868700	202.02
15.	Gram	1521	142800	9.39
16.	Pea	1180	106800	9.05
17.	Total Oilseed	29475	3013700	6.66
18.	Total pulses	41806	2799000	6.7
19.	Total cereals	565653	126800900	22.91

Horticulture				
1.	Onion	621	-	-
2.	Vegetable	16371	-	-
3.	Mango	6599	17810	2.69
4.	Guava	341	3571	10.47
5.	Papaya	3	66	22
6.	Garlic	115	461	0.61
7.	Cucumber	450	-	-

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
May 2008	19.5	37.03	28.96	57.71
June 2008	293	36.23	28.76	84.89
July 2008	106.2	34.96	28.64	84.89
August 2008	225	33.25	28.35	84.89
Sept. 2008	99.5	35.86	27.86	84.34

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	571519	-	-
<i>Indigenous</i>	529988	-	-
Buffalo	391740	-	-
Sheep	60615	-	-
Goats	327230	-	-
Pigs	48325	-	-
Poultry	131092	-	-
Fisheries	-	2950 kg/ha.	-

7. Details of Operational area / Villages (2008-09)

S. N.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
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1.	Hardoi	Sursa	Kashrawan, Brirahimpur, Saraiya, Malih amau, Bhadaicha, Semra, Bahadurpur, ,	Rice, Wheat, Mustard, Bhindi, Gram, Pea,	Lack of improved variety /HYV, improper use of fertilizer, no seed treatment	Need to emphasize HYV of different crops
2.	Hardoi	Bawan	Bawan, Barkhera Jagdishpur, Khetui, Sadhai Behta	Wheat, Gram, Colocasia, Tomato,	Lack of improved variety /HYV, improper use of fertilizer,	Need to emphasize HYV of different crops, imbalance use of fertilizer, lack of knowledge, no seed treatment
3.	Ahirori	Ahirori	Kheraili, Lalpur, Belaha, Rudali	Urd, Moong, Mustard, Pea, Gram	Lack of improved variety /HYV, improper use of fertilizer,	Need to emphasize HYV of different crops, imbalance use of fertilizer, lack of knowledge, no seed treatment
4.	Bilgram	Bilgram, Tadiyanw a	Ganipur Gadarianpurva, Sadila, Dhabha, Kundarauli ,	Mustard, Pea, Maize	Lack of improved variety /HYV, improper use of fertilizer,	Need to emphasize HYV of different crops, imbalance use of fertilizer, lack of knowledge, no seed treatment
5.	Sandila, Shahabad	Behandar, Kachhuna, Shahabad	Dahimpur, Behlolepur, Gaushganj, Udharanpur, Suhagpur	Pea, Wheat, Gram, Cucumber	Lack of improved variety /HYV, improper use of fertilizer,	Need to emphasize HYV of different crops, imbalance use of fertilizer, lack of knowledge, no seed treatment

8. Priority thrust areas

S.No	Thrust area
1.	Lack of awareness or access to information on the part of the farmers.
2.	Need to emphasize balance use of fertilizer.
3.	Need to diversification in agriculture for enhancing the economy of district.
4.	To emphasize on quality productive of major crop with high yielding variety.
5.	Popularization of Kharif onion, Zaid Groundnut & Garlic cultivation.
6.	Need to improve variety/other Agri. Practices for cucumber & cucurbits in both season crops.
7.	Improve the productivity of partially sodic land.
8.	Need to be empowerment of farm-women for increasing their economic status.
9.	Low milk production.

10.	To emphasize integrated fish farming & their management.
11.	To improve the farming system with recent modeless technologies.
12.	For creation of self-employment of rural youths, mushroom, cultivation, poultry farming, bee keeping, sericulture & Nursery management.
13.	Popularization of medicinal & Aromatic plants.
14.	Need to developed sugarcane based farming system.
15.	Need to emphasize on quality seed production.

Banda

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise	
	Paddy-wheat	
1.	Jwar + Pigeon pea	Desi Cow, Goat
2.	Fallow – Gram + Linseed Fallow - Gram	Deshi Buffalo, Deshi Cow, Goat
3.	Fallow – Lentil	Deshi Buffalow, Deshi Cow
4.	Fallow–Wheat (Rainfed)	Deshi Buffalo, Deshi Cow, Goat
5.	Paddy - Wheat (Irrigated)	Deshi Buffalow, Deshi Cow

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	VI	Arid climate

S. No	Agro-climatic Zone	Characteristics
1	Plain	Arid climate
2	Kabar, Mar Soil	Fertile Soil Heavy Soil
3	Degraded	Up and Low Soil

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1	Rakar	Heavy Coarse Soil	64670
2	Paduwa	Sandy Loam	142480
3	Mar	Loamy Soil	78600
4	Kabar	Light Soil	62509

4. Area, Production and Productivity of major crops cultivated in the district

S.No.	Crop	Area (ha)	Production (q)	Productivity q/ha
1.	Arhar	17481	177120	10.13
2.	Urd	4748	1186	2.48
3.	Maize	17	94000	14.12
4.	Mung	2033	5300	2.61
5.	Groundnut	1298	6490	4.81
6.	Jowar	26677	19708	7.39
7.	Paddy	57838	511129	8.84
8.	Seseme	170	209	1.78
9.	Bajra	2005	16400	8.18
10.	Soybean	208	1660	9.76
11.	Lentil	47250	1015	4.45
12.	Gram	104656	662463	6.33
13.	Wheat	127107	183347	14.02

14.	Barley	1222	10650	8.72
15.	Potato	53	-	-
16.	Onion	79	-	-
17.	Pea	1807	925	5.12
18.	Mustard	1835	6610	3.6
19.	Linseed	2165	1065	4.45

5. **Weather data:** Not available

6. **Production and productivity of livestock, Poultry, Fisheries etc. in the district**

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	800	-	-
<i>Indigenous</i>	38598	-	-
Buffalo	232638	-	-
Sheep			
<i>Crossbred</i>	0	-	-
<i>Indigenous</i>	12491	-	-
Goats	151273	-	-
Pigs			
<i>Crossbred</i>	240	-	-
<i>Indigenous</i>	17647	-	-
Rabbits			
Poultry	44658	-	-
Hens		-	-
Desi		-	-
Improved		-	-
Ducks	1169	-	-
Turkey and others		-	-

7. **Details of Operational area / Villages**

Sl.No	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Banda	Kamasin	Kharauli (Rainfed)	Arhar, Gram, Lentill, Wheat	Unavailability of improved variety seed & Irrigation water	Water & Moisture, Conservation Technique, Introduction of production technique for production.
2	Banda	Baberu	Pakharauli	Paddy Arhar, Gram Wheat	Unavailability of seed.	Innovation of package of practices of oil seed.
3	Banda	Baberu	Palhari	Jowar, Wheat, Gram	Unavailability of water, degraded land	Innovation of agro forestry system on ravine and degraded soil

4.	Banda	Baberu	Bhadehadu	Paddy, Wheat, Mustard	Unavailability of seed Technical know how	Diversification in agriculture for enhancing the total production of village
5.	Banda	Kamasin	Kumedha	Pigeon-pea, Til, Wheat, Linseed	Unavailability of quality seed and technology	Enhanced the seed production of high yielding varieties through 'seed plot technique'
6.	Banda	Baberu	Achhah	Paddy, Wheat	Unavailability of quality seed and technology	Popularization of organic farming & Late sown variety of wheat.
7.	Banda	Baberu	ParaBannu - Begam	Paddy Jowar, Gram, Lentil Wheat	Unavailability of quality seed and technology	Popularization of micro irrigation system, Enhancement of pulse crop production.
8.	Banda	Kamasin	Kamasin	Paddy, Wheat	Unavailability of Seed Technical know how	Diversification in agriculture for enhancing the total production of village

8. Priority thrust areas

1. Enhance seed production of high yielding varieties through "Seed Field Technique" specially in pulses for rainfed conditions.
2. Emphasis upon cropping system with the consideration of water deficit.
3. Improve the productivity of cereal and pulses in dry land condition.
4. Enhance the hybrid bazara production and Til production.
5. Improve the productivity of paddy through hybrid rice production by SRI method.
6. Popularization of sprinkler and drip irrigation system in pulse, fruit and vegetable crops.
7. Popularization of "Nutritional Kitchen Garden" for Nutritional security.
8. Enhancement of production to control of pod borer.
9. Popularization of soil testing for use of balance dose of fertilizer.
10. Popularization of soil and water conservation technique.
11. Management of revenous land through watershed basis and its utilization through incorporation of Agroforestry and Agrihorticultural system.
12. Introduction of medicinal and other income generating Important plants under degraded and revenous land.

Mahamaya Nagar

Location:

Mahamaya Nagar (erstwhile Hathras) district situated in south western semi-arid eco-system (zone - IV) of U.P. It is located at Latitude of 27⁰-29.11⁰ North and longitude of 77.29⁰ - 78.26⁰ East and is about 179.8 meter above mean sea level. District Hathras is surrounded by Aligarh in North, Agra in South, Kanshiram Nagar in East and in west by Mathura. There are 4 sub divisions and seven development blocks in district. The total geographical area of the district is 178968 ha; out of which net sown area is 145636 hectares. The area under irrigation is 144393 hectares. The cropping intensity is around 170 per cent.

District enjoys moderate climate through out the year. It is characterized by hot summer, cold winter and moderate rainy season. The annual rainfall is about 656 mm.

The soil of the district Hathras is alluvial soils. These soils characterized by their depth and a gray or grayish brown color. Their texture varies from sandy, sandy loam to clay loam. Structure is also variable, being loose, open and free draining in case of sandy soils and compact imperious in case of the clayey soils. In general the whole area is an indo gangetic plain with a gentle slope from North-West to South-East. Significant area of district is alkaline also. Hence, the coverage, intensity and patterns of crops and farming systems are different from one area to another area. Jowar, Bajra, Maize, Cotton, Paddy, Arhar and Moong are major crops during kharif, while Wheat, Mustard field pea and potato are commonly grown in rabi season. Cotton and Sugarcane (with small area) are major cash crops of the district. Summer Bajra have been introduced recently and now the area under the crop increased markedly. The small and marginal farmers are growing vegetable like cucurbits, Brinjal and onion. Guava, mango, aonla and Ber are main fruit crops of the area.

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Farming system analysis is to be done

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics	Agro ecological situation	Characteristics
1.	South west Gangetic region (semi-arid to tropical)	Hot summer upto 47-48 ⁰ C in June, cold winter upto 2.2 ⁰ C in January and moderate rain fall. (656mm)	AES-1	Shallow soils, Sandy loam soil, irrigated, problem of brakish water irrigated with canal and tube well, rice and rose is also grown.
			AES-2	Deep soil sandy in texture poor in fertility irrigated with canal tube

				well, Bajra and Maize in Kharif and Wheat in Rabi is grown.
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3. Soil types

S. No	Soil type	Characteristics	Area in ha
1	Sandy	<ul style="list-style-type: none"> Poor water holding capacity Shallow soil depth Poor fertility Lacking organic carbon contents. Well drained 	68647
2	Sandy Loam	<ul style="list-style-type: none"> Poor in drainage Good water holding capacity. Problem of salinity. Good soil depth. Well fertile. 	76989

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (000ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Rice	11.098	21.63	19.49
2	Wheat	82.59	253.98	30.76
3	Maize	3.626	6.66	18.39
4	Bajra	47.052	69.44	14.76
5	Urd	167	0.9	5.39
6	Moong	146	.54	3.70
7	Arhar	5630	54.74	9.72
8	Cotton	1.448	18.21	1.37
9	Mustard	13.875	14.15	10.21
10	Barley	4.314	11.48	26.54
11	Potato	38.59	9598	249

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
Annual Average	656 mm	35	12	30

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	2274	Not available	Not available
<i>Indigenous</i>	20718		
Buffalo	148678		
Sheep			
<i>Crossbred</i>	-		
<i>Indigenous</i>	10687		
Goats	103920		
Pigs	-		
<i>Crossbred</i>	13676		
<i>Indigenous</i>	4651		
Rabbits			

Poultry			
Hens	-		
<i>Desi</i>	46295		
<i>Improved</i>	-		
Ducks	-		
Turkey and others	-		

Category	Area	Production	Productivity
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

7. Details of Operational area / Villages (2009-10)

S.N	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Hathras	Hasayan	Mitanpur	Rice, Wheat, Mustard Bajra, Arhar, Rose	Poor productivity of wheat and rice.	-Poor productivity of food grains. -Popularization of hybrid Bajra, Maize and Rice cultivation. -Increasing productivity of pulses and oil seeds. -Soil and water management. - I.N.M. - I.P.M.
2	Sasni	Sasni	Kateliya	Rice, Wheat, Mustard Bajra, Arhar, Rose	Poor productivity of wheat and rice.	-Poor productivity of food grains. -Popularization of hybrid Bajra, Maize and Rice cultivation. -Increasing productivity of pulses and oil seeds. -Soil and water management. - I.N.M. - I.P.M.
3	S. Rao	Sasni	Salempur	Rice, Wheat, Mustard Bajra, Arhar, Rose	Poor productivity of wheat and rice.	-Poor productivity of food grains. -Popularization of hybrid Bajra, Maize and Rice cultivation. -Increasing productivity of pulses and oil seeds. -Soil and water management. - I.N.M. - I.P.M.

8. Priority thrust areas

S. No	Thrust area
1	- Poor productivity of food grains.

2	- Popularization of hybrid Bajra, Maize and Rice cultivation.
3	- Increasing productivity of pulses and oil seeds.
4	- Soil and water management.
5	- I.N.M.
6	- I.P.M.
	- Training of school drop out for self employment in Agri-business.

Bahraich

1. Major farming system/enterprise (based on the analysis made by the KVK)

S. No.	Farming system/ enterprises	
1.	Agriculture :	
	1. Paddy-Wheat /Lentil / maize / mustard	
	2. Maize-lentil/ Wheat/ Mustard	
	3. Paddy/Maize/Pigeon pea- Wheat/lentil/Mustard	
	4. Ground Nut-Lentil	
	5. Sesamum-wheat	
2.	Agriculture + Animal Husbandry (As above)	
	1. Dairy	
	2. Dairy/Poultry or both	
	3. Fishfarming + Dairy	
3.	Horticulture :	
	1. Tomato/ Pea/ Cauliflower/Chilli/ Brinjal/ Onion +Ginger/ Turmeric/Pointed gourd/ Bitter gourd	
	2. Banana-Wheat	
	3. Mango +Turmeric	
	4. Mango+ Elephant Foot Yam	
4.	Agriculture + Horticulture	
	1.Paddy/ Maize + Pigeon pea-Wheat/ Vegetable/ Mustard	
	2. Paddy -Wheat/ Lentil- Maize/ Urd/ Mentha	

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Agro-climatic Zone	Characteristics	
4 th North Agro-climatic Zone	Area:	5,21,903 Ha
	Tehsils:	4: Kaisarganj, Mahsi, Nanpara and Bahraich Sadar
	Blocks:	14-Kaisarganj, Mahsi, Balha, Risia, Huzoorpur, Nawabganj, Mihinpurwa, Payagpur, Visesharganj, Tejwapur, Fakarpur, Jarwal, Shivepur and Chittaura
	Climate:	District's annual rainfall is nearly to national average rainfall of 1200mm. District receives 882 mm annual rainfall during the year. Temperature ranges 4 ^o C in winter to 42 ^o C in summer.
	Soil:	The soil of Bahraich is new, generally deep except few pockets in the tarai belt of Nepal border. In general, three types of soil exist. Sandy in the belt of Ghagra river. Sandy-loam in the middle, and Loam in few pockets. Soil is poorly managed and deficient in nutrients such as zinc. Sulphur and boron etc. It lacks in organic matter and generally has slightly higher P ^H value.
2 District Profile Data		
Area		5,21,903
Population		20,90,843
Male		11,35,543
Female		9,55,300
Ratio of male to female		54:46
Population density		392 Person/Sqm Km

Rural population	19,00,479
Urban population	1,90,364
Literacy (Total)	5,40,069
1. Male	4,33,163
2. Female	1,06,906
No. of farmers	6,64,124
Agricultural labourers	1,35,693
Net cultivated area	3,50,979
Net irrigated area	63,677 Ha
Total irrigated area	67,131 Ha
Total production (cereal)	7,59,885 MT
Annual rainfall	882 mm
No. of villages	1369
No. of villages covered by K.V.K. so far	260

S. No.	Agro ecological situation	Characteristics																																				
AES-1	Tarai Sandy-loam	<p>The belt lies beneath of Nepal border, High humidity and rainfall are prevalent. Rainfed crops are generally grown. The yield of the crop is very poor. Soil is deficient in many of the nutrients. Crop production, Vegetable production, Fodder production, and dairy are main farming system existing among the farmers. It is found in Mihinpurva block.</p> <table border="1"> <thead> <tr> <th>Crop</th> <th>Fodder</th> <th>Vegetable</th> <th>Dairy</th> </tr> </thead> <tbody> <tr> <td>Paddy</td> <td>Jowar</td> <td>Tomato</td> <td>Cow –(Jersey)</td> </tr> <tr> <td>Wheat</td> <td>Chari</td> <td>Brinjal</td> <td>Buffalo (Murrah)</td> </tr> <tr> <td>Arhar</td> <td>Berseem</td> <td>Ladiesfinger</td> <td>Poultry- improved</td> </tr> <tr> <td>Maize</td> <td></td> <td>Onion</td> <td>Goatry- (Barbery)</td> </tr> <tr> <td>Gram</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pea</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rai</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Lentil</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Crop	Fodder	Vegetable	Dairy	Paddy	Jowar	Tomato	Cow –(Jersey)	Wheat	Chari	Brinjal	Buffalo (Murrah)	Arhar	Berseem	Ladiesfinger	Poultry- improved	Maize		Onion	Goatry- (Barbery)	Gram				Pea				Rai				Lentil			
Crop	Fodder	Vegetable	Dairy																																			
Paddy	Jowar	Tomato	Cow –(Jersey)																																			
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AES-2	Tarai Clay-loam	<p>The area under this situation is mainly rainfed. It covers Mihinpurva and Kaiserganj block of the distt. Farmers grow almost all types of crop as grown in AES-1 but productivity is slightly higher. People reared desi breed of cow, buffalo, goat and poultry. Piggery in few of the pockets.</p> <table border="1"> <thead> <tr> <th>Crop</th> <th>Vegetable</th> <th>Fodder</th> <th>Dairy</th> </tr> </thead> <tbody> <tr> <td>Paddy</td> <td>Tomato</td> <td>Bajra</td> <td>Cow Jersey/Desi</td> </tr> <tr> <td>Wheat</td> <td>Potato</td> <td>Jowar</td> <td>Buffalo Murrah/Desi</td> </tr> <tr> <td>Arhar</td> <td>Cauliflower</td> <td>Chari</td> <td>Goatry-barbery/Desi</td> </tr> <tr> <td>Gram</td> <td>Radish</td> <td>Berseem</td> <td>Poultry-improved</td> </tr> <tr> <td>Pea</td> <td>Chilli</td> <td></td> <td></td> </tr> <tr> <td>Rai</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Lentil</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Crop	Vegetable	Fodder	Dairy	Paddy	Tomato	Bajra	Cow Jersey/Desi	Wheat	Potato	Jowar	Buffalo Murrah/Desi	Arhar	Cauliflower	Chari	Goatry-barbery/Desi	Gram	Radish	Berseem	Poultry-improved	Pea	Chilli			Rai				Lentil							
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AES-3	Plain Sandy-loam	<p>Major portion of the area falls under this category. The soil is light textured. Crop are grown with limited resource condition. Major portion is under Nawabganj between the Doab of Rapti and Ghaghra river. From</p>																																				

		<p>agricultural point of view, following crops and enterprises are practiced :</p> <table border="1"> <thead> <tr> <th>Crop</th> <th>Fodder</th> <th>Vegetable</th> <th>Dairy</th> </tr> </thead> <tbody> <tr> <td>Paddy</td> <td>Jowar</td> <td>Tomato</td> <td>Cow Jercy/Desi</td> </tr> <tr> <td>Wheat</td> <td>Chari</td> <td>Brinjal</td> <td>Buffalo Murrah/Desi</td> </tr> <tr> <td>Arhar</td> <td>Berseem</td> <td>Potato</td> <td>Goat- improved/Desi</td> </tr> <tr> <td>Gram</td> <td></td> <td>Cabbage</td> <td></td> </tr> <tr> <td>Pea</td> <td></td> <td>Cauliflower</td> <td></td> </tr> <tr> <td>Lentil</td> <td></td> <td>Ladies finger</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Chilli</td> <td></td> </tr> </tbody> </table> <p>Some other enterprises are also practiced such as black smithy, carpentry, chatai making, weaving, etc. High yielding variety of above crop are needed to be introduced.</p>	Crop	Fodder	Vegetable	Dairy	Paddy	Jowar	Tomato	Cow Jercy/Desi	Wheat	Chari	Brinjal	Buffalo Murrah/Desi	Arhar	Berseem	Potato	Goat- improved/Desi	Gram		Cabbage		Pea		Cauliflower		Lentil		Ladies finger				Chilli	
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Gram		Cabbage																																
Pea		Cauliflower																																
Lentil		Ladies finger																																
		Chilli																																
AES-4	Plain Sandy-loam (flood prone)	Major area under this situation falls in the block Sheopur, Mahsi and along the belt of Ghaghra river in the block of Fakharpur, Kaiserganj and Jarwal. Most of the area is sensitive to flood and some times is submerged two to three times in a season. Crops are damaged due to prolonged water logging. Farmers grow mixed cropping of Paddy, Maize, Sunhemp because these crops are highly risk prone. Productivity is very low. Farmers harvest as per mercy of nature. Some new variety of rice under flood situation are needed to be introduced. There is very high scope for Parwal and hybrid tomato crop cultivation.																																
AES-5	Plain Sandy-loam (irrigated)	Major area of plain lies in the block Chitaura, Mahsi, Tejwapur, Fakharpur, Kaiserganj and some area in Jarwal. This is important area, irrigation facilities are plenty, almost all crops are grown but productivity is poor. Soil is deficient in micro-nutrients. Milk yield is low. Improved breeds of animal and high yielding varieties are needed to be introduced in this situation.																																
AES-6	Plain Sandy-loam (rainfed)	The situation is found in the block of Risia. Area is needed introduction of rainfed improved crops. Some area is highly degraded and looks like a ravine land which needs development through soil conservation work, biological as well as mechanical measures. Introduction of high yielding varieties of cereal, vegetable and fruit are needed to be emphasized.																																

3. Soil type/s

S. No.	Soil type	Characteristics	Area in ha
1.	Tarai Sandy-loam (rain fed)	High humidity and rainfall are prevalent. Rainfed crops are generally grown. Soil is deficient in many nutrients.	120037
2.	Tarai Clay-loam (rain fed)	The area under this situation is mainly rainfed. Farmers grow all types of crops in AES-1, but productivity is slightly higher. People rear Deshi breed of cows, buffaloes, goat, poultry and piggery.	130475
3.	Plain Sandy-loam (rain fed)	Soil is light textured. Crops are grown with limited resource condition. Major portion falls under Nawabganj between the Doab of Rapti and Ghaghra.	123272
4.	Plain Sandy-loam (flood prone)	Major area under this situation falls in blocks like Sheopur, Fakharpur, Kaiserganj, Jarwal & Mahasi along with the river belt of Ghaghra river. In the block of Fakharpur, Kaiserganj and Jarwal, most of the area is sensitive to flood and some times submerged two or three times in a season. Crops are damaged due to prolonged water logging. Farmer raised mixed crops of Paddy, Maize, Sunhemp, because these crops are	44362

		highly risk prone, productivity is very low. There is vast potential for production of pointed gourd and Hybrid Tomato.	
5.	Plain Sandy-loam (irrigated)	Major area of plain lies in block Chittaura, Mahasi, Tejwapur, Fakherpur & Kaiserganj. This is important area. Irrigation facilities are plenty. Almost all crops are grown but productivity is poor. Soil is deficient in micro nutrients.	46971
6.	Plain-loam (rainfed)	This is mainly situated in Risia block. Area is needed introduction of rainfed improve crops. Soil is highly degraded.	52686

4. Area, Production and Productivity of major crops cultivated in the district

S. No.	Crop	Area (ha)	Production (qtl)	Productivity (q/ha)
1.	Rice	162685	307154	18.88
2.	Maize	8844	100680	11.38
3.	Urd	1229	810	6.59
4.	Moong	46	20	4.35
5.	Pigeon pea	4369	3416	7.82
6.	Ground nut	2196	1587	7.23
7.	Sesamum	450	87	1.93
8.	Wheat	155331	374776	24.41
9.	Chick pea	260	235	9.05
10.	Lentil	47832	31665	6.62
11.	Pea (Round)	1558	1818	11.66
12.	Toria	6932	6626	9.5
13.	Sugar cane	855360	42830086	500.72
14.	Potato	2135	47193	224.82
15.	Turmeric	625	1077	36.77

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)		Number of rainy days
		Maximum	Minimum	Max.	Mini.	
October, 2008	0.0	32.6	19.2	92.9	64.4	-
November, 2008	0.0	29.2	14.6	88.5	57.5	-
December, 2008	0.0	22.6	11.8	84.3	52.4	-
January, 2009	0.0	24.1	6.3	96.9	53.1	-
February, 2009	36.0	25.3	10.2	98.8	60.1	2
March, 2009	0.0	30.9	10.8	92.1	50.1	-
April, 2009	93.5	38.1	19.3	71.4	27.8	7

May, 2009	81.0	40.0	21.1	65.0	32.6	6
June, 2009	80.5	41.4	24.7	80.7	48.4	12
July, 2009	148.00	34.2	24.1	88.4	61.8	18
August, 2009	305.6	34.3	24.5	89.0	56.3	13
September, 2009	246.8	36.3	22.6	94.2	63.3	11
Total / Mean	991.4	32.42	17.43	86.85	52.32	69

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district :

Category	Population	Production	Productivity
Cattle			
Crossbred	3185	19110 lit.	6 lit/day
Indigenous	468449	936898 lit.	2 lit/day
Buffalo	296972	55024 lit.	4 lit/day
Sheep	13756	2751.2 kg.	0.2000 kg.
Crossbred	1910	573.0 kg.	0.3000 kg.
Indigenous	11846	11.84 kg.	1000 gm.
Goats	438552	6578.78 lit.	0.150 lit.
Pigs	43458	13637.4 kg.	0.30 kg.
Crossbred	4710	1884 kg.	0.40 kg.
Indigenous	38748	8687 kg.	0.25 kg.
Rabbits	-	-	-
Poultry	221431	221431 kg.	1.0 kg.
Hens	208279	208279 kg.	1.0 kg.
Desi	-	-	-
Improved	-	-	-
Ducks	13152	1352	1.0 kg.
Turkey and others	-	-	-
Fish	744.23 ha	161.00 Qt.	0.216 q/ha
Marine	-	-	-
Inland	-	-	-
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

7. Details of operational area/ Villages

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Area
1.	-	Chittaura	Bahadrapur	Rice, Wheat, Mentha, Brinjal, Bittergourd, Tomato, Chilli, Pigion pea, Maize	Low productivity of Rice, Wheat, Brinjal, Bittergourd, Tomato, Pigeon pea -due to old & local varieties and -due to attack of insect and pest, imbalance use of fertilizers. No used sulphur in pulses.	Seed production : Rice, Wheat, Pigeon pea, Lentil Vegetable production : Tomato, Chilli, Brinjal Aromatic plant production : Mentha
			Raipur	-do-	-do-	-do-
2.	-	Jarwal	Adampur	Wheat, Maize, Toria, Tomato, Brinjal, Chilli, Garlic, Pigion pea, Banana	Low productivity of Wheat -due to delayed sowing - High weed infestation - Lack of high yielding var. -High moisture after rice harvest -due to use of old & local varieties -due to attack of insect pest & disease -Low yield of Toria due to old & local varieties, and no used sulphur. Low yield of pulses. -due to old & local varieties - due to attack of insect and disease -due to no use of sulphur	Seed production : Wheat, Toria & Pigeon pea Vegetable production : Tomato, Brinjal Spice production : Chilli, Garlic Fruit production : Banana etc.
3.	-	Mihipurwa	Harkhapur & Prithvipurwa	Sesamum, Chick pea, Wheat-Rice, Lentil, Pigeon pea, ginger	Low productivity of Sesamum due to use old & local varieties -no use of sulphur -attack of insects. -Low productivity of pulses. due to attack old & local varieties, due to attack of pod borer.	Seed Production : Sesamum, Chick pea, Wheat, Lentil, Pigeon pea
4.	-	Mahsi	Asmanpur	Cereals : Rice, Wheat, Maize Cash crop : Sugarcane Vegetables : Tomato, Brinjal Spices : Ginger, Turmeric Chilli	Low productivity of cereals due to old and local varieties Low productivity of vegetable & spices -due to use of old & local varieties -due to attack of insect & pests -Imbalance use of fertilizers	Seed Production : Wheat-rice & Sugarcane
5.	-	Tejwapur	Basantpur	Cereals : Wheat , Rice, Maize Pulses : Lentil and Pigeon pea Oil seeds : Toria Vegetables : Cowli flower, Tomato, Brinjal Cash crop : Sugarcane ,	Low productivity of cereals due to use of old and local varieties, Low productivity of pulses & oilseeds due to use of old and local varieties -attack of insect & pest -No use of sulphur in oil seed and pulses. Low productivity of poultry	Seed production : Wheat, Rice Cereals production : Rice, Wheat, Maize Vegetable production : Cauliflower, Tomato, Brinjal, Potato Animal Science : Poultry Dairy Fruit production and

				Potato Poultry, Bee keeping, Dairy, Fruit & vegetable preservation.	-due to old breed. -attack of disease. -imbalance feeding Low productivity of Dairy due to indigenous breeds -imbalance feeding. -attack of disease. -sterility. Low productivity of vegetables: due to old & local varieties attack of insect & disease Low productivity & Banana due to attack insect & old varieties. No vegetable & fruit preservation due to lack of know preservation skills. In low land area : Low production of Wheat, due to prolonged high moisture content.	preservation : Mango, Litchi, Banana Organic manure : NADEP, CPP Vermi compost Income generation activities for rural women: fruit and vegetable preservation.
6.	-	Nababganj	Shivdash gaon	Rice, Wheat	Low yield of Wheat due to prolonged high moisture content in Paddy fields & late sowing of Wheat. Low yield of Rice due to old & local varieties & attack of insects and disease	Seed production : Rice & Wheat Resource Conservation : Wheat IPM in Rice
			Salarpur Lakshma npur	Pointed gourd, Ginger, Turmeric, Bitter gourd.	Low yield of pointed gourd, Ginger, Termeric & bitter gourd due to use of old & local varieties. No use of Machan in pointed gourd & Bitter gourd Low yield of Mentha due to use of old & local varieties	Vegetable production : Pointed gourd Spice production : Turmeric & Ginger Aromatic plant : Mentha production
7.	-	Chhtaura	Begampur	Rice, Wheat, Pointed gourd, Potato, Bitter gourd, Pigeon pea, Sugarcane, Dairy	Low yield of cereals vegetables & cash crops -due to old & local varieties Low yield of vegetables & Pigeon pea -due to attack of insect of pest. Low yield of milk due to local breeds	Foodgrain production : Rice, Wheat etc. Vegetable production : Pointed gourd, Bitter gourd Cash crops : Potato & Sugarcane Dairy : Cattle farming

8. Priority thrust areas :

Crop/Enterprise	Thrust Area
Seed production Oil Seeds: Pulses: Cereals: Vegetables:	Narendra Early Rai-4, Groundnut : Amber and Til: Sekhar-1 Pigeon Pea : NA-1,2, Lentil: NL-1,2 Urdbean: NU-1,2, Green Gram: NM-1 Paddy:NDR-97, NDR-359, Maize: Hybrid shaktiman-1,Wheat:NDW-1012, 1014, PBW-343 Okra, Chilli, Tomato, Cauliflower, Onion, Ginger, Turmeric, Garlic ,Bitter gourd etc.
Transfer of Technology	- Zero tillage and Raised bed planting techniques. - Nursery establishment of fruit and agro-forestry plant - Food grain storage techniques.

	<ul style="list-style-type: none"> -Establishment of Animal clinic through DASP Trained Para-Vet - Organic farming by producing organic manure such as NADEP, CPP & Vermi Compost - IPM Techniques to control pest and disease in organic crops and fruit trees
Animal Science	Trainings on-Fodder production, Balance feed preparation, deworming vaccination etc.
Home Science	Health and hygiene, establishment of domestic viable production unit of fruit and vegetable preservation by value addition., garment design and local resource utilization making valuable product.

Ballia

The district Ballia has a total reported area 299265 ha. out of which 215498 ha, (72%) is net sown area, 42989 ha. (14.36%) under land utilized other than agriculture, 22419 ha. (7.49%) current and other fallow, 1248 ha. (0.4%) cultivable waste land and 5792 ha. (1.94%) only under orchard, tree and shrubs with least forest land. The land under cultivable waste land, current and other fallow, usar and uncultivable lands contributes about 13.58 per cent of total reported area is task for KVK to bring land under cultivation in coming future.

Total net sown area covers by 74.99, 83.33 and 3.0 per cent area in Kharif, Rabi and Zaid crops, respectively with 79.58 per cent irrigated area needs attention to increase the cropped area especially in zaid. The total 171485 ha. (79.58%) of net sown area are irrigated, out of which major area (76.42%) irrigated with private tube well under sure irrigation which is more potential for diversification

Category	Average holding size	Percentage of holders
Less than 0.5 ha.	0.26	61.82
0.5-1.0 ha.	0.72	18.64
1.0-2.0 ha.	1.31	11.41
2.0-4.0 ha.	2.68	5.77
4.0-10.0 ha.	5.54	2.14
More than 10.0 ha.	14.78	0.22

The average holding size of semi marginal, marginal and small farmers are only 0.26, 0.72 and 1.31 ha., respectively and they need proper attention for diversification of his integrated farming system to enhance the income for his livelihood. Along with these holdings about 30 per cent area of the district is affected every year by low, medium and high flood, which caused miseries to animals and human population. The productivity of these areas is also affected adversely due to floods needs attention. The large area of the district is under wheat followed by Paddy, Lentil, Potato, Pigeon pea, Chick pea, Field pea, Sugarcane and Maize. Very limited area is covered under Oil seeds and Zaid Urd and Moong. The cropping intensity of the district is only 160.6 percent needs attention to increase. Mixed farming is very common practice among the marginal and small farmers because of CDR system with unorganized form also needs help to organize form through training, demonstration and exposure visit of success stories. The district is in progressive stage for vegetable cultivation mainly for onion, chilli, potato, parval, vegetable pea, brinjal, tomato and cauliflower along with okara, muskmelon and watermelon in zaid season. The fruit orchard especially mango, jack fruit, guava, papaya, banana and aonla are existing in scattered places in unorganized form. Indigenous (gangateeri) non-descript and cross-breed cows and buffaloes in large numbers are reared by farmers. The district has also very good scope for goat, Poultry, sheep and pig

forming looking of their population. The potential of fish forming has also can take a good income source due to large water bodies / ponds / river Ganga, Ghagara, Tounce and other small tributaries existing in the district.

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Category	Enterprises	Contribution of different enterprises (P/S/T/Q) towards annual income of family				
		AES-1	AES-2	AES-3	AES-4	AES-5
Large	Agriculture	P	P	P	P	P
	Horticulture	Q	Q	S	Q	S
	Animal husbandry	S	S	Q	S	Q
	Agriculture labour	-	-	-	-	-
	Nonfarm activity	T	T	T	T	T
Small	Agriculture	T	P	S	P	S
	Horticulture	P	T	P	T	P
	Animal husbandry	S	S	T	S	T
	Agriculture labour	Q	Q	Q	Q	Q
	Nonfarm activity	-	-	-	-	-
Marginal	Agriculture	Q	T	Q	T	T
	Horticulture	T	Q	S	Q	P
	Animal husbandry	P	S	T	P	Q
	Agriculture labour	S	P	P	S	S
	Nonfarm activity	-	-	-	-	-
Landless	Agriculture	-	-	-	-	-
	Horticulture	Q	Q	Q	Q	Q
	Animal husbandry	S	S	S	S	S
	Agriculture labour	P	P	P	P	P
	Nonfarm activity	T	T	T	T	T
P: Primary	S: Secondary	T: Tertiary	Q:Quarternery			

2. Description of Agro-climatic Zone & major agro ecological situations

An attempts has made to work at feasible extension strategy and research agenda needs for the district falls under agro climatic east plain zone of Uttar Pradesh characterize by semi dry medium moisture availability with 180 –210 days growing season and sub humid climate with two dry season i.e. summer and winter and ustic typic soil moisture regimes. A deep thought has also been given to intensively and divisively suitable / adoptable forming system in order to fully utilize the natural resource available at the command of the farmers taking a holistic approach district divided in to following agro-ecological situation (AES) on the basis of soil type and irrigation facilities

AES	Characteristic	Area (%)	Representative village	Block
AES 1	Clay loam irrigated (karail)	36.08	Sohaon	Sohaon
AES 2	Loam irrigated	23.69	Kiriharapur	Sear

AES 3	Sandy loam irrigated	17.41	Deoli	Dubahar
AES 4	Water logged	13.34	Hathahouse	Maniar
AES 5	Flood prone	9.68	Maniar	Maniar

3. Soil types

The physiographic features are similar to that of associated soils of the tarai Himalayas and Awed plains soil moisture regimes are ustic typic and soil temperature regime is hyperthermic. In ustic moisture regime soils have limited moisture with strong retaining capacity and readily available when required for plant growth. In these regimes the soils are formed by the weathered rock quartzite, phyllite and schist parent material with soil texture of clay loam karail dominated (36.08%), loam (23.69), and sandy loam (17.41 %) are dominated in the district.

4. Area, Production and Productivity of major crops cultivated in the district

Sl. No.	Crop	Area (ha)	Production (MT)	Productivity (Qtl / ha)
1.	Wheat	136832	3212160	23.48
2.	Barley	6337	105110	16.59
3.	Chick pea	3590	41700	11.62
4.	Field pea	2487	29750	11.96
5.	Rabi maize	7000	25000	35.71
6.	Lentil	20212	256290	12.68
7.	Rai/ Mustard	879	8760	9.97
8.	Linseed	01.0	-	1.3
9.	Potato	7336	1633580	222.68
10.	Sugar cane	8339	3031060	363.48
11.	Tobacco	02.0	150	75.15
12.	Rice	122943	2196240	17.86
13.	Kharif Maize	24969	168040	13.67
14.	Jowar	1557	17550	11.27
15.	Bajara	1649	22230	13.48
16.	Kharif Urd	10	20	2.37
17.	Kharif Moong	09	20	2.34
18.	Ground Nut	219	1460	6.68
19.	Sunflower	06	100	16.70
20.	Turmeric	02	30	18.09
21.	Zaid Urd	11	50	4.90
22.	Zaid Moong	249	1530	6.05
23.	Zaid Maize	1254	17140	13.67
24.	Pegion Pea	7939	51460	6.48

5. Weather data (Rainfall) (mm)

Month/ year	2000	2001	2002	2003	2004	200 5	200 6	2007	2008	2009	Ave.
Jan.	0.50	-	6.78	6.80	0.02	-	-	-	4.68	-	1.88
Feb.	0.33	-	3.91	-	0.01	5.33	-	11.47	-	-	2.10
March	0.92	-	-	-	-	-	-	38.36	-	-	3.93

April	5.25	-	-	15.61	-	-	0.60	-	-	-	2.15
May.	8.96	63.2 9	4.66	-	-	-	17.3 0	-	7.00	-	10.12
June	38.01	233. 85	200.0 3	90.02	167.7 4	9.80	115. 50	74.80	292.2	9.1	123.11
July	86.40	242. 16	143.3 8	300.6 9	190.8 4	250. 62	174. 20	255.1 0	292.7	72.36	200.85
Aug.	126.2 5	237. 36	159.8 4	219.0 7	99.27	147. 13	105. 0	171.3 0	243.0	64.04	157.23
Sep.	177.6 6	181. 65	217.6 8	122.1 8	9.67	63.0 0	- 0	179.0 0	43.4	28.04	102.23
Oct.	-	-	-	20.05	-	11.9 0	-	-	-	-	3.20
Nov.	-	-	-	-	-	-	-	-	-	-	-
Dec.	-	-	-	-	-	-	-	-	-	-	-

Data presented in above table indicate that about 70 percent of the total annual rainfall is received in the summer monsoon during the period of July to September that coincides with the kharif cropping period. July and August are the peak period of the rainfall. During winter and early summer months, westerly depressions cause light showers in the area are good for rabbi harvest. Generally a rainfall of less than 30 mm per month indicates a dry month, because this amount of rain may not break the crust and even reach the upper layer of the moisture control section of the soil. Hence based on these criteria for a dry month, the number of dry months in the region attains the order of 6 or more from October to May.

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Crossbred	41762	74319 lt/day	7.0 lt/day/cow
Indigenous	221818	203772 lt/day	4.0 lt/day
Buffalo	186571	246157.5 lt/day	5.0 lt/day
Sheep			
Crossbred	949	11.5 qu. wool/year wool/sheep/year	2.0 kg
Indigenous	17323	100.5 qu. Wool/year	1.5 kg wool/sheep/year
Goats	153667	461 qu. Meat/year	11.5 kg meat/goat
Pigs	28989	4032 qu. Meat/year	90 kg meat / pig
Crossbred	1102	220 qu. Meat/year	110 kg meat/ pig
Indigenous	27887	3812 qu. Meat/year	70 kg meat/ pig

Rabbits	-	-	-
Poultry			
Hens	218034	5561 qu. Meat/year	1.0 kg meat /poultry
Fish	87.70 ha	11071.00 qt	126.24 qt / ha

7. Details of Operational area / Villages

Sl. No.	Taluka / Tahsil	Name of Block	Name of Village	Major Crop & Enterprises	Major Problem identified	Identified Thrust areas
1.	Sader	Hanumajganj	Basantpur	Pulse	Disease & Insects	Lack of awerness regarding plant Protections
	„	Garwar	Kureji	Paddy + Wheat	Local Varieties	Poor seed replacement
	„	Sohaon	Piparakala	Pulse	Disease & Insects	Lack of awerness regarding plant Protections
	„	Dubhar	Divali	Vegetable	Local Varieties	Poor seed replacement
	„	Belhari	Nagapur	Vegetable	Local Varieties	„
2.	Baria	Baria	Durganpur	Wheat	Local Varieties	„
	„	Murlli Chapara	Chand Diyar	„	Local Varieties	„
	„	Revati	Chaube Chapara	Maize	Local Varieties	„
3.	Bansdih	Bansdih	Tandva	Potato + Maize	Disease & Insects	Lack of awerness regarding plant Protections & Porr seed replacement
	„	Maniyar	Maniyar	Paddy	Local Varieties & Disease	„
	„	Beruarbari	Maritar	Vegetable	Local Varieties & Disease	„
4.	Sikandarpur	Pandah	Karsor	Paddy	Local Varieties & Disease	„
	„	Nava Nagar	Belsari	„	Local Varieties & Disease	„
5.	Rasara	Rasara	Sariy Bharti	Paddy + Wheat	Local Varieties & Disease	„
	„	Chilkahar	Chilkahar	„	Local Varieties &	„

					Disease	
6.	Siyar	Nagara	Narhi Inamiopur	„	Local Varieties & Disease	„
	„	Siyar	Krdiharapur	Paddy + Wheat+Sugar Cane	Local Varieties & Disease	„

8. Priority thrust areas

The SWOT Analysis of enterprises of the district resources was also done. The basin of river Ganga and Ghaghara and other small tributaries like touns, mghai & Karmanasa soils with good climatic condition, sufficient rainfall, optimum groundwater table, good irrigation facility are the **strength**. Low adoption of high yielder varieties, poor seed replacement rate, imbalance use of fertilizers, negligence of plant protection measures, about 30% area affected by flood and water logging due to poor drainage facility and small holding size are the **weakness**. Light textured soil with good irrigation facilities, success story of lentil and other pulse production heavy textured soil in the district are the good indicators of good **opportunities**. Lacks of marketing facilities with poor mechanism of backward and forward linkage are the major **constants**.

An attempt has made to work out feasible extension strategy and research agenda needs for the district. A deep thought has also been given to intensely and diversely suitable/ adoptable farming system in order to fully utilize the natural resources available at the command of the farmers taking a holistic approach. The efforts have also been made to sort out thrust points for agenda for Krishivigyan Kendra, Sohaon, Ballia annual action plan addressing research, extension and development activities. The thrust points are as follows.

1. Poor seed replacement is common due to lack of knowledge and availability of quality seed therefore development of seed village through seed producing farmers group is required.
2. Due to lack of seed treatment knowledge the training of farmers on this aspects is essential.
3. Imbalance use of fertilizers is a common practice and Karail soil shows creakiness, high clay content, poor drainage, have problem for various crops. Therefore integrated plants nutrient management practice should be acquainted to the farmers through training and demonstration.
4. Lack of awareness regarding plant protection measures among the farmers for which they need IPM training an demonstration.
5. Testing of location specific varieties along with improvement of suitable local varieties.
6. Need based farming system should be adopted by the farmers through training and educational tours of success stories.
7. Development of marketing facilities along with forward linkages.
8. Immunization and AI camps should be organized at village level at regular intervals.
9. Breeding and feeding management practices of livestock required greater attention.
10. Water logging problems of the area required water shed management practices.
11. Irrigation facilities should be developed in rain fed areas.

Basti

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S.No	Farming systems / enterprises
1	Rice – wheat based
2	Sugarcane based
3	Vegetable based
4	Fish and animals based

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Agro-climatic Zone: North Eastern Plain Zone:

Characteristics of North Eastern Plain Zone:

Sl.no.	Agro-climatic	Charaterstics
1	Zone: North Eastern Plain Zone	<p>North Eastern Plain Zone consists of 11 districts viz. Bahraich, Sravasti, Gonda, Balrampur, Siddharth Nagar, Basti, Santkabinagar, Gorakhpur, Mahrajganj, Kushi Nagar and Deoria. It has an area of 33217 sq. km. which is 11.3% of the total area of the entire state. It has population of 1,59,66,722 which accounts for 15.37% of the population of the state. The average density of the population is 491.2/sq.km.</p> <p>There are two district soil type namely alluvial and calcareous. Alluvial soils are either sandy, sandy loam or clay loam. Besides, diara lands area also found in this zone. Rice–wheat is common crop rotation under irrigated condition. The deficiency of nutrient like nitrogen, phosphorus, zinc, sulphur and iron are mostly observed in this zone. The organic matter content varies between 0.20 to 0.40% and pH 6.0 to 8.5.</p>

Agro- Ecological situations

On the basis of the topography, soil types and irrigation availability, the district may be divided into five major Agro-Ecological Situation (AES) as given below:

S.No.	AES identification in the district	Area covered	
		(ha)	(%)
AES-I	Irrigated loam soil	79,230	38

AES-II	Irrigated sandy loam soil	41,700	20
AES-III	Irrigated sandy soil	29,190	14
AES-IV	Rain fed sandy /loam soil	25,020	12
AES-V	Flood prone/water logged	33,360	16

1. Farming system analysis of Basti district

Basti district lies between 20.00° and 27.30° North latitude and between 80.15° and 83.80° longitude and 124 meter above the mean sea level. The major rivers of the district are Quano, Manwar, Aami and Ghaghra. Average annual rainfall of the district is 1020 mm, out of which 68 percent falls during the month of June to September causing sporadic floods and water stagnation in low lying area. Occasional situations are continuous biting into the vitals of Rice-Wheat cropping system and there be affecting the economic status of farming community.

There are three categories of the farmers in the district namely Resource Rich (RR), Resource Poor (RP) and Landless Labourers (L.L.).

Category		Agro-Ecological Situations (AESs)				
		AES-I	AES-II	AES-III	AES-IV	AES-V
1.	Resource rich*	Paddy, wheat + mustard, sugarcane, gram, pea, lentil, summer urd and moong, berseem, mango, potato, dairy (graded buffalo & cow), fisheries.	Paddy, wheat +mustard, sugarcane, arhar, gram, pea, toria, lentil, mustard, tobacco, mango, potato, Cauliflower, tomato, chari, berseem, dairy (cross bred, deshi cow and graded buffalo), fisheries.	Maize, wheat+mustard, arhar+urd+jowar, sesamum, toria, sugarcane, pea, chari, berseem, potato, tomato, onion, mango, jackfruit, anola, cross bred & deshi cows, fisheris.	Maize, wheat + mustard, arhar + urd + jowar, sugarcane, chari, mango, jackfruit, mahua, dairy (deshi buffalo and cow).	Late paddy, wheat + mustard, sugarcane, parval, berseem, mango, guava, dairy (murrh, buffalo and deshi cow).
2.	Resource poor**	Paddy, wheat + mustard sugarcane, pea, potato, onion, okra, berseem, dairy (buffalo &cow)	Paddy, wheat + mustard, sugarcane, pea, tobacco, mango, parval, potato, brinjal, tomato, onion, chari, berseem, buffalo and cow non-descriptive breed.	Maize + arhar, wheat + mustard, arhar + urd + jowar, toria, sugarcane, chari, berseem, potato, brinjal, cauliflower, cabbage, tomato, okra, mango, jackfruit, dairy (deshi cow & buffalo).	Maize wheat + mustard, arhar + urd + jowar, sugarcane, chari, mango, jackfruit, deshi buffalo, cow, goat, poultry.	Late paddy, wheat + mustard, sugarcane, parval, guava, deshi buffalo, cow, goat.
3.	Landless ***	Labour + buffalo, goat,	Labour + buffalo, goat,	Labour + buffalo, cow, goat, poultry,	Labour + goat,	Labour + goat,

		poultry	pig.	pig.	pig, sheep	poultry, fishing
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Existing farming systems in different resource situations each Agro ecological situation

- * **Resource Rich** – Farmers with medium to large land holding size, assured irrigation, plough facilities and good credit support.
- ** **Resource Poor** – Farmers with marginal to small land holding size, occasionally assured irrigation without tractor and low/no credit support.
- *****Landless** – Land on lease or without land.

3. Soil types

S. No	Soil type	Area (ha)	Characteristics
1	Sandy Soil	41700	This type of soil contains about 80% sand and 10% silt and 10% clay. It is highly porous and poor water retention capacity.
2	Sandy Loam Soil	37530	The loamy soil contains about 50-80% comparatively less percent of silt and clay, which is about 15-25% and 10-20% respectively.
3	Loam Soil	83400	The loam soil may be defined as a mixture of sand, silt and clay particles which exhibit about 30-50% sand and silt and 10-30 % clay participant.
4	Clay loam soil	45870	This soil carries about 35 % clay particles and silt particles and contains about 30% of sand unit. This type of soil can easily retain moisture and it is sticky in nature.

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl/ha)
1.	Rice	1,20,000	27,04,800	26.27
2.	Wheat	1,08,000	27,45,360	26.50
3.	Maize	6,875	1,33,375	30.74
4.	Lentil	2,229	21,242	9.64
5.	Gram	4,230	46,656	11.03
6.	Pea	3,617	39,208	13.56
7.	Arhar	8,140	87,912	10.80
8.	Toria	1140	8,037	7.75
9.	Rai	2180	20,601	9.45
10.	Sesamum	500	1,850	3.70
11.	Groundnut	500	5000	10.00
12.	Urd	120	600	4.00

5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity
		Maximum	Minimum	
October 08	-	-	-	-
November 08	-	-	-	-
December 08	-	-	-	-
January 09	-	-	-	-
February 09	6.0	-	-	-
March 09	-	-	-	-

April 09	62.96	-	-	-
March 09	-	-	-	-
June 09	32.48	-	-	-
July 09	152.47	-	-	-
August 09	221.0	-	-	-
September 09	99.30	-	-	-

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Crossbred	14975	56922 lit	6.0 lit/day
Indigenous	94622	94644 lit	2.0 lit /day
Buffalo	118026	236052 lit	4.0/lit/day
Crossbred	1440	-	-
Indigenous	10620	-	-
Goat	144455	1644550 lit	10 kg/year
Crossbred	2409	132495 kg	55 kg/year
Indigenous	14866	445980 kg	30 kg/year
Poultry			
Desi	12500	1700000	200 egg/year
Improved	78930	357860	2 kg
Ducks	750	-	-
Fisheries	-	-	25.0 q/ha

7. Details of Operational area / Villages

S. No	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problems identified	Identified thrust areas
1	Basti Sadar	Basti Sadar	Bhelwal, Banjaria, Badeban, Ganeshpur, Chaurwa	Mango	Lack of awareness about mango plantation	Promotion of fruit crops
2	Basti Sadar	Basti Sadar	Mahmoodpur, Mahrajganj	Fruit & forest crops	Lack of awareness about propagation technique	Promotion of fruit and forest crops
3	Harraiy a	Dubaulia	Chilma,	Vegetable root crops	Lack of awareness about seed production	Promotion of root crop vegetables
4	Basti Sadar	Gaur	Gaur, Belwadam			

5	"	Kaptanganj	Kaptanganj, Rakhiya		technique of root crops	
6	Basti Sadar	Basti sadar	Khirighat, Badeban,			
7	Basti Sadar	Saltauwa	Sewai, Purwa, Kharsar			
8	Basti Sadar	Basti Sadar	Ganeshpur, Badeban, Belwadari,			
9	Harraiya	Dubaulia	Bharukahwa,	Bittergaurd	Crop damage by red pumpkin beetle	Promotion of high-tech vegetable
	Basti Sadar	Gaur	Nonha, Katra			
	Bhanpur	Saltauwa	Shivpur, Tenuwa			
	Basti Sadar	Kaptanganj	Rakhiya, Kusmaur			
10	Harraiya	Dubaulia	Barsaw, Banjaria subi, Khushalganj, Devnathpur, Pakdi, Babhanpura, Dharmupur, Pipra brijlal, Bhatpura, Kajichuil, Luxmanpur, Pureoorirai, Kukripur, Bharpura, Khalwa, Jogia, Samudha, Joghawa,	Major Rabi vegetables i.e. Potato, vegetable pea, cauliflower, Brinjal and Tomato	Incidence of disease and insects	Promotion of high-tech vegetable
11	Basti Sadar	Gaur	Pauni	Tomato	Poor quality seed	Promotion of high-tech vegetable
12	Basti Sadar	Bahadurpur	Nagar Khas	Brinjal	No use of balance fertilizer	Promotion of high-tech vegetable
13	Basti Sadar	Kaptanganj	Manjaharia, Ranipur	Cabbage	Insect infestation	High yielding variety
14	Basti Sadar	Basti Sadar	Nagar Khas	Cauliflower	Poor nutrient management	High tech. vegetable
15	Basti sadar	Basti sadar	Bantala, Bharuli, Walterganj, Oausarpur, Bangawa, Belhara, Mahripur, Rethiya, Kusmaur, Gaighat, Khirighat, Dammerjot, Bhiriya, Bangarh, Manuri, Mahdeva, Kusuma, Mahdeve bujurg, Tenuwa, Ratanpur, Ramwapur	Major Rabi crops i.e. Wheat, mustard, gram, pea, potato, tomato, brinjal and fruit crop mango and	Lack of awareness about balance use of fertilizer and high incidence of disease and pest	Management of crops under rice-wheat system and promotion of major vegetable and fruit crops
16	Bhanpur	Saltauwa	Mithat, Tarkaulia, Amrauli, Ramnagar, Vishunpurwa, Pokharbhitwa, Nagaicha, Parsan, Saltuwa, Saltauwa Bujurga, Puraina, Raghunathpur, Belhasa, Kakraiya, Jogia, Maghurwa,			

			Bankasiya, Kalyanpur, Jiniwa, Pakri, Manka	aonla		
17	Basti sadar	Basti sadar	Buxer, Bhelwal, Bahvapar	Groundnut Til	High incidence of Whitegrubs and termite	Management of oilseed crops under rice-wheat system
18	Basti sadar	Dubaulia	Jilaspur, Gulauri	Mustard (Torai & Rai)	Lack of awareness about use of sulphur	Management of oilseed crops under rice-wheat system
	Basti sadar	Bahadurpur	Kudaprithi			
	Harraiya	Vikramjot	Kamalpur, Densa, Dusinia			
19	Bhanpur	Saltuawa	Visunpurwa	Chickpea and fieldpea	High incidence of insect and disease	Management of pulse crops under rice-wheat system
	Basti sadar	Bahadurpur	Kudhaprithi			
20	Harraiya	Vikramjot	Miniyakala, malhani	Maize	Low yield of maize	Introduction of hybrid maize under rice-wheat system
		Kaptanganj	Guwaon, pokhra,			
		Bahadurpur	Kalwari, mustahkam, Benipur			
21	Basti Sadar	Basti sadar	Tangpara, Dummerjot, Rajya, Narhariya	Paddy	High cost of cultivation	Minimize the cost of cultivation of paddy through RCT under rice-wheat system
		Saltauwa	Visunpurwa, Romali Somali			
		Bahadurpur	Benipur, kalwari			
22	Basti sadar	Basti sadar	Sansaripur, Tangpara, Dummerjot,	Wheat	High cost of cultivation and delayed sowing	Minimize the cost of cultivation of paddy through RCT under rice-wheat system
	"	Kaptanganj	Tilakpur, Rakhiya, Setha			
	Bhanpur	Saltuwa	Vishunpurwa, Chamanganj			
	Rudhuli	Rudhuli	Karmakala, Surwarkala, Kachari			
	Basti sadar	Vikramjot	Sevralala, Kawalpur			
	"	Kudraha	Rampur, Paun			
	"	Bahadurpur	Benipur, Kalwari			
	"	Bankati	Bharwaria			
	Harraiya	Harriya	Mahuwa, Ratanpur, Tenuwa			
	Basti Sadar	Gaur	Khuteha, Shivpur, Sari, Pauni			
	"	Basti sadar	Buxer, Kudhaprithivi, Tangpara, Narhariya			
	Bhanpur	Saltuwa	Bhanpur, Bhiriya, Shiva, Somali, Vishunpurwa, Pokharbhitwa, Belhasa,			
	Basti	Kaptanganj	Sarwalia, Dhekha, Nankar,			

	Sadar		Sikta, Behra, Nagarkhas, Bairagal			
23	Basti Sader	Bhelawal	Bhelawal, Basuapar	Pigeonpea	Low yield due to old variety	Promotion of HYV
	Basti Sadar	Basti Sadar	Belhara, Ganeshpur, Manjhariya			
	Basti Sadar	Saunghat	Chainpurwa, Ausapur, Padiya, Busdiliya, Khajhula, Daridiha, Misraulia,			
23	Basti Sadar	Basti Sadar	Parsadafali, Belwadadi, Dummerjot, Dilhinursingh, Kopiya, Rampurrewli	Goat	Non descriptive goat breed and low income	Raising productivity of goat
24	Harraiya	Kaptanganj	Behra,	Poultry (Broiler)	High incidence of diseases	Management of diseases
		Vikramjot	Ibrahimpur, Vikramjot			
	Rudhuli	Rudhuli	Hanumanganj			
25	Basti sadar	Basti sadar	Tilakpur, Mahripur, Marwatiya babu, Khuthan, Katra, Gaura, Ganeshpur, Madwanagar	Cow and Buffalo	Low yield of milk and poor infertile	Feeding and raising management of cow and buffalo
26	Basti sadar	Saunghat	Lohti, Jamohey, Batella, Paida, Ganeshpur, Bighiya, Manjhariya, Umara Chaurawa	Fish	Low fish production	Management of feed and stocking of fingerlings in proper ratio
	Rudhuli	Rudhuli	Hanumanganj			
	Basti sadar	Bahadurpur	Harnakha,			
27	Basti sadar	Basti sadar	Dubkhara, Dubaulidubey, Gotwa, Mahmoodpur and Marha	Fruit preservation	Poor quality product	Skill development of farm women
28	Basti sadar	Kaptanganj	Lahil, Bhanpur Chaukada, Mitasoti, Jaraipur, Rajajot, Lahilwara	Rabi vegetables crop like potato, brinjal, cauliflower and vegetable pea	Poor quality seed and incidence of insect management and diseases	High-tech vegetable crops
	Basti sadar	Bahadurpur	Sadha			
	Basti sadar	Basti sadar	Pikaura, Mahripur, Buxer, Bhatolwa			
	Bhanpur	Saltauva	Brahpur, Bhiriya			
	Bhanpur	Ramnagar	Tharuwapur			

8. Priority thrust areas

- Management of Rice – wheat cropping system.
- Management of crop in flood prone areas.
- Promotion of resource conservation technologies.
- Promotion of fruit crops : Mango, Aonla, papaya and litchi.
- Promotion of high tech vegetable production.
- Raising productivity of buffalo and development of cattle and goat.
- Entrepreneurship development in rural youth.

- Integrated inland fisheries.
- Drudgery reduction skill and entrepreneurship development in farm women.

Mau

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No.	Farming system/enterprise
AES.1	Agriculture + Livestock + Fisheries + Horticulture
AES.2	Agriculture+ Livestock + Horticulture
AES. 3	Agriculture + Livestock
AES. 4	Agriculture + Livestock
AES. 5	Agriculture + Pastoriculture + Olericulture
AES. 6	Fisheries + Poultry + Silviculture
AES. 7	Agriculture + Livestock + Olericulture

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Sl. No	Agroclimatic Zone	Av. Rainfall (mm)	Temperature (°C)		Soil Type	Cropping Intensity (%)	Limitation
			Max	Min			
1	Eastern Plain	800	41.4	5.7	Alluvial soil with varying proportion of silt and clay, sandy loam in south east part	138	Large areas alkaline/saline and sizable areas under water logged & diara

3. Soil types

S. No.	Soil type	Characteristics	Area (ha)
1	Loam/Clay Loam,	Irrigated	70133
2	Loam/clay loam,	Rain fed	24388
3	Sodic soil,	Irrigated	4274
4	Sodic soil	Rain fed	1287
5	Low land	30-45 cm depth	5285
6	Deep land, pond,	reservoir and lake	3967
7	Diara and river bed,	Tauns & Ghaghra	3679

Source: District statistical Magazine, Mau-2007-08

4. Area, Production and Productivity of major crops cultivated in the district

S. No.	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl/ha)
1	Rice	89833	1958370	21.8
2	Wheat	78285	1972050	25.2
3	Lentil	295	3450	11.68

4	Gram	1346	15640	11.62
5	Pea	1630	19500	11.96
6	Pigeon pea	2772	28360	10.23
7	Mustard	137	1370	9.97
8	Sugarcane	7172	3108580	433.4
9	Potato	1220	240860	197.37

5. Weather data

Month.	Rainfall (mm)	Temperature (°C)		Relative Humidity (%)
		Maximum	Minimum	
October, 2008	Nil	32.0	26.0	65
November, 2008	25.00	23.0	18.0	60
December, 2008	20.00	20.0	10.0	55
January, 2009	60.00	20.0	8.0	68
February, 2009	20.00	28.0	15.0	64
March, 2009	Nil	34.0	26.0	58
April, 2009	Nil	36.0	30.0	55
May, 2009	Nil	40.0	30.0	55
June, 2009	14.00	44.0	34.0	58
July, 2009	86.00	42.0	32.0	82
August, 2009	112.00	42.0	32.0	85
September, 2009	116.00	38.0	28.0	82
October, 2009	Nil	32.0	26.0	65

Source: District statistical Magazine, Mau-2007-08

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category.	Population	Production	Productivity
Cattle	328022	6044.02	1.84kg/ha
Buffalo	154682	36040q	2.33kg/ha
Sheep	5982	--	--
Goats	165352	7910 q	4.78 kg/ha

Pigs	23145	9258 q	40.0 kg/ha
Poultry	265910	-	-
Fish	264 (ha)	2832 (q)	10.73 q/ha

Source: District statistical Magazine, Mau-2007-08

7. Details of Operational area / Villages (2008-09)

Sl. No	Taluka	Name of the block	Name of the Village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Mau	Pardaha & Ratanpura	Makhna Paniara, Tajopur, Hardaspur, Dumraon, Haldharpur, Pilkhi, Khalishpur Etura	Paddy, Wheat, Pea, Mustard, Gram, Dairy	1) poor productivity due to usar soil 2)unavailability of quality seed 3)unavailability cross breed	1)Z.T. programme on rice , wheat, pea, mustard and gram 2) AI-programme through BAIF 3) Training, demonstration
2	Mohamadabad Gohna	Ranipur & Mohamadabad Gohna	Prabhutanda, Bara, Samsabad Khurhat Paligarh	Paddy, wheat, Mustard, gram , Fish Farming	1) Poor productivity due to usar soil 2)unavailability of quality seed 3)unavailability improved fingerlings	1)Z.T. programme on rice , wheat and gram 2) AI-programme through BAIF 3) Training demonstration
3.	Ghosi	Kopaganj , Badrao & Ghosi	Budhave Adari, Alinagar, Majhawara Rampur kola Saharoj & Semari	vegetable Paddy Wheat, Gram & Arhar	1) Poor productivity due to usar soil 2)unavailability of quality seed	1) Use of usar tolerant varieties 2) Z.T. programme on rice , wheat, arhar, and gram 3) Training, demonstration
4	Madhuban	Doharighat , Fatehpur Mandav,	Surajpur Khirikothe Dighera, Parsupur	Paddy, Arhar	1)Low lying Water logged area 2) poor productivity due to sandy and light soil 3)unavailability of quality seed	1) Water logged variety of Paddy, Jal lahari, Maduker May be useful 2) Integrated fish farming (Paddy+ fish) May be useful Training and Demonstration

8. Priority thrust areas

S. No.	Thrust area

1. (TA-1)	The District suffers adversely with problem of flood and water logging covering a large area almost every year. This can be tackled by popularizing water-logging rice varieties i.e., Madhukar (Flooded situation) and Jal Priya & Jal Lahari (Water-logged condition) in these problem soils.
2. (TA-2)	About 78 percent area is under irrigation yet per hectare productivity of cereals. Oilseeds; pulses are low in the district. this poor productivity is only due to lack of knowledge and unavailability of improved variety seed. So there is need of dissemination of need based and location specific appropriate technology among the farming community. Beside this seed replacement programme should also be taken up on massive scale by involving progressive farmers and rural youth in self-seed production programme.
3. (TA-3)	A vast area of the district about 3000 ha is under sodic soil (usar) which is lying uncultivated due to zero or nominal yield potential. There is need of planned efforts to change usar land green by Appropriate usar reclamation technology.
4. (TA-4)	There is only 3 percent area under horticulture in the district, it has got very conducive atmosphere for developing fruit belt. The technology of fruit plantation of agro forestry is to be disseminated among the farmers through imparting skill training and adoptive trails/ demonstrations.
5. (TA-5)	Mau, Ghosi, Kopaganj. Adari, Doharighat and Mohammdabad are some of the few towns around which vegetable production may be profitable business. Effort should be made and popularize important seasonal vegetable and vegetable seed production programme in the nearby villages around these towns.
6. (TA-6)	The district has very poor breed of cattle, to overcome this problem there is need to undertake cross breeding programme to promote the cattle development. Mau city is dominated by Muslim population; there is big scope for Broiler farming, goat keeping, and back, and back yard poultry.
7. (TA-7)	Improved agricultural implements. i.e., Zero Till machine, Paddy Drum Seeder, Ridge Maker Disc harrow, Seed cum ferti-drill, paddy trans-planter and reape are in less use. There is need of skill oriented training/ demonstration of these implements for proper land preparation, seed and fertilizer placement and saving of labour/ man power.

Varanasi

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S.No.	Resource/situations AES	Farming System			
		AES-1	AES-2	AES-3	AES-4
1	Resource Rich	Vegetable / paddy / wheat/ muskmelon/ wheat + mustard	Jowar/bajara pigeon pea - wheat / gram-pea	Vegetable / paddy/maize / wheat / gram	Jowar/bajara/arhar/wheat
		+	+	+	+
		Mango orchard	Orchard	Mango orchard	Guava orchard
		+	+	+	+
		Karonda / Phalsa 2 to 3 graded buffalo/cows	Graded Buffalo/cows	1 to 2 graded buffalo	1 to 2 cows
2.	Resource Poor	Vegetable / paddy / jowar / bajara / arhar / wheat / vegetable	Jowar / bajara / arhar / wheat / gram / veg.	Paddy / arhar / jowar / bajara / wheat / gram / pea	Vegetable muskmelon
		+	+	+	+
		1 to 2 Buffalo / cows	1 to 2 cows	1 to 2 buffalo/cows	-
3	Landless	Daily wages Vegetable / cereals (Land on lease share-cropping)	Daily wages	Daily wages + Share cropping	Daily wages + Share cropping
		+	+	+	+
		Buffalo/cow/ pig	Cow / goat / pig	Cow/ goat / pig	Cow/ goat/ pig

Resource Rich : **Farmers with medium to large land holding, assured irrigation ploughing facilities and good credit support.**

Resource Poor : **Farmers with marginal to small land holdings with occasionally assured irrigation with no tractor and low credit support.**

Landless : **Land on lease or share cropping or without land**

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S.No.	Agro-climatic Zone	Characteristics
1	Eastern Plain Zone (ACZ-VIII)	<p>This zone has a area of 3842sq.km.</p> <p>As regards temperature there is some variation in the mean, maximum and minimum temperatures in different districts of this zone. In this zone, January is the coldest and May being the hottest months. The minimum of temperature of 4.6^oC has been recorded in Varanasi and the hottest 46.5^oC of this zone so far.</p> <p>The average rainfall of the zone is 898.5 mm of which about 96% is received during four monsson months (June to September). Among the nine districts Ballia receives maximum rain 1044.1 mm</p> <p>The main crops in this zone are rice, maize and arhar during kharif season and wheat farley, gram and peas during rabi season.</p> <p>The area receiving more than one irrigation is quite seizable in this zone (1,30960 ha) . Among the crops grown during the kharif seasons, rice, sugarcane, maize, arhar and smaller millets are prominent During winter season, wheat, gram, barley and peas are important crops of the zone. However, where irrigation facility is available rice-wheat is a common rotation. Which stands first in respect of production, wheat (22.98q/ha), barley (17.91q/ha). Paddy (19.69q/ha) and arhar (9.27q/ha) have the highest productivity.</p> <p>Among the various crops oilseeds have the lowest productivity, where as cereals and millets have the highest.</p> <p>The largest areas in the districts of Sultanpur, Pratapgarh, Ballia, Azamgarh and Mau alkaline/saline and sizable area is also covered under diara of Ganga, Ghaghra, Gomti rivers. The irrigation facilities are also not adequate Of the net cropped area as a result of which cropping intensity in this zone is only 163.98% This can be improved by developing short duration varieties of crops. The productivity of major crops e.g. rice, wheat, maize, millets, gram and mustard is also quite low as compared to states average.</p>

S.No.	Agro-ecological situations				Characteristics
	AES-1	AES-2	AES-3	AES-4	
1	65 15	60 9	65 10	63 5	Kharif Agriculture Horticulture
Total	80	69	75	68	
2	50 30	55 10	53 10	50 5	Rabi Agriculture Horticulture
Total	80	65	63	55	
3	10 9	5 3	8 5	3 7	Zaid Agriculture Horticulture
Total	19	08	13	10	

3. Soil types

S.No.	Soil Type	Characteristics	Area in ha
1	Sandy to sandy loam	Good for cultivated	34059
2	Loam to clay loam	Water logged	63578
3	Sodic soils/saline	Usar	75894

Source : SREP Varanasi, District (2006)

4. Area, Production and Productivity of major crops cultivated in the district

S.No.	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl/ha)
1	Paddy	47,369	72,048	21.46
2	Maize	3,147	4,589	13.21
3	Arhar	2,456	2,846	15.11
4	Wheat	69,670	1,91,593	27.50
5	Pea	3,070	5,430	17.98
6	Gram	2,190	2,490	11.37
7	Rai /Musterd	543	628	11.57
8	Urd	2,043	1,661	8.13
9	Moong	374	099	2.66

5. Weather data

Month	Rainfall (mm)	Temperature ^o C		Relative Humidity (%)
		Maximum	Minimum	
October 08	-	34.5	15	35-39
November 08	-	29.1	11.4	86.20
December 08	-	26.4	7.4	50.65
Jan. 09	-	24.5	92	30-86
Feb. 09	-	28.5	12.4	38-84
March 09	-	35.1	16.2	16-82
April 09	-	38.52	15.2	15-52
May 09	-	40.5	28	20-52
June 09	15.8	43.5	28.6	19-60
July 09	156.25	34.6	26.5	58-86
August 09	72.25	34.5	24.8	62-90
September 09	58.68	32.5	24.2	65-88

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population (Thousand)	Production (Lit/day)	Productivity (Mt/year)
Cattle	55974	3.697	34.47
Crossbred	13762	8.259	41.49
Indiganous	42212	2.210	75.53
Buffalo	66698	3.619	82.82
Sheep	22266	0.979	19.84
Crossbred	-	-	-
Indigenous	-	-	-
Goats	35670	0.681	8.86
Pigs			
Crossbred	12786	48.342 (kg/d/animal)	6.18 (lakh/kg)
Indigenous	-	-	-
Poultry	-	-	-

Hens	-	-	-
Desi	-	-	-
Improved	354144	-	-
Ducks	-	-	-
Turkey and others	-	-	-
Fish			
Marine	-	-	-
Inland	56.69/ha	153.63 (q/ha/yr)	27.71
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

7. Details of Operational area / Villages (2007-08)

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Sadar Pindra	Arazilines Sewapuri Harhua Cholapur Pindra	Madhu karshapur, Gaur, Rakhaana Mehdiganj, Khajuri, Newada, Awsanpur, Kallipur, Dharsona, Bhusanla, Atesua, Ratahpur, Virbhanpur, Kacchia	Rice-wheat, gram, pea, fruits & vegetables Dairy, Poultry, goatry	Late sowing of paddy, imbalance use of fertilizer excessive use of pesticides in plant protection, unawareness in treatment, imbalance use of concentrates and green fodders	Transplanting of paddy in time to avoid delay in wheat sowing. Use of balance dose of fertilizer on the basis of soil testing. Use of ZT machine in rice wheat cropping system. Replacement of wheat by Rabi mazie/mustard /pulse in rice-wheat system.

8. Priority thrust areas

S.No.	Thrust area
1	Transplanting of paddy in time to avoid delay in wheat sowing
2	Use of balanced dose of fertilizers involving the integrated nutrient supply system (inorganic, organic and biological components) in irrigated/rainfed areas.
3	Use of zero-till seed-cum-ferti drill in rice-wheat cropping system.
4.	Utera cultivation in low lying, water-logged and flood prone areas.
5	Replacement of wheat by rabi maize/mustard/pulses in rice-wheat cropping system.
6	Increasing the area under short duration, high yielding varieties of pigeon pea.
7	NADEP-compost, vermiculture, recycling of biomass and green manuring etc. should be given priority.
8.	Plantation of medicinal crop to increase prosperity.
9.	Alternative sources of low cost technologies should be inculcated.
10	Increasing the cropping intensity with inclusion of short duration vegetables in existing cropping systems.
11	Use of ITKs and IPM technologies in food and horticultural crops.
12	Proper nutrient management and cultural practices in new mango orchard and rejuvenation of

	old mango orchard.
13	Seed and soil treatment should be given priority.
14	Increasing the area under vegetable pea, pointed guard, rose and marigold.
15	Plantation of Karonda in rainfed areas and woody plants in wastelands.
16	Plantation of Karonda in rainfed areas and woody plants in wastelands.
17.	Plantation of Aonla and Karonda in saline-alkali soils.
18	Mushroom production with locally available materials.
19	Plantation of Teak plants along bunds and boundaries of agricultural farms.
20.	Establishment of bee keeping units.
21.	Trichoderma use of for seed and soil treatments to control wilt, stem and root rot.
22.	Proper grain storage to minimize the loss.
23.	Fish & prawn culture should be promoted to utilize water resources available in the district.
24	Dairy, poultry, piggery, goatry should be included in the farming system to increase additional income and utilize by-products of the various crops.
25.	Use short duration & less water requirement variety of paddy to avoid drought.
26.	Water conservation technology must be followed.
27	Use of drip irrigation & sprinkler water technique for irrigation.

Mahrajganj

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Agriculture+ AH
2	Agriculture+ Vegetable Farming
3	Agriculture+ Vegetable Farming+ Horticulture
4	Agriculture+ Poultry
5	Agriculture+ Fish Farming
6	Agriculture+ Goat Rearing
7	Agriculture+ Horticulture
8	Agriculture + Horticulture+ AH

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics	Agro ecological situation	Characteristics
1	North Eastern Plain Zone	High rainfall (1000-1200 mm annual), Temperature varies from 45 ^o C to 4.5 ^o C. Cropping Intensity is 142%, Irrigation is through canal & tube wells, Frequent floods, Paddy based cropping.	AES-1 AES-2 AES-3 AES-4	Silty Loam soil texture, irrigated, CI - >200% Silty Loam, rain fed, Cropping Intensity <200% Silty Loam, water logged, CI 100 to 200% <i>Bhat soil</i> . Irrigated, CI 200%

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1	Alluvial Loam	Brought by water flow from Himalaya & deposited in the District, rich in calcium, forts soil rich in organic matter & acidic in nature.	198521
2	<i>Bhat soil</i>	Water holding capacity is very high, pulverization stage come after long time.	10431

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Mt)	Productivity (q /ha)
1	Paddy	168000	38900	23.08
2	Wheat	143903	400133	27.81

5. Weather data

Month	Rainfall (mm)	Temperature ^o C		Relative Humidity (%)
		Maximum	Minimum	
April 07 to July 07	844.32	Not available		Not available
Aug. 07	237.90			

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	20907	-	9.5 L/day
<i>Indigenous</i>	1399750	-	4.0 L/day
Buffalo	202520	-	6.5 L/day
Sheep		2950	
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	10570	-	-
Goats	137680	-	11 kg/ Goat
Pigs	35416		
Poultry			
Hens	20514		

Category	Area	Production (q.)	Productivity (q/ha)
Fish		-	-
<i>Marine</i>	-	-	-
<i>Inland</i>	1915	48832.5	25.50

7. Details of Operational area / Villages (2009-10)

Sl. No	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Nichlaul	Siswa	Bhujauli	Agriculture (Paddy, Wheat, Lentil, Toria, Sugar cane, Pigeon pea, Urd, Field pea); AH (Cattle, Buffalo, Goat, Poultry); Fisheries; Bee Keeping; Horticulture (Mango & Litchi); Agro forestry	<ul style="list-style-type: none"> Low yield of Cereals, Pulses, Oilseeds Low production of Mango & Litchi Low production of Milk & Meat Low yield of Sugarcane 	<ul style="list-style-type: none"> Poor quality seed Imbalance use of fertilizers Infestation of insect pest and diseases. Improper sowing technique Weed infestation Improper crop rotation Untimely sowing Improper feeding Poor diseases management No use of supplementary feeds Improper feeding and ratio

2			Mathnia	Agriculture (Paddy,Wheat,Lentil,Toria,Sugarcane,Pigeon pea,Urd,Field pea) ;AH(Cattle, Buffalo,Goat,Poultry); Horticulture (Mango)	<ul style="list-style-type: none"> • Low yield of cereals,Pulses,Oilseeds • Low production of Mango • Low production of Milk & Meat • Low yield of Sugarcane 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds
3			Bajjnathpur	Agriculture (Paddy,Wheat,Lentil,Toria,Sugarcane,Pigeon pea,Urd,Field pea) ;AH(Cattle, Buffalo, Poultry);Vegetable farming (Tomato,Brinjail,Okra,Chilli)	<ul style="list-style-type: none"> • Low yield of cereals,Pulses,Oilseeds • Low production of Milk & Meat • Low yield of Sugarcane • Low yield of vegetables 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds

4			Sabya	Agriculture (Paddy,Wheat, Lentil,Toria,Sugarcane,Pigeon pea,Urd,Field pea) ;AH(Cattle, Buffalo,Goat,Poultry); Horticulture (Mango, Litchi,Banana) Vegetable farming (Tomato,Brinjail,O kra,Cucurbits)	<ul style="list-style-type: none"> • Low yield of Cereals,Pulses,Oilseeds • Low production of Mango & Litchi& Banana • Low production of Milk & Meat • Low yield of Sugarcane • Low yield of vegetables 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds
5			Barhara Mahant	Agriculture (Paddy,Wheat,Sugarcane)	<ul style="list-style-type: none"> • Low yield of Cereals • Low yield of Sugarcane 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing
6		Siswa	Khesari	Agriculture (Paddy,Wheat, Lentil,Toria,Sugarcane,Pigeon pea,Urd,Field pea) ;AH(Cattle, Buffalo,Goat,Poultry) Horticulture (Mango, Banana & Litchi); Vegetable farming (Tomato,Brinjail,O kra,Cucurbits,Cole crops,Chilli)	<ul style="list-style-type: none"> • Low yield of cereals,Pulses,Oilseeds • Low production of Mango, Banana & Litchi • Low production of Milk & Meat • Low yield of Sugarcane • Low yield of Vegetables 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds

7		Nichalul	Balaihore	<p>Agriculture (Paddy,Wheat,Lentil,Toria,Sugarcane,Pigeon pea,Urd,Field pea) ;AH(Cattle, Buffalo,Pig,Goat,Poultry); Fisheries; Vegetable farming (Tomato,Brinjail,O kra,Cole crops,Chilli)</p>	<ul style="list-style-type: none"> • Low yield of Cereals,Pulses,Oilseeds • Low production of Milk & Meat • Low yield of Sugarcane • Low yield of Vegetables • Low growth rate of fishes 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds • Improper feeding and ratio
8			Rautar	<p>Agriculture (Paddy,Wheat,Lentil,Toria,Sugarcane,Pigeon pea,Urd,Field pea) ;AH(Cattle, Buffalo); Horticulture (Mango),Vegetable farming (Tomato,Brinjail,O kra,Cole crops,Chilli)</p>	<ul style="list-style-type: none"> • Low yield of Cereals,Pulses,Oilseeds • Low production of Mango • Low yield of Vegetables 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds

9			Zahada	<p>Agriculture (Paddy,Wheat,Lentil,Toria,Sugarcane,Pigeon pea,Urd,Field pea) ;AH(Cattle, Buffalo); Vegetable farming (Tomato,Brinjail,O kra,Cole crops,Chilli)</p>	<ul style="list-style-type: none"> • Low yield of Cereals,Pulses,Oilseeds • Low production of Milk • Low yield of Vegetables 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds
10			Raipur	<p>Agriculture (Paddy,Wheat,Lentil,Toria,Sugarcane,Pigeon pea,Urd,Field pea) ;AH(Cattle, Buffalo, Poultry),Vegetable farming (Tomato,Brinjail,O kra,Cole crops,Chilli)</p>	<ul style="list-style-type: none"> • Low yield of Cereals,Pulses,Oilseeds • Low production of Milk • Low yield of Vegetables 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds

11			Zaishree	<p>Agriculture (Paddy,Wheat,Lentil,Toria,Sugarcane,Pigeon pea,Urd,Field pea) ;AH(Cattle, Buffalo); Horticulture (Mango),Vegetable farming (Tomato,Brinjail,Okra,Cole crops,Chilli),Fisheries</p>	<ul style="list-style-type: none"> • Low yield of Cereals,Pulses,Oilseeds • Low production of Milk • Low yield of Vegetables Low growth rate of fishes 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds
12			Khamaura	<p>Agriculture (Paddy,Wheat,Lentil,Toria,Sugarcane,Pigeon pea,Urd,Field pea) ;AH(Cattle, Buffalo, Poultry); Horticulture (Mango& Lichi),Vegetable farming (Tomato,Brinjail,Ookra,Cole crops,Chilli) ,Fisheries</p>	<ul style="list-style-type: none"> • Low yield of Cereals,Pulses,Oilseeds • Low production of Milk & Meat • Low yield of Vegetables • Low production of Mango & Litch • Low growth rate of fishes 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds

13		Mitha ura	Pach ma	Agriculture (Paddy,Wheat,Le ntil,Toria,Sugarca ne,Urd,Field pea) ;AH(Cattle, Buffalo); Horticulture (Mango),Vegetabl e farming (Tomato,Brinjail,O kra)	<ul style="list-style-type: none"> • Low yield of Cereals,Pulses,Oilseeds • Low production of Milk • Low yield of Vegetables • Low production of Mango • Low growth rate of fishes 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds
14			Sindu riya	Agriculture (Paddy,Wheat,Le ntil,Toria,Sugarca ne,Pigeon pea,Urd,Field pea) ;AH(Cattle, Buffalo, Poultry); Horticulture (Mango& Banana),Vegetabl e farming (Tomato,Brinjail,O kra,Chilli), Sericulture	<ul style="list-style-type: none"> • Low yield of Cereals,Pulses,Oilseeds • Low production of Milk & Meat • Low yield of Vegetables • Low production of Mango & Banana 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds

15		Mithora	Harkh ora	Agriculture (Paddy,Wheat,Le ntil,Toria,Sugarca ne,Urd,Field pea) ; Horticulture (Mango& Lichi) ,Fisheries, Bee keeping	<ul style="list-style-type: none"> • Low yield of Cereals,Pulses,Oilseeds • Low production of Milk • Low production of Mango & Litchi • Low growth rate of fishes 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds
16	Mahr ajgan j	Mahr ajganj	Gaun aria Babu	Agriculture (Paddy,Wheat,Le ntil,Toria,Sugarca ne,Pigeon pea,Urd,Field pea) ;AH(Cattle, Buffalo, Poultry)	<ul style="list-style-type: none"> • Low yield of Cereals,Pulses,Oilseeds • Low production of Milk & Meat • Low yield of Vegetables • Low production of Mango • Low growth rate of fishes 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Infestation of insect pest and diseases. • Improper sowing technique • Weed infestation • Improper crop rotation • Untimely sowing • Improper feeding • Poor diseases management • No use of supplementary feeds

8. Priority thrust areas

Crop/Entrprises	Thrust area
Paddy	Balance use of fertilizers ,High yielding variety of seeds
Pigeon Pea	Integrated pest management
Wheat	High yielding variety, Balance use of fertilizers, Proper sowing technique, Weed management
Lentil	Balance use of fertilizers, Proper sowing technique, Weed management
Field Pea	Balance use of fertilizers, Integrated pest management, High yielding varieties
Toria	Balance use of fertilizers, High yielding varieties
Brinjal	Integrated pest management

Cauliflower	Balance use of fertilizers
Buffalo	Balance feeding, Regular heating, Disease management
Sugarcane	Balance use of fertilizers, Intercropping
Goatery	Improve bread

Siddharthnagar

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S.No	Farming system/enterprise
1.	Paddy-Wheat
2.	Paddy-Wheat-Sugarcane
3.	Kharif Maize – Wheat
4.	Kharif Maize – Potato – Sugarcane
5.	Paddy – Lentil
6.	Paddy – Field pea

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S.No.	Agro-climatic Zone	Characteristics
1.	North-eastern plain zone-7	Trai Humid Temperature 4-5 ^o C in January 44-45 ^o C in the month of June Reinfall ranges Between 900-1300 mm.

S.No.	Agro ecological situation	Characteristics
1.	AES-1	Clay loam, sandy loam, irrigated. Major crop sown in this AES in kharif are paddy, maize, pigeonpea and sugarcane in rabi season wheat, Lentil mustard and vegetable crops. Under fruit major crops are mango, guava, banana. Major livestock in this area local cow, buffaloes, goats and broiler farming in this AES Dumariaganj, Itwa, Bhanawapur, Khuniyuon and Khasraha block comes.
2.	AES-2	Soil type of this AES are sandy loam & clay loam Topography of soil is plain and irrigated. Major crop of this area are paddy, pigeon pea groundnut maize wheat lentil linseed. Major livestock in this area are local cow, crossbred. Cow, buffalo, local goat & broiler farming , under this AES Mithwal, Uska & Bansi block comes .
3.	AES-3	Soil type of this area is sendy sandy loam, clay loam and low land flood prone. The topography of the soil is plain and irrigated. Major crop of this AES are paddy, maize, arhar, wheat & lentil. Local cows, buffaloes, goat mostly reased. Broiler farming is popular in this AES. Birdpur, Jogia, Lotan and Naugarh blocks are comes in this AES.
4.	AES-4	Soil of this areas is sandy loam, clay loam topography of the soil is plain irrigated. Un irrigated major crop of this area under kharif rabi and zaid are paddy maize, arhar wheat, lentil linseed and sugarcane. Fruit & vegetables crop in these area are mango, guava, banana, potato, brinjal onion, chilli. Major livestock of that area local cow. Cross bred cow, local buffaloes, goats and broiler farming in this AES Barhni & Shoharatgarh block.
5.	AES-5	In this AES soil is mostly under Diara land. Under this area is

	major crops are paddy wheat, lentil and live seed. Major livestock are also local cow buffaloes and local goat and poultry farming in this AES Bansi, Dumariaganj, Barhni and Jogia block comes.
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3. Soil type/s

S.No	Soil type	Characteristics	Area (ha)
1.	Clay loam	Irrigated, rainfall	92609
2.	Sandy loam	Irrigated, rainfall	87316
3.	Sandy clay	Irrigated	46211
4.	Diara	Irrigated	16392

4. Area, production and Productivity of major crops cultivated in the district (2007-08)

S.No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1.	Paddy	170011	5035725	29.62
2.	Maize (Kharif)	819	10860	17.03
3.	Kharif Pulses	5455	70369	12.90
4.	Wheat	145043	3718902	27.22
5.	Lentil	1047	7486	9.89
6.	Pea	2365	27670	11.70
7.	Oilseed	3740	39570	10.58

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
October 08	-	31.4	-	85
Nov.08	-	29.5	-	81
Dec. 08	-	24.3	-	80
January 09	-	20.8	-	82
February 09	-	23.5	-	75
March 09	-	31.8	-	65
April 09	-	35.9	-	48
May 09	70.51	41.6	-	52
June 09	51.31	42.7	-	65
July 09	247.76	39.3	-	95
August 09	306.58	38.2	-	96
Sept. 09	125.35	35.4	-	96

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle (Cow)	224450	-	465Lt.
Crossbred	1506	-	1472 Lt.
Buffalo	165564	-	1265 Lt.
Sheep	7560	-	-
Indigenous	-	-	-
Goats	225663	-	-
Pigs	17005	-	-
Crossbred	-	-	-

Indigenous	-	-	-
Poultry Broiler	204000	4200 Qtls.	1.95
Hens Layer	42000	-	300 eggs/bird
Deshi	-	-	-
Improved	-	-	-
Fish	-	-	-

7. Detail of operational area/ villages (2008-09)

S. No.	Taluk	Name of the block	Name of the village	Major crop and enterprises	Major problem identified	Identified thrust area
1.	Domariaganj, Naugarh, Itwa, Bansi	Bhanwapur, Domariaganj, Jogia, Itwa, Khuniyav, Bansi	Tikaria, Ramwapur, Budhaun, Gorbaha, Bansi, Bhavpur, Pidari, Bhagwatpur, Hathpura, Sohna, Sikta	Paddy	Bacterial blight in paddy imbalance use of fertilizer weed problem khaira disease in paddy	Seed treatment balanced use of fertilizer weed control with chemicals use of zinc sulphate
2.	Naugarh, Domariaganj, Itwa, Shohratgarh	Jogia, Domariaganj, Bhanwapur, Itwa, Shohratgarh	Tikaria, Agya, Bhitharia, Sahna	Arhar	Use of old varieties pod borer problem wilt problem	HYVs of arhar use of insecticide ridge sowing
3.	Domariaganj, Itwa	Domariaganj, Bahanawapur Itwa	Badahra, Monohrapur, Benawa, Dhandhra, Belwa Semri	Wheat	Low yield of variety Im balance use of fertilizer Management practice of Wheat	High yielding variety of wheat Control weed chemical Balance use of fertilizer
4.	Itwa Domariaganj	Itwa, Domariaganj	Singarjot, Manohrapur, Babhni, Khardewer	Mustard	Low yield mustard due to insect problem	High yielding variety of mustard improved package and practices.
5.	Domariaganj, Itwa	Domariaganj, Itwa	Singarjot, Nawdeeh, Gigna habeerpur, Sohna	Tomato	Low yield of tomato due to use of old variety	Introduced newly released variety use of package of practices
6.	Domariaganj, Itwa	Bhanwapur, Khuniyavan	Manohrapur Ahirauli, Sohna	Potato	Low yield of potato due to high infestation of disease	HYVs variety of potato and use of chemical for disease control
7.	Domariaganj, Itwa	Bhanwapur, Itwa	Manohrapur, Safipur, Hasudi, Kamsar, Sikta	Okra	Low yield of okra due to poor crop management	HYVs variety of okra and improved package and practices
8.	Domariaganj Itwa Shohratgarh	Bhanwapur Itwa Barhni	Dhamdhara, Sohna, Barhni Sikta, Bishunpur	Turmeric	Low yield of turmeric due to use of old	Introduced the high yielding variety

	h				variety	
9.	Domariaganj Shohartgarh	Bhanwapur Shohragarh Domariaganj	Safipur, Bhaisi, Hathpara Gagapur, Gugraulia khalsa Domariaganj	Zaid maize	low yield of maize due to poor crop management	HYVs Variety of maize and improved package and practices
10	Domariaganj Itwa	Domariaganj Bhanwapur Itwa Khuniyavan	Parsa Badalia Sikta Bhaluhia Jigna habirpur	Barseem (Green fodder)	Low yield of fodder due to old variety of Barseem	Introduced HYVs of barseem and Inaculation of culture
11.	Domariaganj	Bhanawapur	Bonajot Mannijot Malhwar Bhaisi Taravan	Multicut Chari	Low yield of fodder in summer	Introduction of HYVs of multicut chari
12.	Domariaganj	Domariaganj Bhanawapur	Sigarjot Parsa Chitahi	Calves	High mortality in calves due to parasitic infestation	Timely deworming in calves up to six month of age
13.	Domariaganj Itwa	Domsriaganj Bhanwapur	Singarjot, Parsa, Chitahi, Bhaisi, Jigna Habirpur	Nutrition garden	Poor health due to no use of nutrition food	Establishment of nutritional garden for small family

8. Priority thrust areas

- Management of rice -wheat system
- Promotion of resource conservation technologies
- Promotion of high -tech vegetable production (Hybrid tomato, brinjal, potato)
- Promotion of fruit crops mango, guava & banana
- Raising productivity of buffaloes and development of cattle and goats
- Entrepreneurship development in rural youth
- Promotion of pulse crops: Arhar, Lentil & Chickpea

Drudgery reduction skill and entrepreneurship development in farm women

Faizabad

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Rice-Wheat cropping system
2.	Sugarcane based farming system
3.	Rice- Vegetable cropping system
4.	Vegetable based farming system
5.	Mango based farming system
6.	Vegetable seed production enterprises
7.	Poultry enterprises
8.	Dairy industry
9.	Fishery
10.	Deira land cultivation

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Particulars	Farming System
AES-1: Productive plain land Under canal and tubewell Irrigation (a) Main branch+tube-well	Specified farming i.e. rice, wheat/potato, Sugarcane, vegetables supported by Cow and buffaloes
(b) Minor canal+tubewell	Sugarcane, Rice, Urd, Vegetables, Wheat, Gram+Mustard, Horticultural crops
AES-2 : Productive plain land Under tubewell irrigation	Diversified farming i.e. Rice, Arhar, Sugarcane, Urd/Mung, Fodder crop, gram, Pea, toria with few cows and buffaloes
AES-3 : Sodic land under canal+ Tubewell irrigation	Rice, wheat/mustard, vegetable and other horticultural crops, and some other Crops are growing in pockets with few local Cows/buffaloes and goats
AES-4: Waterlogged under canal and tubewell irrigation	Rice, late wheat, lentil, vegetables in certain Pockets, fodder crops and other horticultural trees with few cows and buffaloes
AES-5 : Eroded cultivable land	Rice, arhar+jowar+til, mung, maize, chari as Fodder, wheat/barley, peas, lentil, vegetables and other horticultural trees with few cows, buffaloes, goats and sheep
AES-6: Rainfed, eroded cultivable Land and ravines	Arhar+jowar, urd, maize, chari as fodder crops, millets, barley, pea, lentil mixed with Mustard kharif vegetables, fruits and other Forest trees with cows/buffaloes and goats

3. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1.	Paddy	88399	2203790	24.93
2.	Jowar	872	4190	4.81
3.	Maize (Kharif)	1028	13580	13.21
4.	Bajra	2	30	15.67
5.	Wheat	76155	1988410	26.11
6.	Barley	439	8160	18.58
7.	Chick pea	1486	13250	8.92
8.	Field pea	680	7950	11.70
9.	Pigeon pea	1112	14160	12.73
10.	Lentil	820	5380	6.56
11.	Mustard/rai	1949	22530	11.56
12.	Linseed	27	110	4.13
13.	Potato	2866	561280	195.84

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Crossbred	327300	-	-
Indigenous	340103	-	-
Buffalo	225998	-	-
Sheep			
Crossbred	405	-	-
Indigenous	13526	-	-
Goats	147954	-	-
Pigs	10700	-	-
Crossbred	4569	-	-
Indigenous	35669	-	-
Rabbits		-	-
Poultry			
Poultry	162345	-	-
Turkey and others	2036	-	-

Category	Area (ha)	Production (q)	Productivity (q/ha)
Fish	95.70	492.85	5.15

7. Details of Operational area / Villages (2007-08)

S. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Bikapur	Haringteen Ganj, Bikapur, Tarun	Dubawan, karoundi, Asrewa, Ghurehta, Chamaila, Sindhura, Karanpur, & Anapur	Rice- Wheat, Sugarcane, Vegetable, Poultry, Dairy	Low productivity, Imbalance use of fertilizers, Use of indigenous variety, Lack of improved breeds of milch animals	Replacement of Indigenous Varieties, Development of nutritional green fodder

2.	Milkipur	Milkipur & Amaniganj	Anjrouli, Gokula, Taksara, Kuschera, Raipatti, Gaddoupur, Sariwanya & Motiganj,	Rice-Wheat, Pulses, Sugarcane, Fisheries	Sodic soils, Lack of irrigation facilities, Low productivity, Lack of improved breeds, Poor socio-economic status of the farm-women	Soil reclamation, Replacement of Indigenous Varieties, Introduction of Diversified Farming, Improvements in socio-economic status of the farm-women
3.	Sohawal	Sohawal & Masodha	Maholi, Mubarakganj, Pirkhouli, Pilkhawana, Madhupur, Raghupur, Shivdaspur & Sariyanwa,	Rice-Wheat, Sugarcane, Vegetable, Poultry, Seed production	Low productivity, Imbalance use of fertilizers, Use of indigenous variety, Lack of improved breeds of milch animals	Replacement of Indigenous Varieties, Development of nutritional green fodder, Use of balance nutritional ration in dairy cattle
4.	Sadar	Pura Bazar & Maya	Darsannagar, Sarirasi, Gangouli, Madna, Arwat, Tandouli, Pakrouli, Dilasiganj, Ruhianwa & Amsin	Rice-Wheat, Pulses, Sugarcane, Fisheries, Floriculture	Lack of irrigation facilities, Low productivity, Lack of improved breeds, Poor socio-economic status of the farm-women	Replacement of Indigenous Varieties, Introduction of Diversified Farming, Improvements in socio-economic status of the farm-women

8. Priority thrust areas

S. No	Thrust area
1.	Replacement of Indigenous Varieties through improved varieties.
2.	Use of INM, IIM, IDM, IWM in Kharif, Rabi & Zaid crops.
3.	Introduction of Diversified Farming.
4.	Lack of improved breeds of milch animals.
5.	Development of nutritional green fodder for the milch animals throughout the year.
6.	Use of balance nutritional ration in dairy cattle.
7.	Development of waste and watershed lands through various farming systems.
8.	Improvements in socio-economic status of the farm-women through small cottage / House old industries.
9.	Lack of knowledge regarding immunizations in developing babies' contagious diseases in farm families, malnutrition in pregnant and lactating farm women.
10.	Introduction of vocational courses for the Rural Youth/School dropouts to generate their employment

Gorakhpur

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Farming System/Enterprise

Crop Production + Dairing
 Crop Production + Poultry
 Crop Production + Fisheries
 Crop Production + Vegetable Production

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Agro ecological situation	Characteristics
AES I	Soil Type-Sandy loam
AES II	Soil Type-Silty loam, Khadar Soil
AES III	Soil Type-Clay Loam

4. Area, Production and Productivity of major crops cultivated in the district

S.No.	Crop	Area (ha)	Production (MT)	Productivity (Qt/ha)
1.	Paddy	132959	202895	15.26
2.	Maize	3299	4281	12.98
3.	Jowar	27	37	13.70
4.	Bajra	369	-617	16.72
5.	Arhar	8659	4978	5.75
6.	Urd	24	09	3.73
7.	Moong	02	01	2.77
8.	Ground Nut	2547	1508	5.92
9.	Til	75	12	1.62
10.	Wheat	187896	448884	23.89
11.	Barley	708	1388	19.60
12.	Gram	668	544	8.15
13.	Pea	2766	3587	12.97
14.	Lentil	2275	2067	9.08
15.	Mustard	3492	2373	6.80
16.	Linseed	47	02	4.20
17.	Sugarcane	3955	209034	528.53
18.	Potato	5000	125490	250.90

8. Priority thrust areas

S.No.	Thrust Area
1.	Low Yield and net return rice wheat cropping system
2.	Low production pulses due to attack of pod borer
3.	Low Production of oil seeds
4.	Low milk Production
5.	Quality Vegetable Production

1. The major crop in Kharif is rice grown in 145171 ha. Area with productivity of 16.96 q/ha which is very low. Low rice yield in Gorakhpur is due to delay in rice transplanting, weed infestation, poor seed & variety replacement rate. Confective is balance fertilizer application. Direct seeding of rice may be a option for timely sowing & dose of new chemical for weed control (Post Emergence) Certainly increase the yield. High yielding hybrid seed availability may also help in increase in yield. Lot of area under sub murgence need better variety for low land area.
2. High yielding long duration rice variety delay the sowing of wheat which affect the wheat yield. Infestation of phalaris minor and wild oat reduced the wheat yield more than 35.7%. Deficiency of multi nutrient specially sulphur, iron, zinc checking the wheat yield. The problem is sever in the rice wheat cropping system fields.
3. Decreasing factor productivity in rice wheat cropping system is a major challenge to accelerate the economy of farmer.
4. Infestation of pod borer & poor variety replacement rate in pulses is a major factor in low productivity of pulses & oil seeds. Broad coasting of seed & fertilizer in Kharif pulses affect the yield of pulses.
5. Most of the milch animal is local breed with low milk potential affect the milk productivity in the direct. Breed improvement is necessary & training to the farmer for feeding the milch animal can solve the problem.
6. Indiscriminate use of chemicals in vegetable production is on top now days. Availability of good hybrid seed of vegetable a cheaper rate is a problem for resource poor farmers. Incidence of fruit borer, stem borer and blight affecting the vegetable production in the district.

Sonbhadra

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Farming system/enterprise
 Low lands (Agriculture/Horticulture)
 Semi Irrigated Uplands (Agriculture/Horticulture/Animal Rearing)
 Rainfed Upland(Agriculture/Horticulture/ Forestry/Animal Rearing)

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1.	Zone-IV (Vindhyan Zone)	Rainfed Farming, Rocky and Undulated land, Very deep water table, Black and Red laterite soils and Bushy forests.

S. No	Agro ecological situation	Characteristics
1.	AES-1	Black Soil, Plain.
2.	AES-2	Red soil, Undulated with Presence of hilly terrain
3.	AES-3	Red soil, Undulated with predominance of hilly terrain

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1.	Black Soil	Low land/Upland, Semi Irrigated/Rainfed cultivated	186525
2.	Red Soil	Upland, Rocky and Undulated, Semi Irrigated/ Rainfed, Cultivated/Cultivable/Waste land/Barren land	495082
3	Others (Red Yellow Mixed Soil)	Hilly terrain with Predominance of Forest species	37681

4. Area, Production and Productivity of major crops cultivated in the district (2007-08)

S. No	Crop	Area (ha)	Production (Qt)	Productivity (Qt /ha)
1.	Paddy	30582	34408	10.27
2.	Wheat	52112	67457	12.94
3.	Barley	11179	7328	6.56
4.	Jowar	2805	1624	5.79
5.	Bajara	366	387	10.57
6.	Maize	14450	11430	7.91
7.	Sawa	5701	2189	3.84
8.	Kondo	4273	1235	2.89

9.	Urd	2461	914	3.71
10.	Moong	25	10	4.00
11.	Lentil	9161	5323	5.81
12.	Gram	8903	7355	8.26
13.	Pea	3400	2056	6.05
14.	Arhar	15227	5818	3.82
15.	Mustard/Toria	3402	1802	5.30
16.	Linseed	5952	1917	3.22
17.	Sesamum	4614	655	1.42
18.	Potato	828	12515	151.14

5. Weather data

Average Annual Rainfall (mm)	Average Temperature ° C		Average Relative Humidity (%)
	Maximum	Minimum	
529	48.8	2.8	-

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	966	Not Available	Not Available
<i>Indigenous</i>	89644		
Buffalo	44375		
Sheep			
<i>Crossbred</i>			
<i>Indigenous</i>	24048		
Goats	242460		
Pigs			
<i>Crossbred</i>			
<i>Indigenous</i>	18801		
Rabbits			
Poultry			
Hens	561977		
<i>Desi</i>			
<i>Improved</i>			
Ducks	-		
Turkey and others	6333		

8. Priority thrust areas

S. No	Thrust area
1.	<p>Crop Production</p> <p>A large low-lying area of the district is occupied by the black and heavy soils, which are very tricky to work. There is need to develop technology for the preparation of seed bed conducive for seedling emergence and growth of the crop. Sowing of wheat and chickpea during rabi season is often delayed due to uncertain transplanting and late harvesting of rice. There is need to develop technology for timely planting of rice nursery and use of short and medium, high yielding rice varieties to avoid delay in wheat and chickpea planting.</p>
2.	<p>Seed Replacement</p> <p>Poor seed quality is one of the major reasons behind low yield of crops that is why seed replacement programme should also be taken up on massive scale by involving progressive farmers and rural youth in self seed production programme.</p>

3	<p>Rain Water Harvesting Rain water management is the other area identified for maximization of crop yield, check soil erosion, increase crop intensity through alternate land use system and sequential cropping system recommended under dry land conditions for achieving sustainable agricultural production in this area.</p>
4.	<p>Horticulture and Agro-forestry There is ample scope for the establishment of Aonla, Ber, Bael, Phalsa, Karonda, Pomegranate, Chiraunji orchards along with forest species. Plantation of Teak, Subabool, Mahua, Sheesam, Anjan, Siris, Neem, Eucalyptus, Jatropha and Karanj is more viable than crop production.</p>
5	<p>Vegetable Production Renukoot, Obra, Anapara, Shaktinagar, Dala, Churk, Robertsganj, are the areas where different industries have been established and around which vegetable production may be profitable business. To fulfill the demand of vegetables in these areas K.V.K. has taken initiative in popularising the some important seasonal vegetables and vegetable seed production programme in the nearby villages around these towns.</p>
6	<p>Production of Medicinal Plant There is ample scope for the cultivation and production of medicinal plants. The soil and climate of this area is very much suited for the cultivation of medicinal plant i.e. Safed Musali, Buch, Kalmegh, Aswagandha, Chandrashoor, Isabgoal and Muskdana. Accordingly, there is need of imparting training and conducting demonstrations by KVK.</p>
7	<p>Cattle Development Improvement of existing breeds of milch cattle through artificial insemination and proper feeding management is another problem identified in the district.</p>
8	<p>Poultry farming Sonbhadra is a district of industries, thus there is a big scope for broiler farming. There is need of popularising back yard poultry after skill oriented training on proper feed management and health care to weaker section of societies.</p>
9	<p>Use of Improved Agricultural Implements District has got very poor status on the use of improved implements, i.e. Disc harrow seed cum fertidril, paddy transplanter and reaper for harvesting. There is need of skill oriented-training / demonstration of these implements for proper land preparation, seed and fertilizer placement and saving of labour / manpower. Beside this, farmers should also be encouraged for the use of these implements.</p>
10	<p>Agro based Industries In this area almost very little work has been done even by government Agencies. There is a big scope of installation of Agro-based industries i.e. Fruit and vegetable preservation unit, Mini Rice Mill, Dal Mill, Bidi industry (Tendu Patta), Agarbatti and Dhoop Batti industry and some cottage industries like Bamboo based (Bena (Pankha), Dauri, Dalia), Dona/Pattal making by machine and fibre based (Rope) etc.</p>
11.	<p>Farm Women Illitracy among the rural women is very high. They are totally unskilled in farm operations. Therefore, has to be taken up for imparting the vocational training in agriculture and allied enterprizes such as nutrition and home management aspects and cottage industries.</p>
12.	<p>Unemployment of rural / tribal youths Provision of gainful employment for the tribal of the district, comprising of about 30-40% of the total population, as well as rural youths through subsidiary agricultural occupations is another problem identified in the district.</p>

Azamgarh

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S.No.	Farming system/enterprise
1.	Field Crops : Cereals, Pulses, Oilseeds, Fodder & Cash crops.
2.	Live stock : Dairy, Poultry, Goatry & Fisheries.
3.	Horticultural Crops : Fruits & Vegetables.
4.	Others : Bee keeping, Vermi & Nadep compost production.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S.No.	Agro-climatic Zone	Characteristics
1.	VIII- Eastern plain Zone	This zone has a geographical area of 16m. ha & rain fall is high. Alluvial soil type is pre dominant in nature. About 39% of gross cropped area is irrigated & the cropping intensity is 142 percent.

S.No.	Agro-ecological situation	Characteristics
1.	AES-1 Sandy Loam	In the north part of the district which is situated at the south bank of river Ghaghra. In this part Haraiya & Mahrajganj block are covered. The yield of the crop is very poor. Soil is deficient in many of the nutrients. Crop production, vegetable, fodder production & dairy management are main occupation of the farmers.
2.	AES-2 Clay Loam Soil	North part of the river Tamsa & South Kachhar of river Ghaghra is met together, which have clay soil & have most fertile belt of the district. It contains Atrauliya, Koilsa, Bilariyaganj & Azmatgarh block. Farmers grow almost all types of crop which are grown in AES-1 but productivity is slightly higher. People rear desi breed of cow, buffalo, goat, poultry & piggery in few of the pockets.
3.	AES-3 Sandy Clay Loam	Third part having loamy soil which contain mixture of clay & sandy loam. Containing area of block Ahiraula, Pawai, Tahbarpur, Palhni, Phoolpur, Mirzapur, Rani Ki Sarai, Sathiyaon, Jahanaganj, Mohammadpur, major portion of the area fall under this category. The soil is the light textured. Crops are grown with limited resources condition. In this ecological situation major crops, fodder, vegetable & dairy components are actively adopted.
4.	AES-4 Sodic Soil	Fourth part have south west area of district in which Marteenganj, Thekma, Lalganj, Palhna, Mehnagar & Taruan blocks are covered. The soil of these area is found as sodic soil. Productivity is very low. Soil is deficent with micro-nutrients. Milk yield is low. Improved breeds of animal & high yielding varieties which have sodicness tolerant capacity like usar Dhan-1 have need to introduce in this area.

3. Soil types

S.No.	Soil type	Characteristics	Area in ha.
1.	Sandy Loam Soil	The sandy loam to loam soils having soil pH 6.0 to 7.5 and contain less limes than the Bhat soil. Loam soil possessing a high water holding capacity & Zone of accumulation of CaCO ₃ are called Dhankar in the district, which are suitable for paddy cultivation.	54744
2.	Clay Loam Soil	In this soil clay percent is dominated which provide better water retention capacity & are most fertile zone of the district. The crops & Vegetables are raised on less supply of plant nutrients.	86506
3.	Sandy Clay Loam	In this soil having loamy soil, which contain mixture of clay & sandy loam. The soil is the medium textured. These soils are most desirable for movement of air & water and hold the plant nutrients & moisture well. These soils are suitable for cultivation of major commercial crops, vegetables & horticultural crops.	203217
4.	Sodic Soil	Fourth part have south west area of district in which Marteenganj, Thekma, Lalganj, Palhna, Mehnagar & Taruan blocks are covered. The soil of these area is found as sodic soil. Productivity is very low. Soil is deficient with micro-nutrients. Milk yield is low.	158100

4. Area, Production & Productivity of major crops cultivated in the district

Sl.No.	Crop	Area (ha)	Production (Qtl.)	Productivity (Qtl/ha)
1.	Paddy	205352	4175370	20.33
2.	Wheat	222018	5526400	24.89
3.	Maize	7158	91110	12.73
4.	Urd	361	1390	3.85
5.	Mung	72	420	5.83
6.	Lemtil	123	1570	12.68
7.	Gram	4583	53260	11.62
8.	Pea	8602	102880	11.96
9.	Arhar	9723	85080	- 8.75
10.	Mustard	1200	11970	- 9.97
11.	Sugar cane	21313	9291820	- 435.52
12.	Potato	5553	913590	- 163.99

5. Weather data

Month	Rainfall (mm)	Temperature °c		Relative Humidity (%)
		Maximum	Minimum	
Oct. 2007	-	29.20	18.31	52.81
Nov. 2007	-	28.33	16.63	55.60
Dec. 2007	-	27.66	15.27	61.03
Jan. 2008	-	20.69	9.21	68.20
Feb. 2008	205.8	29.06	10.45	63.38
March, 2008	75.0	31.65	15.86	51.09
April, 2008	10.0	38.8	20.00	68.00
May, 2008	48.0	38.6	25.00	59.60
June, 2008	437.0	42.0	24.00	91.00
July, 2008	602.0	33.0	21.00	95.00
August, 2008	353.0	35.0	25.00	95.00
September, 2008	32.0	35.0	24.00	90.00

6. Production & productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	81603 (*F-34342)	85855 Lit.	2.5 Litr./Ani.
Cross bred			
Indigenous	414520 (F-122763)	110486 Lit.	0.900 Litre/Ani.
Buffalo	379364 (F-192381)	288570 Litre	1.5 Litre/Ani
Sheep	1294	51760 Kg.	40 Kg/Ani.
Crossbred			
Indigenous	22818	798630 Kg.	35 Kg./Ani.
Goats	326830	13073200	40 Kg./Ani.
Pigs	6846	1026900 Kg.	150 Kg./Ani.
Crossfred			
Indigenous	37620	3385800	90 Kg./Animal
Rabbits	-	-	-
Roultry			
Hens			
Desi	25300	50600 Kg.	2 Kg./hen
Improved	602189	752736 Kg.	1.25 Kg./Poul.
Ducks	N.A.		
Turkey & Others	N.A.		
Fish	1292000	1615000 Kg.	1.5 Kg./Fish

*F = Female

7. Details of Operational area/Villages (October 2007 to September-2008)

S.N o.	Taluk	Name of the Block	Name of the Village	Major crops & enterprises	Major problem identified	Identified Thrust areas
1.	Sadar	Palhna	Geluara,	Pigeon pea	Pod borer & blue Bull attack	Nutritional Management in R-W System
		Palhni	Ekrampur	-do-	-do-	
	Lalganj		Chakbilinda			
			Budaitha			
			Chandeshwar			
		Thekma	Gopalpur	-do-	-do-	-do-
			Khursu,			
			Belaisa			
			Karanpur			
			Mahuwari,			
			Belakhas			
2.	Sadar	Thekma	Chatarpur	Chick pea	Wilt & Pod borer	Nutritional Management in R-W System
	Lalganj & Phoolpur	Martinganj	Kumbh			
		Lalganj	Kuruthua		-do-	-do-
			Gopalpur			
		Bilariyaganj	Pachakhora	Field pea		
				-do-	Powdery Mildew & Alternaria Blight	-do-
		Thekma	Chatarpur	-do-	-do-	
		Martinganj	Kumbh			
		Lalganj	Baragaon	-do-		
		Palhni	Gopalpur		Dense Plant population &	-do-
			Kuruthua	Mustard		

					Aphid attack	-do- Promotion of oilseed & pulse production
	Lalganj Sadar Sagri	Lalganj Thekma Mahrajganj Sathiaon Rani Ki Sarai	Chewar, Thekma, Sapha, Mohamadpur, Chatarpur, Kharagpur, Ahirauli, Karanpur, Sadipur	Paddy	Over aged thick seedlings duply transplanted by the farmers.	Thin & shallow transplanting of 20 days nursery
3.	Phoolpur Lalganj	Martinganj Mahrajganj Thekma Lalganj Rani ki Sarai Palhni Mehnagar	Surhan, Dubra, Lasrakala, Kotwa, Gopalpur, Baghpur, Amnawey, Kharagpur Sapha, Harnampur, Dana	Mustard -do- -do-	Lower production due to Sulphur deficiency in soil -do- -do-	-do- -do- -do-
4.	Sadar Sadar Lalganj, Phoolpur Sadar	Palhni Palhani Rani Ki Sarai, Martinganj Lalganj Thekma Rani ki sarai Mehnagar	Nibi, Basirpur, Ekrapur, Bhagipur Dubra, Surhan, Kotwa, Lasroukala, Baghpur, Harinampur, Para, Newada, Kharagpur, Ekrapur, Salarpur, Baragaon Kotwa, Sapndhar, Shahigra, Mohandalla, Bhagha, Dihiya, Chani	Wheat Barley Tomato	Imbalance use of fertilizers, avoid RCT'S option's & weed infestation Imbalance use of fertilizers, avoid RCT'S option's & weed infestation. Leaf curl virus & splitting of fruits.	Development of efficient package & practices for management of production of crops. Development of efficient package & practices for management of production of crops. Adoption of biopestisids & bioagents for eco-friendly environment.

			behta, Jalalpur			
	Sadar	Palhni	Lachchirampur Daudpur, Hazipur, Nibi, Sathiaon, Gangapur	Chilli	Leaf curlvires & flower drops	-do-
		Palhni Rani ki Sarai Palhni	Palhani, Mohandalla	-do-	-do-	-do-
	Sadar	Palhni, Rani Ki Sarai	Daudpur, Andhari, Chaksethwal, Ghatipatti, Behta, Tiwariapur, Gopalpur	Bringal	Sever attack of shoot & fruit borer of bringal	-do-
	Lalganj, Sadar	Jahanaganj, Mohammad pur, Bilariyaganj	Anwati, Jagarnath Sarai, Bhelkhra, Mainparpur, Dharwara	Suran	Mosaic & callor rot	-do-
5.	Sagri	Azmatgarh	Maltari	-do-	-do-	-do-
	Sadar	Palhani Rani Ki Sarai	Mohandalla, Sahigara	Cauliflower	Sever attack of Cauliflower catterpillar (DBM) high yielding varieties.	-do-
6.	Budhanpur, Sadar, Phoolpur	Koylsa Palhani Martinganj Atraullia	Sarraiya, Nebuadeh, Parmeshwar pur, Daniyalpur, Akharchanda, Gangtia, Achalipur, Devapur, Newada, Dehduar	Sudan -do-	Popularization of HCN free green fodder -do-	Nutritional deficiency & unbalanced feeding in milch cattle -do-
7.	Budhanpur, Phoolpur, Lalganj	Palhani Koyalsa Mortinganj Thekma Mehnagar	Unchagaon, Jalalpur, Dehduar, Baghpur, Bitthalpur, Daina	Berseem	Use of unknown local variety with low productive & slow growing	Popularization of fast growing high productive Berseem variety
	Sadar	Ahiraula, Jahanaganj, Palhani	Tiwariya Khurd, Makhdoom- pur, Nibi, Dharwara	Haldi	No diversification of existing farming system even high value crop of haldi.	Introduction of high yielding with urumin content var. of haldi.
8.	Sadar & Lalganj	Palhani Lalganj	Gopalpur, Khemaupur, Salhara, Mirzapur	Drum Seeded Rice	Use aged nursery for transplanting & higher labour requirement.	Promotion of NRM & RCTs to improve soil health & environment.

9.	Sadar, Lalganj, Budapur	Palhani & Thekma	Thekma Sadipur, Chatarpur, Sapha, Karanpur, Kharagpur, Mohammadpur	Rice	Lack of variety suited to sodic soil, raising of dense nursery with deep transplanting.	Development of efficient package & practices for management & production of crops in sodic soils.
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8. Priority thrust areas

Sl.No.	Thrust area
1.	Promotion of Oilseed, Pulses and cereals.
2.	Promotion of natural resource management (NRM) & RCTs to improve soil. Heath & environment.
3.	Nutritional management in R-W cropping system.
4.	Promotion of enterprenurship for emploment generation through allied enterprizes.
5.	Development of efficient package & practices for management & production of crop in sodie soils.
6.	Development of efficient package & practices for management & production of crop's in flood prone areas.
7.	Possibilities of Dairy, Poultry, Bee keeping, Mushroom, fisheries & Goatary components are assessed in the district.
8.	Promotion of integrated approaches for quality production & safer environment.
9.	Diversification of existing cropping system through incorporation of high value crops.

Barabanki

Location and Geographical Texture of the District

The district Barabanki lies between the latitude of 25°3' and 24°16' north and longitude 85°9' and 84.26' east surrounded by Baharich, Sitapur, lucknow, Raibareli, Sultanpur and Faizabad district. The district consist of 06 Sub Division (Tehasil), 17 C.D. Blocks, 163 Nayaya Panchayat 833 Village Panchayat and 2360 revenue village with a geographical area of about 2981 sq. km. present a complex variety of landscape and falls under **Eastern plain Agro Climatic Zone** . This Zone (**Cd 5.4**) comprises upper and middle Gangatic alluvial plains including Ghaghara, Gomati interfluves and Bihar plains have moderately large moisture availability with 150-180 days growing period and **Dry Sub Humid Climate** . These area have two dry seasons i.e. summer and winter with **Ustic typic soil moisture resumes**.

Major drainage passes through river Ghaghara, and other tributaries in the district. Due to topographical and hydrological situation total precipitation received in drainage congestion about 30% area of the district is affected every year by low, medium and high flood which causes miseries to animals and human population and some **wet lands** are also situated in the district. The productivity of these areas is also affected adversely due to floods needs attention.

2. Description of Agro-climatic Zone & major agro ecological situations

IDENTIFICATION, DESCRIPTION AND ANALYSIS OF EXISTING FARMING SYSTEM UNDER EACH AES

Agro Ecological Situation

Based on the variations in precipitation, soil type, irrigation facilities, topography and land use pattern the Barabanki district has been classified under four (4) different **Agro Ecological Situations (AES)**. These **AES** are named as under

AES and Representative Village for participatory data collection

Agro-Ecological Situation (AES)	Area (ha)	Representative villages	Representative Blocks
Sandy loam	242971	Kutubapur	
Loam irrigated	47906	Daulat pur	
Clay Loam irrigated	61742	Kothi	
Flood Prone/ Water logged		Pure Dalai	

3. Soil types

The soils of the selected AES Villages are light to heavy in texture and the agro-ecological situations have been identified as under.

- Light alluvium (Loam- sandy Loam).
- Alluvial plans both irrigated and rain fed salt affected and normal slightly alkaline plains (Light alluvium, loam).
- Heavy alluvium (clay loam to Clayey soils)

The soils of the aforesaid AES range from moderately well drained to somewhat poorly drained and from slightly alkaline to alkaline in nature. The information an different types of soils.

4. Area, Production and Productivity of major crops cultivated in the district

Crop	Area (ha)	Production (q)	Productivity (Q/ha)
Paddy	179338	416602	23.23
Arhar	8787	7705	8.77
Groundnut	1026	822	8.01
Wheat	162040	470888	29.06
Potato	14011	274391	195.84
Mustard	10950	12658	11.56
Urd	6214	1510	2.43
Sugarcane	13816	710585	514.32
Mentha	47523	4752300 kg	115.00 kg/ha.

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)	
		Maximum	Minimum	Max	Mini
JAN	50.70	23.9	4.3	100	55
FEB	00	34.0	5.5	95	38
MARCH	00	40.5	3.2	80	18
April	13.8	42.0	15.3	94	15
May	64.5	44.8	18.0	96	15
June	237.3	39.5	23.1	100	42
July	256.6	36.0	23.3	95	56
August	94.5	36.1	24.4	94	62
Sept	111.3	38.4	22.8	98	47
Oct	49.5	36.4	16.5	98	50
Nov	00	31.5	11.5	98	44
Dec	00	28.1	5.2	100	47

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Productivity
Cattle		
<i>Crossbred</i>	10465	6-7.5 l/day
<i>Indigenous</i>	401772	2-3 l/day
Buffalo	319619	4-5 l/day
Sheep	4603	
Goats	278421	6-8kg after 6months
Pig	62378	30-35 kg after 6 months
Rabbits	410	
Poultry	160650	
Turkey and others	5057	

Type of Changing Scenario in Rural Areas, Which Is Having a Bearing on Existing Farming System in the district

Type of changing scenario	Effect of each scenario on farming system (H/M/L)			
	AES-I	AES-II	AES-I	AES-II
• Migration of people to urban areas	M	M	M	M
• Lack of animal draught power	H	H	H	H
• Increase in farm machinery	H	H	H	H
• Shortage of labour	H	H	H	H
• Reduction in availability of fodder	M	M	M	M
• Increase in number of unemployed rural youth	H	H	H	H
• Increase in level of education	L	H	H	H
• irrigation water	L	H	H	L
• Increase in rural indebtedness	M	H	M	H
• Better transport facilities	L	M	M	M
• Milk collection centers/route	L	M	M	M
• Marketing facilities at the village level	L	M	M	M
• Slackness towards agriculture	M	M	M	M
• Low relative profitability from farming	M	M	M	M
• Absentee land lordism	L	L	L	L
• Purchasing land from others				

Description of Ongoing Development Activities in the District

Name of the scheme	Sector
AGRICULTURE	
<ul style="list-style-type: none"> • Macro Mode Management (MMM) • Integrated Cereal Development Programme • Integrated Pest Management • Fertility Management Programme • Agricultural Mechanization Programme 	Central
<ul style="list-style-type: none"> • Integrated Scheme of Oilseeds Pulses Oil palm & Maize (ISOPOM) 	Central
<ul style="list-style-type: none"> • National Food Security Mission 	Central
<ul style="list-style-type: none"> • Rashtriya Krishi Vikas Yojana 	Central
<ul style="list-style-type: none"> • Micro Irrigation Scheme 	Central
<ul style="list-style-type: none"> • National Crop Insurance Programme 	Central
HORTICULTURE	
<ul style="list-style-type: none"> • National Horticulture Mission 	State
<ul style="list-style-type: none"> • Macro Management Mode 	Central
<ul style="list-style-type: none"> • National Medicinal Plant Board Scheme 	Central
<ul style="list-style-type: none"> • National Horticulture Board Scheme 	Central

ANIMAL HUSBANDRY	
• Capital Insurance Scheme	Central
FISHERIES	
• Fisherman Development Agency Scheme Training Construction of New Tank, Renovation / Construction of Old tank, Integrated Fish Farming Reproduction Hatcheries of Ornamental Fisheries	Central
• Insurance Scheme for Fisherman Community	Central
• Scheme for Housing and other Citizen Scheme for Fisherman Community	State
• Fisherman Seed Producing & Distribution Scheme	State
KRISHI VIGYAN KENDRA	
• Trainings for practicing Farmers, in service field staff and vocational trainings for rural youth.	Central
• Conducting FLD's, OFTs & adaptive trials	Central
• Transfer of Technology	State
• Farmer's Scientist Interaction	State
• Mass Media Support to agriculture Extension Kheti Vari Krishi Darshan	AIR / Door Darshan

7. Details of Operational area / Villages

Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Haidergarh	Bara Kanawa	Paddy , wheat Sugarcane, Mentha, Arhar, Toria, Mustard, Til, lentil, Chickpea Mushroom production, Madhumakhi palan, Grain storage, Vegitable & fruit preservation	<ul style="list-style-type: none"> • Low yield of paddy • Low yield of Wheat • Low yield of Pigeon pea • Low yield of Mentha oil • Low yield of Mustard • Low milk yield of milch animals. 	<ul style="list-style-type: none"> • No use of weedicide • Introduction of new varieties • Attack of pod borer • Attack of viral diseases • Attack of aphid, hairy caterpillar • Imbalanced use of fertilizer • Poor feeding management of cattle
	Beejapur			
	Pecharuwa			
	Purey Parihar			
Trivediganj	Tahawapur			
	Gyanmatikhera			
	Kakari			
	Husainabad			
Siddhaur	Purey gauriya			
	Iliyash Pur			
	Kutubapur			
	Mohabbatpur			
	Saddullapur			
	Kothi			
	Saddullapur			

8. Priority thrust areas

Keeping in view of AES the efforts have also been made to sort out thrust points for agenda addressing research, Extension and development activities as follows.

Crop	Priority thrust areas	Solution	Activity
Paddy	Poor seed replacement rate	Development of seed village	Group formation
		Development of input agency	Agric clinic development
			Training
	Lack of seed treatment	Training on seed treatment	Training

	Thick & weak nursery raising	Training& Demo. on nursery raising	Training
			Demo.
	Lack of suitable variety for flood prone	OFT on variety suitability	OFT
	Imbalance use of fertilizer	Use of balance fertilizer	Training
			Demo.
		Credit mobilization	Credit card camp
	Depletion of organic mater in soil	Development of organic fertilizer production unit & their use	Training
			Demo.
			Trial
		Use of Green / Brown manuring	Trial
			Demo
	Poor weed management	Integrated weed management	Training
	Lack of proper insect-pest management	integrated pest management	Training
	Lack of knowledge about post harvest technology	Training on post harvest technology	Training
	Lack of value addition	Training on value addition	Training
Pigeon pea	Poor seed replacement & lack of seed treatment	Replacement of seed & training on seed treatment	Training
			Demo.
	Poor plant population due to water logging	Sowing on raise bed	Trial
			Demo.
	Attack of wilt & pod borer	Training & Demo. on it	Training
			Demo.
	Lack of proper post harvest management & value addition	Training on post harvest & value addition	Training
Maize	Lack of seed treatment	Training on seed treatment	Training
	Poor plant population due to water logging	Sowing on raised bed	Trial
			Demo.
	Lack of proper post harvest management & value addition	Training on post harvest & value addition	Training
Wheat	Poor seed replacement rate	Development of seed village	Group formation
			Training
	Lack of seed treatment	Training on seed treatment	Training
	Delayed sowing in water logged area	Introduction of Zero tillage technology	Training
			Demo.
	Imbalance use of fertilizer	Use of balance fertilizer	Training
			Demo.
	Depletion of organic mater in soil	Development of organic fertilizer production unit & their use	Training
			Demo.
			Trial
		Use of Green manure	Trial

			Demo
	Poor weed management	Integrated weed management	Training
	Lack of knowledge about post harvest technology	Training on post harvest technology	Training
	Lack of value addition	Training on value addition	Training
Lentil	Poor seed replacement & lack of seed treatment	Replacement of seed & training on seed treatment	Training
	Lack of proper post harvest management & value addition	Training on post harvest & value addition	Training
Chick pea	Poor seed replacement & lack of seed treatment	Replacement of seed & training on seed treatment	Training
	Attack of wilt & pod borer	Training & Demo. on it	Training
			Demo.
	Lack of proper post harvest management & value addition	Training on post harvest & value addition	Training
Field pea	Poor seed replacement & lack of seed treatment	Replacement of seed & training on seed treatment	Training
	Poor water management	Sowing on raised bed	Trial
			Demo.
	Lack of proper post harvest management & value addition	Training on post harvest & value addition	Training
Sugarcane	Unawareness about early maturing varieties	Demo. on early maturing varieties	Demo
	Poor management of cultural practices	Training on management of cultural practices	Training
	Poor management of ratoon crop	Training on management of ratoon crop	Training

Jaunpur

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S.No.	Farming system/ Enterprise
1.	Crop production
2.	Crop production– Horticulture/Vegetable
3.	Crop production– Horticulture – Animal Husbandry
4.	Crop production– Vegetable – Fisheries

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No.	Agro-ecological situation	Characteristics
1.	Eastern Plain Zone (EPZ)	Alluvial, sandy, sandy loam soil with alkaline in nature, average annual rainfall of 1150 mm
2.	AES I	<p>√ Lomy sand to sandy soil, undulating and eroded Topography with tube well irrigation. Major crop sown in this AES in kharif are paddy, Maize, Sugarcane, Arhar and in rabi season, Wheat, Gram, Mustard and zaid Maize, Urd, Moong. Under vegetable & fruits major crops are Potato, Okra, Chilies, vegetable pea, tomato, Mango, Guava, Jackfruit, Banana, Karaunda.</p> <p>√ Major livestock in this area are local cow, cross jurshi, Murrha, Jamunapari, Barbari, Jaunpuri, Prominent farming system in this areas are crop production, crop production- Horticulture – Animal Husbandry and Crop Production-Horticulture-Animal Husbandry-Fisheries farming.</p>
3.	AES II	<p>√ Soil type of this AES areas are silt loam & clay loam Topography of soil is plain and irrigation facilities are canal & state tube well. Major crop of this area under kharif are Paddy, Maize, Sugarcane, Arhar. In rabi, Wheat, Gram, Mustard and in Zaid Maize Urd & Moong. Major vegetable & fruit crops in these areas are Potato, Brinjal, Okra, Chilli, Onion, Mango, Guava & Aonla. Major livestock of that area are local cow, cross Jurshi, Murrha, Jaunpuri and Domi-farming system of these area are Crop Production, Crop Production-Horticulture, Crop Production-Horticulture & Crop Production-Horticulture-Animal Husbandry-Fisheries.</p>
4.	AES III	<p>√ Soil of this areas is sandy loam to loam. Topography of the soil is plain and irrigation facilities are canal & state tubewell. Major crop of this AES are also in kharif Paddy, Maize, Sugarcane and in rabi wheat, Gram, Pea & Mustard and in Zaid Maize, Urd & Moong. Major horticultural crops viz., Vegetable & fruit in these areas are Potato, Onion, Vegetable Pea, Tomato, Cauliflower, Mango, Guava, Banana citrus, Karaunda. While major livestock are also local cow, cross Jurshi, Murra, Jaunpuri, Barbari, Jaunpuri. Major farming system of these area are also Crop Production, Crop Production-Horticulture, Crop Production-Horticulture-Animal Husbandry & Crop Production-Horticulture-Animal Husbandry-Fisheries</p>

Source: SREP, Jaunpur

3. Soil types

S. No.	Soil type	Characteristics	Area in ha
1.	Loamy Sand, Sandy Soil	Upland soil, Poor in Soil, fertility, Deep water table undulating and eroded soil	96,652
2.	Salty loam &	Sodic, water logged low land soil, Poor in soil fertility fallow	1,64,497

	clay loam	water table, canal are the major irrigation source	
3.	Loam, Sandy loam, Alluvial	Mostly Plain Soil, Major area in under irrigation, source of irrigation bore well canal & state tube well	1,35,846

4. Area, Production and Productivity of major crops cultivated in the district

S. No.	Crop	Area (ha)	Production (Metric/ton)	Productivity (Qtl/ha)
(a) Kharif (2008-09)				
1.	Paddy	142240	282346	19.85
2.	Maize	45185	62485	14.05
3.	Sorghum	3201	3909	12.21
4.	Bajra	5190	5564	10.72
5.	Urd	4572	3932	7.60
6.	Moong	126	25	1.99
7.	Arhar	9680	7066	7.32
8.	Sesamum	412	61	1.54
9.	Sugarcane	10215	588384	576.4
(b) Rabi (2008-09)				
1.	Wheat	195412	525658	26.94
2.	Pea	4856	5487	11.27
3.	Mustard	2011	2213	11.05
4.	Check Pea	5940	5286	8.86
5.	Lentil	41	33	7.96
6.	Barley	704	1211	17.21
7.	Linseed	6	4.7	7.8

5. Weather data

Month	Rainfall (mm)	Maximum Temperature (°C)	Relative humidity (%)
October,2008	12.60	32.7	86
November,2008	Nil	30.4	82
December,2008	Nil	26.2	83
January,2009	0.50	22.8	86
February,2009	1.0	27.5	70
March,2009	Nil	33.8	63
April,2009	Nil	37.9	52
May,2009	Nil	41.5	72
June,2009	17.70	42.5	97
July,2009	224.75	40.4	99
August,2009	117.30	41.3	99
September,2009	11.50	37.6	98

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			

<i>Crossbred</i>	44049	132147.00 lit	5 lit
<i>Indigenous</i>	435763	78373.4 lit	3 lit
Buffalo	401121	722017.8 lit	3 lit
<i>Crossbred</i>	570	199.5 wool/ yr.	0.50 kg
<i>Indigenous</i>	46271	16194.85 wool/ yr.	0.50 kg
Goats	212592	1488144 kg meat	14 kg
<i>Crossbred</i>	4417	159012 kg meat	60 kg
<i>Indigenous</i>	32248	483720 kg meat	25 kg
Rabbits	79	Not reared	-
Poultry			
Hens	10839	14632.65 kg meat	1.5 kg
Desi	368674	497709.9 kg meat	1.5 kg
Inland Fish	219	6570	30 q/ha

7. Details of Operational area / Villages

S. N.	Taluk	Name of the Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Jaunpur Kerakat Madiyahun Jaunpur	Buxa Kerakat Ramnagar Dharmapur	Gopalapur Gadsaini Uttarpatti Majhuali Bhivrahan Akbarpur Jamaliya Kuchmuch Kadipur	Kharif Maize	Low yield of maize due to poor crop management	HYVs of maize & improved package and practices
2.	Badlapur Jaunpur	Badlapur Buxa	Sidd Bithwakala Biraja Dandwa Ardhpur Sujiamau Sekhpura	Sesamum	Low yield of sesamum due to poor crop management	HYVs of sesamum & improved package and practices
3.	Madiyahun Kerakat Jaunpur Madiyahun Jaunpur	Ramnagar Dobhi Buxa Madiyahun Sirkoni	Jamaliya Ailia Bedauli Chondhi Dhaneja	Toria	Low yield of Toria due to poor crop management	HYVs of Toria & improved package and practices
4.	Kerakat Jaunpur	Kerakat Sirkoni	Akbarpur Salkhapur	Mustard	Low yield of Mustard due to poor crop management	Improved varieties and package and practices
5.	Kerakat	Kerakat	Akbarpur	Arhar	Low yield of pigeon pea and old varieties	HYVs of pigeon pea & ridge sowing
6.	Jaunpur	Dharmapur	Kadipur, Rajepur	Pea	Low yield of pea and no use of bio-fertilizer	Introduction of HYVs and proper nutrient management
7.	Kerakat	Muftiganj	Umari Suraila	Chick pea	Low yield of chick pea due to pod	Introduction of HYVs and

					borer	proper nutrient management
8.	Kerakat	Dobhi	Kakrapar Lokapatti Bisauli Mahapur	Lentil	Low yield of Lentil due to poor crop management	HYVs of lentil and improved package and practices
9.	Jaunpur Badlapur	Buxa Badlapur	Sujiamau Sid Barria Biduakala Salkhapur	Paddy	Long duration varieties in upland areas and imbalance use of fertilizer & higher investment	Short duration HYVs of paddy. Direct seeding with paddy drum seeder and weed control management and balanced used of fertilizer
10.	Jaunpur Madiyahun Badlapur	Buxa Sikrara Madiyahun Badlapur	Lakhanipur Samaspur Chaundhi Ugapur Niderpur	Wheat	Low yielding varieties imbalance use of fertilizer and weed control management practices	Balance fertilization and HYV of wheat and control of weed with chemicals
11	Sodhi Badlapur	Khuthan Badlapur	Didkhora Sid	Sugarcane	High infestation of shoot borer in sugarcane	To enhanced the yield of sugarcane through control of shoot borer
12.	Madiyahun Jaunpur	Ramnagar Sirkoni Buxa	Jamaliya, Salkhapur, Bharopur	Brinjal	High infestation of fruit & shoot borer in Brinjal	To assess the biological control of fruit & shoot borer in Brinjal
13.	Jaunpur Kerakat	Dharmapur Dobhi	Kadipur, Rajepur, Barmalpur	Guava	Poor yield of Guava due to poor management	To assess the rejuvenation practices for increasing the Guava yield
14.	Jaunpur	Dharmapur Sirkara Buxa	Kuchmuch, Dehajuri Goriyapur	Vegetable pea	Low yield of vegetable pea due to no use of descriptive varieties	To assess the comparative performance of HYVs of vegetable pea
15.	Jaunpur	Buxa, Sikrara, Sirkoni, Dharmapur	Hasrauli, Gadsaini, Magresher Majhauili Dhaneja Kadipur	Onion	Low yield of Onion due to use of local available variety	Introduced the HYVs of Onion
16.	Shah ganj	Sondhi Khuthan	Kanwariya Safipur Pura Andhari	Vegetable pea	Low yield of vegetable pea due to use of old variety	Introduced the HYVs
17.	Karanja-kala	Kohada Sultanpur	Kohada Sultanpur	Lobiya	Low yield of Lobiya due to use of old variety	Introduced the HYVs

18.	Karanja-kala	Kohada Sultanpur	Kohada Sultanpur	Ladyfinger	Low yield of Ladyfinger due to use of old variety	Introduced the HYVs
19.	Buxa	Bhivrahana	Majhauri Hasrauli Bhivrahana	Chilli	Low yield of Chilli due to use of old variety	Introduced the HYVs
20.	Buxa	Bhivrahana	Majhauri Hasrauli Bhivrahana	Cauliflower	Low yield of cauliflower due to use of old variety	Introduced the HYVs
21.	Buxa	Bhivrahana	Majhauri Hasrauli Bhivrahana	Tomato	Low yield of Tomato due to use of old variety	Introduced the HYVs
17.	Jaunpur	Sikrara Buxa	Sikrara, Khanapatti, Sujjamau, Bharavpur	Buffalo	Low milk yield due to no use of mineral mixture	To assess the feeding of mineral mixture on production of milk and improve the fertility in Buffaloes
18.	Jaunpur	Sikrara Buxa	Sikrara, Khanapatti, Sujjamau, Bharavpur	Cross-bred Cows	Low milk yield due to no use of mineral mixture	To assess the feeding of mineral mixture on production of milk and improve the fertility in cross-bred Cows
19.	Jaunpur	Buxa	Lakhanipur, Bhivrahan, Buxa	Nutritional garden	Mal nutrition is a health problem	Assessment of nutritional garden for small farmers

8. Priority thrust areas

- Management of Rice-Wheat system.
- Promotion of resource conservation technologies
- Management of crop in sodic soils
- Promotion of fruit crops: Mango, Aonla, Banana and Guava.
- Promotion of high- tech vegetable production.
- Raising productivity of Buffalo and development of cattle and goat
- Entrepreneurship development in rural youth.
- Integrated inland fisheries
- Drudgery reduction skill and entrepreneurship development in farm women.

Chandauli

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Sl. No.	Farming system/enterprise
1.	Resource Rich* : Rice-wheat, Oilseeds and pulse crop, Mango/Guava orchard, 2 to 3 graded buffalo/cow.
2.	Resource Poor** : Rice-wheat, Jwar, Bajra, Arhar, Vegetables, 1 to 2 Buffalo/Cow
3.	Landless*** : Labour, Buffalo, Goat, Duck, Pig, Daily wages Veg./Cereals (Land on lease)

* Farmers with medium to large land holding size, assured irrigation, ploughing facilities and good credit support.

** Farmers with marginal to small land holding size. Occasionally assured irrigation, without tractor.

*** Land on lease or without land.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Agro-climatic zone : Eastern Plain Zone

Sl. No.	Particulars	Characteristics
1.	Alluvial Soil	Sandy, Sandy loam or Clay loam.
2.	Calcareous Soil	Black Soil
3.	Rocky Track	Sandy loam with small stones
4.	Holding size	Small & Marginal farmers and less Large farmers
5.	Temperature	06 to 44 ⁰ C
6.	Rainfall	667 – 1153 mm.
7.	Irrigation facilities	Canal, Boring and Tubewells
8.	Production system	Rice-wheat
Sl. No.	Agri-Eco System	Characteristics
1.	AES-I	Irrigated Clay loam Soil
2.	AES-II	Irrigated Loam Soil
3.	AES-III	Irrigated Sandy loam Soil
4.	AES-IV	Rainfed Sandy soil
5.	AES-V	Water logged Clay condition.
6.	AES-VI	Rocky track

3. Soil types

Sl. No.	Soil type	Characteristics	Area (ha)
1.	Clay	Paddy, Wheat, Lentil	26000
2.	Clay Loam	Paddy, Wheat, Lentil, Rai	54000
3.	Loam	Paddy, Wheat, Gram, Lentil, Pea, Rai, Vegetable, Urd (Summer)	122074
4.	Sandy Loam	Arhar, Gram, Vegetable pea, Vegetable, Maize, Sesamum, Ground nut, Urd, Moong	20000
5.	Sandy	Arhar, Maize, Gram, Papaya, Bajra, Vegetable Sesamum, Rai & Toria etc.	18000
6.	Rocky track	Arhar, Maize, Early Paddy, Vegetable, Toria, Rai, Gram Lentil, forest	13000
Total			253074

4. Area, Production and Productivity of major crops cultivated in the district

Sl. No.	Crop	Area (ha)	Production (qtl)	Productivity (qtl/ha)
Kharif				
1.	Paddy	94847	247456	26.09
2.	Maize	69	97	14.05
3.	Jowar	373	455	12.21
4.	Arhar	2368	2187	9.23
5.	Pearl millet	4899	7069	14.43
6.	Groundnut	99	71	7.17
7.	Urd	167	43	3.88
8.	Moong	39	18	2.16
Rabi				
1.	Wheat	93371	210889	22.59
2.	Barley	709	1332	18.79
3.	Gram	208	175	8.40
4.	Pea	1999	3316	16.59
5.	Lentil	11815	8436	7.14
6.	Rai	353	409*	11.58
7.	Toria	1262	452	3.58
8.	Potato	914	18968	207.53

5. Weather data

Sl. No.	Month	Rainfall (mm)	Temperature		Relative humidity (%)
			Maximum	Minimum	
1.	October 2008	-			
2.	November 2008	-			
3.	December 2008	-			
4.	January 2009	-			
5.	February 2009	-			
6.	March 2009	-			
7.	April 2009	-			
8.	May 2009	-			
9.	June 2009	3.00			
10.	July 2009	213.60			
11.	August 2009	106.60			
12.	September 2009	65.80			
	Total				

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Sl. No.	Category	Population (No.)	Milk Production (lit)	Productivity (lit/d/animal)
1.	Cattle Crossbreed	17203	52581.00	3.05
	Cattle Indigenous	156377	59137.95	0.37
2.	Buffalo	153258	79688.00	0.51
3.	Sheep Crossbreed	-	-	-
	Sheep Indigenous	23421	-	-
4.	Goat	82704	-	-
5.	Pig Crossbreed	510	-	-

	Indigenous	6989	-	-
6.	Poultry Broiler & Cheeks Duck	184353 29032	- -	- -
7.	Fish (qtl)	5907 ha (Water spread area)	2794 (qtl)	472 (Kg/ha)

7. Details of Operational area / Villages

Sl. No.	Tahsil/ Taluka	Name of the block	Name of the villages	Major crops and enterprises	Major problems identified	Identified thrust area
1	2	3	4	5	6	7
1.	Chandauli Sadar	Chandauli	Khuraujha, Hathiyani, Bisauri, Lilapur, Pandya, Bichhiya, Khurunja, Digghi, Banauli Khurd, Gorai Maddupur, Halwa, Bharthana, Dhurikot, Kanta- Bishunpura, Dharauli, Footia, Maidi, Sawaiya, Baburi	Paddy, Wheat, Maize, Lintil, Chickpea, Barley, Rai/Toria, Pigeonpea, Vegetable, Dairy, Dukery, Broiler	1. Low yield of paddy 2. Low yield of wheat 3. Low yield of Vegetables i.e. Brinjal, Tomato, Bottlegaurd	1. Quality Seed 2. IPNM 3. IPM 4. Diversi- fication in Rice-wheat cropping system 5. self employment generation
		Niyamtabad	Chhitampur, Rema, Mawai Kala, Dharne, Sahjor, Chhimia	Paddy, Wheat, Lentil, Vegetables, Gvava orchard, Dairy, Goatary	1. Low yield of paddy 2. Low yield of wheat 3. Low yield of Vegetables i.e. Brinjal, Tomato, Bottlegaurd	1. Quality Seed 2. IPNM 3. IPM 4. Diversi- fication in Rice-wheat cropping system 5. self employment generation
		Barahani	Amda, Arangi, Chattem, Tendumuhan, Sogai, Phutiya, Daina, Jalalpur, Newada, Banrajpur	Paddy, Wheat, Lintil, Potato, Vegetables, Dairy, Duckery	1. Low yield of paddy 2. Low yield of wheat 3. Low yield of Vegetables i.e. Brinjal, Tomato, Bottlegaurd	1. Quality Seed 2. IPNM 3. IPM 4. Diversi- fication in Rice-wheat cropping system 5. self employment generation

Contd.

1	2	3	4	5	6	7
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2.	Chakiya	Chakiya	Chakiya, Murarpur, Ganeshpur, Mudauya, Raghunathpur Barhongi, Emilia, Kharid, Amber, Rampur, Gayaghat, Mawaiya, Karemu, Sikandar Pur, Ramlaxaman Pur, Mahadew pur Dubey pur, Dodha pur	Paddy, Maize, Groundnut, Sesamum, Pigeonpea, wheat, lentil, Rai, Vegetables, i.e. Lobia, Potato, Tomato, Beans, Cucurbits, Table Pea, Dairy, Goatary, Agro Forestry	1. Low yield of all crops	1. Quality Seed 2. IPNM 3. IPM 4. Diversification in Rice-wheat cropping system 5. Agro-biased enterprises
		Shahabganj	Bhaisahi, Karemu, Ghudsar, Baraujhi, Badora, Dumori, Khikahi, Dodanpur, Rasia, Bentiyari, Maldah, Atayastganj, Singaroul Saraiya, Basari, Saidupur	Paddy, Wheat, Maize, Barley, Linseed, Chickpea, Pigeon pea, Rai, Vegetables, Agro-forestry	1. Low yield of paddy, wheat, lentil, chickpea	1. Quality Seed 2. IPNM 3. IPM 4. Diversification in Rice-wheat cropping system 5. Agro-biased enterprises
		Naugarh	Dhusuriya, Aurwa Tand, Bajariha, Mughgava, Parsia, Amdhaha, Jansoti, Kesar Semara, Manghagawa, Kunda, Hinauta Ghat, Rasauli, Semar Sadhopur	Paddy, Wheat, Sesamum, Maize, Lentil, Chickpea, Linseed, Agro Forestry	1. Low yield of paddy & wheat, 2. Low yield of vegetables	1. Quality Seed 2. IPNM 3. IPM 4. Moisture management

Contd.

1	2	3	4	5	6	7
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3.	Sakaldeeha	Sakaldeeha	Phaguia, Rammipur, Dighwat, Kori Kodaria, Raneypur, Basila, Samodhpur	Paddy, Wheat, Barley, Jwar, Bajra, Maize, Pigeonpea, Fieldpea, Chickpea, Lentil, Toria/Rai, Sesamum, Goatery, Poultry, Agro-forestry	1. Low yield of cereal crops 2. Low yield of Oilseeds crops. 3. Low yield of Pulse crops.	1. Quality Seed 2. IPNM 3. IPM 4. Wasteland (Usar) reclamation
		Chahaniya	Derwa, Balua, Juda Hardhan, Laxmangarh, Mahuar Kala, Gadhochuck, Saifpur, phoolpur, Kaithi, Mukundpur, Nidhaur, Nadeshwar, Marukhpur, Mahadewpur	Paddy, Wheat, Barley, Pigeonpea, Fieldpea, Chickpea, Lentil, Toria/Rai, Sesamum, Goatery, Poultry, Agro-forestry	1. Low yield of cereal crops 2. Low yield of Oilseeds crops. 3. Low yield of Pulse crops.	1. Quality Seed 2. IPNM 3. IPM 4. Wasteland (Usar) reclamation
		Dhanapur	Dhanapur, Amadpur, Sakrari, Pura Cheta Dube, Saheed, Nekonampur, Odara, Awazpur, Tarva, Awahi, Kamalpur, Khadan	Paddy, Wheat, Barley, Jwar, Bajra, Maize, Pigeonpea, Fieldpea, Chickpea, Lentil, Toria/Rai, Sesamum, Goatery, Poultry, Agro-forestry	1. Low yield of cereal crops 2. Low yield of Oilseed crops. 3. Low yield of Pulse crops.	1. Quality Seed 2. IPNM 3. IPM 4. Wasteland (Usar) reclamation

8. Priority thrust areas

Sl. No.	Crop/Enterprise	Thrust Area
1.	Rice	Introduction of disease resistant high yielding varieties of rice.
2.	Oilseeds, Pulses & Cereals & Vegetable	Use of IPNM in existing cropping system.
3.	Rice, Wheat	Use of IPM in rice-wheat cropping system
4.	Wheat, Pigeon pea	Resource Conservation Technologies (ZT & RB)
5.	Vegetables	Diversification in existing cropping system
6.	Cattle & Buffalo	Enhancement of milk yield of cattle and buffalo
7.	Horticultural crop	Promotion of Aonla, Mango, Guava, Bael, Citrus plants orchard etc.
8.	Elephant Foot Yam, Ginger, Turmeric	Intercropping in orchards
9.	Rice & Vegetables	Promotion of organic farming
10.	Rice	SRI technique in rice
11.	Kalmegh, Satawar, Marigold	Promotion of Medicinal plants & Floriculture
12.	Rice	Promotion of Rainfed rice

Balrampur

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Sl. No.	Farming system/ enterprise
1	Agriculture + Poultry
2	Agriculture + Fish farming
3	Agriculture + Dairy
4	Agriculture + Poultry + Fish farming
5	Agriculture + Goat rearing
6	Agriculture + Vegetable farming
7	Agriculture + Vegetable farming + Horticulture
8	Agriculture + Horticulture

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography) :

Balrampur district comes under North Eastern Plain Zone bordering Nepal country from North, Bahraich, Gonda and Siddharth nagar district from west east and south respectively. The temperature of the district varies from 9°C during winter to 45°C during summer. The maximum rainfall occurs in last week of July and first week of August. Hot wave flows in the month of May and cold wave during January. This district divided in three agro-ecological situations.

3. Soil types

Sandy loam, loam, clay loam.

4. Area, Production and Productivity of major crops cultivated in the district (2007-08)

Sl. No.	Crop	Area (ha)	Production (qt/)	Productivity (qt/ha)
1	Paddy	100608	2048380	20.36
2	Maize	5573	56100	10.07
3	Jwar	11	120	10.91
4	Bajra	106	1869	17.64
5	Other millets	113	690	6.11
6	Black gram	1441	8084	5.61
7	Pigeon pea	5403	41340	7.65
8	Wheat	83172	2912530	22.09
9	Barley	273	4837	17.72
10	Gram	490	3360	7.48
11	Pea	1724	16170	9.38
12	Lentil	26040	295030	11.33

5. Weather data

Month	Rain fall (mm)	Temperature ^o C		Relative Humidity (%)
		Maximum	Minimum	
Oct., 08	4.2	30.8	19.5	93
Nov., 08	-	24.6	12.8	89
Dec., 08	-	19.5	9.5	95
Jan., 09	-	21.5	6.2	92
Feb., 09	-	24.8	11.5	90
March, 09	-	28.6	13.5	85
April, 09	0.0	29.8	14.3	76

May,09	103.16	35.9	14.6	72
June,09	70.80	36.2	14.1	73
July,09	313.38	33.9	14.5	89
Aug,09	412.46	33.8	14.2	88
Sept,09	-	-	-	-

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	2,98,256		
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	-	-	-
Buffalo	1,43,246	-	-
Sheep	6,963		
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	-	-	-
Goats	1,51,150	-	-
Pigs	16,586		
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	-	-	-
Rabbits	370	-	-
Poultry	1,63,227		
Hens	-	-	-
<i>Desi</i>	-	-	-
<i>Improved</i>	-	-	-
Ducks	2,075	-	-
Turkey and others	-	-	-
Fish			
<i>Marine</i>	-	-	-
<i>Inland</i>	700 ha.	15,750	20-25 q/ha/ year
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

7. Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Tulsipur	Pachpedwa	Khakha daiyee	Crop production (Sugarcane, Wheat, Paddy, Lentil, Toria, Arhar); Vegetable (Brinjal, Tomato, Onion, Cole crops); Poultry, Horticulture (Mango)	<ul style="list-style-type: none"> • Low yield of cereals, pulses, & oilseeds. • Low production of vegetable • Low production of mango • Low yield of sugarcane 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Improper sowing technique • Untimely sowing • Improper crop rotation • Severe attack of pod borer • Weed infestation • Severe attack of top borer & wilt • No use of bio fertilizer • No summer ploughing • Severe attack of diseases & insects

						<ul style="list-style-type: none"> • Severe attack of shoot gall psylla
2	Tulsipur	Gainsree	Surat Singh Deeh	Crop production (Sugarcane, Wheat, Paddy, Lentil, Toria, Arhar); Horticulture (Mango, Guava)	<ul style="list-style-type: none"> • Low yield of cereals pulses, & oilseeds. • Low production of mango • Low yield of sugarcane 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Improper sowing technique • Untimely sowing • Improper crop rotation • Severe attack of pod borer • Weed infestation • Severe attack of top borer & wilt • No use of bio fertilizer • No summer ploughing • Severe attack of diseases & insects
3	Tulsipur	Pachpedwa	Sugaon	Crop production (Sugarcane, Wheat, Paddy, Lentil, Toria, Arhar); Horticulture (Mango), Dairy	<ul style="list-style-type: none"> • Low yield of cereals, pulses, & oilseeds. • Low production of mango • Low yield of sugarcane • Low production of milk. 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Improper sowing technique • Untimely sowing • Improper crop rotation • Severe attack of pod borer • Weed infestation • Severe attack of top borer & wilt • No use of bio fertilizer • No summer ploughing • Severe attack of diseases & insects • Imbalance feeding • Improper vaccination • Irregular heat
4	Tulsipur	Pachpedwa	Sishaniya	Crop production (Sugarcane, Wheat, Paddy, Lentil, Toria, Arhar); Poultry; Goatry; Horticulture (Mango) Fisheries	<ul style="list-style-type: none"> • Low yield of cereals, pulses, & oilseeds. • Low production of Mango • Low growth rate of broilers, fishes & goats. 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Improper sowing technique • Untimely sowing • Improper crop rotation • Severe attack of pod borer • Weed infestation • Severe attack of top borer & wilt • No use of bio fertilizer • No summer ploughing • Severe attack of diseases & insects

						<ul style="list-style-type: none"> • No use of supplementary feeds • Improper ponds preparation stocking of fingerlings in improper ratio & high density. • Polluted drinking water severe attack of E.coli & diarrhoea • Desi breed • Imbalance feeding • Improper deworming
5	Tulsipur	Pachpedwa	Bhushar Unchwa	Crop production (Sugarcane, Wheat, Paddy, Lentil, Toria,); Vegetable (Tomato, Brinjal, Cole crops,); Backyard poultry; Goatry; Piggery	<ul style="list-style-type: none"> • Low yield of cereals, pulses, & oilseeds. • Low yield of vegetables. • Low productivity of eggs & meat. • Low growth rate of pig. 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Improper sowing technique • Untimely sowing • Improper crop rotation • Severe attack of pod borer • Weed infestation • Severe attack of top borer & wilt • No use of bio fertilizer • No summer ploughing • Severe attack of diseases & insects • Desi breeds • Imbalance feeding • Improper vaccination
6.	Tulsipur	Pachpedwa	Kalyan pur Bargadwa	Crop production (Sugarcane, Paddy, Wheat, Toria, Lentil), Vegetable (Tomato, Brinjal, Cucurbitaceous crops); Poultry; Goatry.	<ul style="list-style-type: none"> • Low yield of cereals, pulses, & oilseeds. • Low yield of vegetables. • Low growth rate of poultry, fishes. 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Improper sowing technique • Untimely sowing • Improper crop rotation • Severe attack of pod borer • Weed infestation • Severe attack of top borer & wilt • No use of bio fertilizer • No summer ploughing • Severe attack of diseases & insects • Desi breed • Imbalance feeding • Improper deworming
7.	Tulsipur	Pachpedwa	Harraiya Chandarsi	Crop production (Sugarcane, Paddy, Wheat, Toria, Lentil), Fisheries,	<ul style="list-style-type: none"> • Low yield of cereals, pulses, & oilseeds. • Low yield of 	-do-

				Dairy, Poultry, Horticulture (Mango)	vegetables. • Low growth rate of poultry fishes.	
8	Tulsipur	Pachpedwa	Barhara	Fisheries, Poultry, Horticulture (Mango); Crop production (Sugarcane, Wheat, Paddy, Toria, Arhar, Lentil).	<ul style="list-style-type: none"> • Low yield of cereals, pulses, & oilseeds. • Low growth rate of poultry and fishes. • Low yield of sugarcane 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Improper sowing technique • Untimely sowing • Improper crop rotation • Severe attack of pod borer • Weed infestation • Severe attack of top borer & wilt • No use of bio fertilizer • No summer ploughing • Severe attack of diseases & insects
9.	Tulsipur	Pachpedwa	Motipur Harhawa	Crop production (Sugarcane, Wheat, Paddy, Lentil, Toria, Arhar); Horticulture (Mango); Fisheries, Poultry	<ul style="list-style-type: none"> • Low yield of cereals, pulses, & oilseeds. • Low growth rate of poultry & fishes. • Low yield of sugarcane 	-do-
10.	Tulsipur	Pachpedwa	Shankarpur Kala	Crop production (Sugarcane, Wheat, Paddy, Lentil, Toria, Arhar); Horticulture (Mango); Fisheries, Poultry	<ul style="list-style-type: none"> • Low yield of cereals, pulses, & oilseeds. • Low production of mango. • Low growth rate of broilers & fishes. • Low yield of sugarcane 	<ul style="list-style-type: none"> • Poor quality seed • Imbalance use of fertilizers • Improper sowing technique • Untimely sowing • Improper crop rotation • Severe attack of pod borer • Weed infestation • Severe attack of top borer & wilt • No use of bio fertilizer • No summer ploughing • Severe attack of diseases & insects
11.	Tulsipur	Pachpedwa	Basantpur Madrahawa	Crop production (Sugarcane, Wheat, Paddy, Arhar, Lentil, Toria, Arhar); Horticulture (Mango); Poultry, Goatry	<ul style="list-style-type: none"> • Low yield of cereals, pulses, & oilseeds. • Low growth rate of broilers. • Low production of mango. 	Same as above
12	Tulsipur	Pachpedwa	Masha	Crop production	• Low yield of	Same as above

				(Sugarcane, Paddy, Wheat); Vegetable (Tomato, Bringal, Cucurbitaceous crops, Chilli), Poultry, Goatry	cereals, pulses, & oilseeds. <ul style="list-style-type: none"> • Low production of vegetable. • Low growth rate of broilers & goat. • Low yield of sugarcane 	
13	Tulsipur	Pachpedwa	Khajuriya	Crop production (Sugarcane, Paddy, Wheat, Arhar, Lentil, Toria), Horticulture (Mango) Poultry, Goatry	<ul style="list-style-type: none"> • Low yield of cereals, pulses, & oilseeds. • Low production of mango. • Low yield of sugarcane 	Same as above
14	Tulsipur	Gainsree	Bhariha Deeh	Crop production (Sugarcane Paddy, Wheat, Arhar, Lentil, Toria); Horticulture (Mango), Dairy	<ul style="list-style-type: none"> • Low yield of cereals, pulses & oilseeds. • Low production of mango. • Low yield of sugarcane. 	Same as above
15	Tulsipur	Pachpedwa	Bisunpur Tantanwa	Crop production (Sugarcane, Paddy, Wheat, Arhar, Lentil, Toria) Poultry, Horticulture (Mango)	<ul style="list-style-type: none"> • Low yield of cereals, pulses & oilseeds. • Low Production mango. • Low growth rate of broilers. • Low yield of sugarcane. 	Same as above

8. Priority thrust areas

KVK Balrampur identified the following thrust areas based on the PRA and mass contact.

1. Enhancing Productivity of crop (Rice- wheat- sugarcane)
2. Improving soil health
3. Improving economic status of rural community
4. Improving animal health.
5. Providing employment opportunities for school drop outs
6. Skill improvement of farmers
7. Utilization of water bodies through fish culture

Sant Kabir Nagar

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1-	Paddy – Wheat/ Lentil
2-	Paddy/ Maize – Wheat/ Lentil/Pea
3-	Paddy/ Maize/ Pigeon Pea – Urd
4-	Maize – Pea/ Potato

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1-	North Eastern Plain Zone (Zone 4)	Abundent Surface and Ground Water

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1-	Sandy loam, Silty loam	--	--

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1-	Rice	92217	172907	18.5
2-	Maize	1604	2305	14.37
3-	Pigeon Pea	2915	2228	7.64
4-	Wheat	91295	240928	26.39
5-	Pea	3448	3234	9.38
6-	Lentil	1255	910	7.25
7-	Mustard	2316	2680	11.57
8-	Potato	2107	46303	219.76

5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
April	10.70	45°C	4°C	
May	63.84			
June	174.98			
July	316.13			
August	249.52			
Sep.	218.40			
Oct.	59.99			
Nov.	--			
Dec.	--			
Jan.	7.76			
Feb.	12.65			
March	0.571			

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>			
<i>Indigenous</i>			
Buffalo			
Sheep			
<i>Crossbred</i>			
<i>Indigenous</i>			
Goats			
Pigs			
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits			
Poultry			
Hens			
<i>Desi</i>			
<i>Improved</i>			
Ducks			
Turkey and others			
Category	Area	Production	Productivity
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

7. Details of Operational area / Villages (2009-10)

Sl. No	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Dhanghat a	Pauli, Haiser bazar	25	Wheat, rice, vegetables, A.H.	Low productivity due to poor seed replacement and less knowledge on IPNM & IPM	Low yield of wheat in rice wheat cropping system
2.	Khalilabad	Nath Nagar	10	Wheat, rice, Sugarcane, A.H.	Low productivity due to poor seed replacement and less knowledge on IPNM & IPM	Problem of micronutrient deficiency. Problem of water logging. Poor seed replacement.

8. Priority thrust areas

Priority/problem/issues	Crop/Enterprise
Popularization of variety suitable for late sown condition viz – PBW-373, UP – 2338, Raj -3077 & Raj 3765	Wheat
Motivational camp. for soil reclamation through organic matter	Problem of micronutrient deficiency.
Training for proper drainage	Problem of water logging
Promotion of improved seed and package of practices	Poor seed replacement.

* An example for guidance only

Bijnour

1. Major farming systems/enterprises (based on the analysis made by the KVK)

SN	Farming system/enterprise
1	Integrated agriculture farming systems
2	Integrated crop-livestock-fish farming systems
3	Dairy farming systems
4	Agro-forestry systems

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

SN	Agro-climatic Zone	Characteristics
1	Mid Western Plain Zone	<ul style="list-style-type: none"> The soils are coarse to medium in texture, moderately well drained, consistently deep and neutral to slightly alkaline in nature Climate of the zone in general is subtropical type. The maximum temperature of the district was 41^oC while minimum was found to be 0.6^oC. The fertilizer consumption of the area is 143 kg/ha. 83% farmers are having less than 2 ha. land, 8% farmers are having 2-4 ha. land, while the rest 9% have more than 4 ha. land. The crops of the zone are sugarcane, rice, wheat, mustard, groundnut, field pea, gram, fodder sorghum etc.
2	Tarai & Bhabar Zone	<ul style="list-style-type: none"> A part of the district falls under this zone. The highest temperature is recorded in May, June and the lowest in Dec., Jan. The average rainfall is 1400 mm. Eighty three percent of rains are received from south- west monsoon from June to September. The soils are low to medium in available phosphorus, medium to high in organic carbon.

3. Soil types

SN	Soil type	Characteristics	Area in ha
1	Clay loam	Fine-grained <u>minerals</u>, organic matter medium, variable range of <u>water content</u>, <u>clay minerals polar attraction</u>.	179652
2	Sandy loam	Fertile soil with rich nutrient, organic matter medium to high suitable for all arable crops	172428
3	Sandy	Low organic matter content, high porosity, contains large particles, usually light in color. stay loose and allow moisture to penetrate easily	84272

4. Area, Production and Productivity of major crops cultivated in the district

SN	Name of Crop	Area (ha)	Production (M.T.)	Productivity (q/ha)
1	Sugarcane	233991	14291602	641.20
2	Rice	62538	185932	29.73
3	Wheat	109830	327456	29.89
4	Pea	185	287	14.89
5	Lentil	2375	3260	13.71
6	Gram	330	430	13.02
7	Urd	3840	3160	8.21

8	Arhar	93	81	8.7
9	Maize	25	27	10.20
10	Lahi/Mustard	8945	12240	13.68
11	Groundnut	2050	2660	12.96
12	Barley	103	262	23.26
13	Soyabean	5	5	9.42
14	Sesame	92	16	1.78

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
August, 08	299.3	31.2	25.1	92
September, 08	49.3	32.2	23.6	65
October, 08	37.3	30.0	17.1	56
November, 08	8.8	26.1	10.6	47
December, 08	0.0	22.4	8.9	58
January, 09	4.0	20.3	8.3	61
February, 09	26.2	24.5	9.4	47
March, 09	7.6	28.7	11.4	41
April, 09	8.6	36.5	17.2	28
May, 09	28.7	36.6	22.2	38
June, 09	36.6	38.6	23.4	36
July, 09	66.6	35.5	26.4	68
August, 09	315.0	31.3	25.2	77
September, 09	246.5	31.3	23.9	75

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production (LMT)	Productivity (kg/day/animal)
Cattle			
<i>Crossbred</i>	41490	--	3.0
<i>Indigenous</i>	223258	--	1.5
Buffalo	526188	127.56	4.3
Cow	223258	33.52	2.5
Sheep			
<i>Crossbred</i>	8286	--	--
<i>Indigenous</i>	5599	--	--
Goats	104429	10.93	0.729
Pigs			
<i>Crossbred</i>	5427	--	--
<i>Indigenous</i>	24938	--	--
Rabbits	495	--	--
Poultry	152327	--	--

Category	Area	Production (qt.)	Productivity (qt./ha)
Fish	1306.60 ha	4540435.00	34.75

7. Details of Operational area / Villages

SN	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Kotwali	Khajuri, Bundaki, Chandanwala, Khushalpur, Matheri, Harga-mpur, Badhapur, Ladpur, Patpada, Harvanshpur, Dha-ram, Khanpur, Mothapur, Rampur, Lalwala, Roshanpur etc.	Sugarcane, Rice, Wheat, French bean, Okra, Mustard, Groundnut, Urd, Moong, Mango and Guava	<ul style="list-style-type: none"> • Insect & Diseases • Old variety seed • Excessive and Imbalanced use of pesticides & fertilizers • No seed treatment, • Poor Management of orchards • No application of micronutrients • Monoculture of sugarcane 	<ul style="list-style-type: none"> • Evaluation of newly HYV • Promotion of balanced use of fertilizer • Discriminative use of pesticides • Promotion of IPNM, IPM, IDM, ICM • Popularization of intercropping • Promotion of self help group of farmers • Encouragement of Oilseed and Pulses • Rejuvenation of old orchards • French bean intercrops with sugarcane
2	Allahapur	Nayagoan, Baseda, Kuwar, Bhagwanwala Chack, Shajani, Bhutpuri, Nindru, Jitara, Bhatpur, Hashanpur, Habebwala etc.	Sugarcane, Rice, Wheat, Mustard, Vegetables	<ul style="list-style-type: none"> • Insect & Diseases attack • Excessive and imbalanced use of pesticides & fertilizers • No seed treatment • Reliability of the farmers on chemicals 	<ul style="list-style-type: none"> • Discriminative use of pesticides • Promotion of IPNM, IPM, IDM, ICM • Improving technological skills of fruits farmers • Promotion of self help group of farmers
3	Najibabad	Bhaguwala, Mandawali, Raipur, Jhakkaki, Shanpur, Badibudhi, Malakpur etc.	Vegetable, Fruits, Rice, Wheat and Sugarcane	<ul style="list-style-type: none"> • Unavailability of quality seed of vegetable • Insect & Diseases attack • No seed treatment • Poor management of orchards • No application of micronutrients 	<ul style="list-style-type: none"> • Promotion of suitable and high yielding varieties of vegetables • Discriminative use of pesticides • Promotion of IPNM, IPM, IDM, ICM • Improving technological skills of fruits farmers • Promotion of self help group of farmers

4	Kiratpur	Padla, Kumaira, Sadipur, Rashulpur, Bhanera, Murshadpur, Akbarpur, Islampur etc.	Vegetable, Fruits, Rice, Wheat and Sugarcane	<ul style="list-style-type: none"> • Unavailability of quality seed of vegetable • Insect & Diseases attack • Excessive and imbalanced use of pesticides & fertilizers • No seed treatment • Poor management of orchards • No application of micronutrients 	<ul style="list-style-type: none"> • Promotion of suitable and high yielding varieties of vegetables • Adequate package and practices of vegetables and fruits • Discriminative use of pesticides • Promotion of IPNM, IPM, IDM, ICM • Improving technological skills of fruits farmers • Promotion of self help group of farmers
5	Seohara	Narullapur, Gotra, Hidayatpur, Sadafal, Raja Ka Tajpur, Mahmoodpur, Morna, Kajampur, Amirpur, Palanpur, etc.	Rice, Wheat, Sugarcane and orchard	<ul style="list-style-type: none"> • Delayed sowing of sugarcane and wheat • Improper management of pests • Sowing of old varieties seeds • Imbalanced use of pesticides & fertilizers • Poor management of orchards • No application of micronutrients 	<ul style="list-style-type: none"> • Promotion of suitable and high yielding varieties • Adequate package and practices of fruits • Discriminative use of pesticides • Promotion of IPNM, IPM, IDM, ICM • Improving technological skills of sugarcane and rice farmers • Promotion of self help group of farmers

8. Priority thrust areas

SN	Crop/ Enterprises	Thrust area
1	Wheat, Mustard, Groundnut, Urd	<ul style="list-style-type: none"> Ø Poor seed replacement rate Ø Integrated Pest Management
2	Rice, Sugarcane	<ul style="list-style-type: none"> Ø Integrated Nutrient Management Ø Integrated Pest Management Ø Weed Management
3	Mustard, Groundnut, Urd	Ø Low productivity of oilseeds and pulses
4	Brinjal, Okra, Tomato	<ul style="list-style-type: none"> Ø Integrated Nutrient Management Ø Integrated Pest Management
5	Sugarcane, Wheat	Ø Delayed sowing of sugarcane and wheat crop
6	Mango, Brinjal, Okra, Tomato, Frenchbean	<ul style="list-style-type: none"> Ø Lack of improved varieties of fruits & vegetables Ø Lack of post harvest technology
7	Fish	Ø Unavailability of improved fingerlings to the fisherman
8	Cattle	<ul style="list-style-type: none"> Ø Lack of improved breeds of animals Ø Lack of Feed management

Budaun

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Sl.	Enterprise
1	Agriculture crops (Wheat, Mustard, Lentil, Potato, Paddy, Sugarcane, Maize, Bajra, Toria)
2	Horticulture crops (Guava, Mango, Papaya, Shimla Mirch, Brinjal, Chilli & Tomato)
3	Animal husbandry (Cow, Buffalo & Goat)
4	Fisheries

Sl.	Farming system
1	Agriculture + Horticulture + Animal Husbandry
2	Agriculture + Animal Husbandry + Horticulture
3	Agriculture + Agriculture Labour

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Sl.	Agro-Climatic Zone	Characteristics
1	CWPZ	District Badaun comes under Central Western Plain Zone of U.P. The temperature ranges from 4.5 °C to 45.4 °C. The soils of the region are mostly alluvial and soils are neutral to moderately alkaline and medium in organic content. Rainfall in this region is received during mid June to mid October with annual rainfall is 882 mm.

Sl.	Agro-Ecological Situation	Characteristics
1	AES I	It represents the Central Western Plain Zone of the district having light soil with high fertility, medium rainfall and most suited for paddy, wheat, potato, sugarcane as well as guava cultivation. Out of 18 development blocks of Badaun district. It covers four blocks viz. Dataganj, Samrer, Meon, Usawan
2	AES II	It represents the Central Western Plain Zone of the district with loamy soil having medium fertility, medium rain fall, suited for all type of crops viz. wheat, sugarcane, paddy, Bajra as well as vegetable crops due to proximity to the city. It covers five blocks viz. Jagat, Ujhani, Qadarchowk, Salarpur and Wajirganj.
3	AES III	It represents the Central Western Plain Zone of the district having sandy soil and sandy loam with medium fertility and medium rainfall. Four development blocks viz. Bisauli, Asafpur, Ambiyapur & Islamnagar comes under this AES. It is suited for cereal crops as well as vegetables.

3. Soil types

Sl.	Soil type	Characteristics	Area (ha)
1	Clay Loam	It is more fertile than sandy and sandy loam	5526
2	Sandy Soil	Sandy soil is dominated and having low status of NPK.	271400
3	Sandy Loams	It is more fertile than sandy soil	238877

4. Area, Production and Productivity of major crops cultivated in the district

Sl.	Crop	Area (ha)	Production ('00' m.tons)	Productivity (q/ha)
1	Wheat	270583	676458	25.00
2	Gram	277	252	9.11
3	Pea	2008	3922	19.53
4	Mustard /Toria	18059	19185	10.62
5	Lentil	10126	8081	7.98
6	Paddy	67430	118407	17.56
7	Bajra	133994	184836	13.76
8	Maize	12121	18303	15.10
9	Arhar	1791	1660	9.27

5. Weather data

Sl.	Months	Average Rainfall (mm)
1	October 08	2.98
2	November 08	0.00
3	December 08	0.00
4	January 09	0.00
5	February 09	0.00
6	March 09	0.00
7	April 09	0.00
9	May 09	2.00
10	June 09	28.43
11	July 09	98.00
12	August 09	203.00
13	September 09	178.00
Total		512.41

6. Details of Operational area / Villages

Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust areas
Bisauli	Bisauli	Parouli, Hatsa, Bhiloliya	Bajra, Maize, Jower, Wheat, Potato, Mustard, Barly, Toria, Sugarcane, Paddy,	Productivity of paddy, wheat, Maize, Bajra, Lentil etc. in general are very low. The main reason of low yield is imbalance use of fertilizer and lack of high yielding varieties	Integrated nutrient management Organic Farming Post harvest management Nutrition and
Sadar	Jagat	Aamgaon			
Sadar	Ujhani	Chhatuia, Achora, Bangawan,			
Sadar		Adholi, Naushara			

		Lokinagla	Gram, Vegetables, Sunflower, Mentha	Attack of stem borer in rice. Attack of wilt in gram Weed infestation in weed Blast disease in paddy Use of local var. of rice, wheat, Bajra, lentil etc. by the farmer	health
	Kadarchowk	Sisya Nagla			Employment generation in Rural areas Bio pesticide in vegetables/ cereals Integrated fish culture Diversification in Agriculture

7. Priority thrust areas

1. Lack of knowledge about balance nutrition in agricultural crops.
2. Low organic carbon in soil.
3. Need of diversification in agriculture.
4. Lack of elite quality planting material of horticultural crops and lack of Bahar control in guava.
5. Lack of knowledge about improved varieties and seed production of different crops.
6. Lack of IPM and IDM in various crops
7. Lack of management in animal and poultry production.
8. Lack of improved breeds of animals.
9. Nutrition and health.
10. Preservation of fruit and vegetable surplus.

Ghaziabad

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S.No.	Farming system/enterprises
1	Crop+ Dairy
2	Crop+ Dairy +Horticulture (Vegetables & Flower cultivation)
3.	Crop+ Dairy +Horticulture + Bee keeping
4.	Crop+ Dairy +Horticulture+ Bee keeping +Poltry/Fishries/Mushroom.Vermi compost

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S.No.	Agro-climatic Zone	Characteristics	Agro-ecological situation	Characteristics
1	Western Plain Zone	Average rain fall 795 mm. Maximum temp.-37 ⁰ -42 ⁰ C Minimum temp.-4.5 ⁰ C-6.9 ⁰ C Relative Humidity-32-85% Soil-Sandy Loam , Loam, Clay Cropping Intensity -157%	AES I AES II AES III AES IV	Loam to Sandy Loam Sandy Loam Sandy/Sandy Loam Alkaline/Saline

3. Soil types

S. No.	Soil type	Characteristics			Area in (ha)
		pH	(N P K)	Crop	
1	Loam to Sandy Loam (AES I)	7.5-8.5	187.38, 53.7, 7.46	Sugarcane, Wheat, Paddy,	79910.00
2.	Sandy Loam (AESII)	7.0-7.5	99.49, 33.12 9.27	Sugarcane, Wheat, Paddy, Mustard, Sorghum	82954.00
3.	Sandy/Sandy Loam (AESIII)	7.5-8.0	125.71, 39.29 8.15	Sugarcane, Wheat, Paddy, Sorghum(Fodder)	80192.00
4.	Alkaline/Saline (AESIV)	8.0-8.7	129.27, 51.88 5.08	Wheat, Paddy, Vegetable, Sorghum (Fodder)	26911.00

4. Area, Production and Productivity of major crops cultivated in the district (2006-2007)

S.No.	Crop	Area(ha)	Production(Qtl)	Productivity(Qtl/ha)
1 Kharif	Paddy	21996	50129	23.32
	Bajra	300	4180	13.43
	Maize	2800	47550	16.98
	Sorghum	16	130	27.84
	Urd	370	1980	5.35
	Moong	19	70	3.68
Rabi	Arhar	2429	21920	8.81
	Wheat	71936	2524730	35.09
	Chickpea	15	130	8.66
	Pea	468	54860	11.66
	Lentil	256	1810	7.07

Zaid	Rape seed	2631	31660	12.03
	&Mustard	5113	997480	189.21
	Potato	55	322	5.87
	Urd	65	670	10.03
	Moong	50	650	13.00
	Maize	69165	337199990	525.51
	Sugarcane			

5. Weather data

Month	Rainfall(mm)	Temperature 0 C		Relative Humidity(%)
		Maximum	Minimum	
Oct. 2008	-	32.4	17.5	83
Nov.08	0.7	26.2	11.6	84
Dec.08	3.0	22.8	6.3	82
Jan.2009	1.8	18.6	8.4	90
Feb. 09	3.2	22.0	8.8	93
March09	-	28.7	12.8	77
April09	1.94	42.2	13.0	62
May09	12.58	42.2	19.5	63
June09	5.8	40.0	20.0	58
July09	88.0	35.0	24.0	53
August09	115.0	36.0	31.0	65
Sept. 09	10.0	36.5	31.5	68

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Crossbred	5523825	Not Available	Not Available
Indigenous	36076		
Buffalo	475763		
Sheep	911		
Crossbred	127		
Indigenous	784		
Goats	50823		
Pigs	9149		
Crossbred	2322		
Indigenous	6827		
Poultry			
Hens	406459		
Turkey and others	1380		
Category	Population	Production	Productivity
Fish	68.56 area in ha.	193 Quintal	0.36

7. Details of Operational area / Villages (2008-09)

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust area
1.	Modin agar	Murad nagar	Milakhrawa li Kumhera Niwari,	Paddy, Urd, Pigeon pea Wheat, Mustard,	<ul style="list-style-type: none"> Stem borer & Bacterial blight in Basmati Rice Pod borer in 	<ul style="list-style-type: none"> To transfer technology and knowledge of new fungicide,

			Sikrikalan, Chitora, Kanaujja	Sugarcane Vermin compost Durdgery reduction techniques Nutrition garden Paddy, Urd, Dairy husbundry Pigonpea Wheat,	Chickpea & Pigeon pea • Top borer and white grub in Sugarcane • Inadequate nutrients in take in daily diets • Stem borer & Bacterial blite in Basmati Rice • Pod borer in Chickpea & Pigeonpea • Top borer and white grub in Sugarcane • Repeat breeding problem in dairy animal • No summer ploughing	insecticide, pesticide • To transfer the improve technology for reducing infestation of insect & pest • To promote the organic manure in place of chemical fertilizer in nutrients garden • Awareness about mineral mixture & dewormmer • To promote the summer ploughing
2.	Ghazi abad	Raja pur	Bhikanpur Kazipura, Morti, Duhai, Bhadoli Kanouja Chittaura	Paddy, Urd, Pigeon pea, Wheat, Mustard, Pea, Beekeeping, Vermi, Nadep .compost, Vegetable Nutritient garden Vegetable Pickle	• Mal nutrient ion in children • Storage problem in wheat • Stem borer & Bacterial blite in Basmati Rice • Pod borer in Chickpea & arhar • Top borer and white grub in Sugarcane Imblance use of Fertilizer, less area	• To transfer the technology for drudgery reduction • intake of less nutrients in diet • To transfer the improve technology for reducing infestation of insect • Balance use of fertilizer on the basis of soil testing
3	Hapur	Hapur	Shyampur Jatt, Lalpur, Tatarpur, Anwarpur, Dadaira	Paddy, Urd, Verm- compost, Vegetable & Floriculture Dairy husbundry	• Stem borer & Bacterial blite in Basmati Rice • Yello mosaice and Bihar harycatter piller., • Calf motarilty	• To transfer the improve technology for reducing infestation of insect & pest • Endo & Ecto paracites knowledge

8. Priority thrust areas

Crop/Enterprises	Thrust area
Dairy husbundry	Sterility (Repeat breeding) , mastitis problem in milch animal Calf motarilty
Dairy husbundry	Fodder and feed diversification, use of mineral mixture and vaccination in farm animals
Nutrition and Health	Malnutrition is a measure problem among farm women, children population
Income and Empl. generating program	Low income of rural women due to least participation in income generation activities other than household.
Bhindi	Highly infestation of shoot and fruit borer, YVMV
Rice	Highly infestation of top borer, Sheeth blightand BPH, effective weeds management, balance fertilization
Sugarcane	Low yield of Sugarcane due to infestation of white grub, effective weeds control

Meerut

Farming system analysis of district

Crop production, Animal Husbandry and Horticulture are among the major enterprises of the farming system prevailing in the district. Poultry and piggery has also emerged as new enterprises. Increased pressure on cultivated land and daily need of various items of human and Cattle diet warrants that the farmers should go for more than one enterprises keeping in view the resources and technical know how for harvesting full advantage from the system designed on integrated approach. The analysis of impact of mechanization of cropping system also leads to emphasis on timeliness, precision and general improvement in quality of work, with proper mechanization will always enhance the yield and total production of district. By adopting mechanization will also reduce the drudgery and solve the labour scarcity problem

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. N.	Farming system/enterprise
1	Cropping (Sugarcane-Ratoon-Wheat) + Live Stock
2	Crop cultivation (Rice-Wheat) + Live Stock
3	Horticulture (Vegetable)+ Live Stock
4	Horticulture (Flower) + Apiculture

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S N	Agro-climatic Zone	Characteristics
1	Western Plain Zone	<ol style="list-style-type: none"> The Zone includes districts of Muzaffarnagar, Meerut, Bagpat, Ghaziabad, Gautam Budha Nagar, Bundelkhand and parts of Saharanpur located between the Ganga and Yamuna river and their tributaries. The zone is highly productive with light coloured loam soil. The average annual rainfall is 795 mm. Relative humidity ranges from 32 to 85% and the temperature ranges from 1.5°C to 4.3 °C. Rice wheat sugarcane based cropping system is prevalent in the zone.

S N	Factors	Characteristics
1	A) Algae biotic	<ol style="list-style-type: none"> General flora -fauna found in western plain zone of U.P. The principal crops of these regions are rice, wheat, maize, bajra, black gram, red gram, groundnut, mustard, sugarcane, rapeseed and mustard, potato, onion, tomato, pea, cole, crops, chilies are the major vegetables and mango, litchi, grape, guava and papaya are the major fruits cultivated in the zone. In addition, commercial flower cultivation is also practiced in this Zone.
	B) Crops	Kharif : Rice, Pigeon Pea, Sorghum, Black Gram, Sugarcane Rabi : Wheat, Mustard, Chickpea, Pea, Lentil Zaid : Sugarcane, Greengram, Cowpea
	C) Weed	Phalaris minor, Parthinum, Motha, Cyprus spices, Argimoum
	D) Forest	Seasum, Neem, Bakyan, Teek etc.

3. Soil types

Crop production, Animal Husbandry and Horticulture are among the major enterprises of the farming system prevailing in the district. Poultry and piggery has also emerged as new enterprises. Increased pressure on cultivated land and daily need of various items of human and Cattle diet warrants that the farmers should go for more than one enterprises keeping in view the resources and technical know how for harvesting full advantage from the system designed on integrated approach. The analysis of impact of mechanization of cropping system also leads to emphasis on timeliness, precision and general improvement in quality of work, with proper mechanization will always enhance the yield and total production of district. By adopting mechanization will also reduce the drudgery and solve the labour scarcity problem

S. No	Soil type	Characteristics	Area in ha
1	Alluvial Light in texture	light colored loam soil	Total - 275973 a) Cultivated land - 198417 b) Forest area- 26787 c) Usar Land- 2450 d) Others- 35186

Agro ecological situation of district

Situation	Soil type	pH	Farming system	Major crops	Live stock	Block
AES I	Loam	7.5-8.5	Sugarcane-Ratoon-Wheat, Agro forestry and/or Jower-Wheat (2-3 Graded buffalo/ 1 cross bread cow)	Sugarcane, Wheat, Paddy, Potato, Vegetable, Jower	Buffalo, Cow	Mawana, Pariksheetgarh, Machhra, Kharkoda, Rajpura, Meerut, Duaralla, Sardhana, Saroorpur, Rohta, Jani
AES II	Loamy sand	7.0-8.0	Sorghum-Potato-Cucurbits and/or Sugarcane – Ratoon –Wheat (2-3 Graded buffalo / 1 Cross bread cow)	Sugarcane, Potato, Wheat, Jower, Mango, Bajra	Buffalo, Cow	Hastinapur, Pariksheetgarh, Machhra, Kharkhoda, Jani, Rohta, Saroorpur, Sardhna
AES III	Sandy loam, Silty loam, Clay loam	7.5-7.9	Paddy-Wheat and /or Jower-Wheat-Sugarcane-Ratoon-Wheat(2-3 Graded/ Deshi Buffalo	Sugarcane, Paddy, Wheat, Jower, Vegetable	Buffalo, Cow	Hastinapur, Pariksheetgarh

4. Area, Production and Productivity of major crops cultivated in the district

S N	Crop	Area (ha)	Production (Mt)	Productivity (Qtl /ha)
1	Sugarcane	153000	8285502	598.82
2	Wheat	79000	293444	36.62
3	Paddy	19000	43423	23.21
4	Mustard	2852	2422	10.33
	Sunflower	-	18	14.36
5	Pulses Massor	3600	927	7.83

	Gram Pea Arhar		117 892 785	9.11 12.29 9.8
6	Potato	6455	135013	260.05
7	Others	70975	-	-
	Total	304803		

5. Weather data

Month	Rainfall (mm) (Average)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
January	5	23	5	Not available
February	0	27	9	Not available
March	5	32	16	Not available
April	0	35	25	Not available
May	0	39	27	Not available
June	150	42	28	Not available
July	335	41	26	Not available
August	235	38	24	Not available
September	15	35	23	Not available
October	5	30	20	Not available
November	0	28	15	Not available
December	10	24	8	Not available
Total	760			

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	5702300	Not available	Not available
<i>Indigenous</i>	76049	Not available	Not available
Buffalo	567070	Not available	Not available
Sheep			
<i>Crossbred</i>	482	Not available	Not available
<i>Indigenous</i>	3490	Not available	Not available
Goats	44353	Not available	Not available
Pigs			
<i>Crossbred</i>	8947	Not available	Not available
<i>Indigenous</i>	12388	Not available	Not available
Rabbits	-		
Poultry			
Hens	85565	Not available	Not available
<i>Desi</i>	Not available		
<i>Improved</i>	Not available		
Ducks	Not available		
Turkey and others	2483	Not available	Not available
Category	Area	Production	Productivity
Fish	Not available	Not available	Not available
<i>Marine</i>	Not available	Not available	Not available
<i>Inland</i>	Not available	Not available	Not available
Prawn	Not available	Not available	Not available

7. Details of Operational area / Villages (2008-09)

S N	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Meerut	Kharkhoda	Piplikhera Kelli	Sorghum, Potato Wheat, Mustard Livestock production (2-3-Graded buffalo / 1-Crossbred cow)	High infestation of diseases & insects Unavailability of seed	Integrated pest management Seed production of major crops by farmers to ensure adequate seed availability and Introduction of inter cropping with sugarcane
		Rajpura	Salarpur, Saini Rajpura	Sugarcane, Pigeon pea, Potato & Wheat	White grub Pest & diseases	Introduction of inter cropping along with IPM in sugarcane
		Daurala	Nihori, Lawad Mahalka	Vegetables, Sugarcane, Wheat Mustard,	Pest & diseases Nutrient deficiency	Pest management Balance fertilization & IPNM
		Meerut	Chandsara, Alipur	S/cane, Urd, Rice Wheat	-do-	Pest management Balance fertilization & IPNM
2	Sardhana	Sardhana	Mahadev Kushawli	S/cane, Wheat, Vegetables, Flower	Unavailability of improved var. seed	Seed production
		Suroorpur	Pawarsa	-do-	Insect & disease	Popularization of bio pesticides
		Rohta	Rohata	S/cane, wheat	- do-	-do-
		Jani	Baffar Meerpur	S/cane, wheat, mustard, paddy & urd	Lack of seed, high infestation of insect and diseases.	Promotion of seed production, IPM
3	Mawana	Hastinapur	Ganeshpur, Saif pur Meewa Mammudpur Latiffpur Makan nagar Pali Nagla gusai Rani nagla	Sugarcane, Wheat Rice, potato, Mustard, Chichpea, Urd, Moong	Soil Health i.e. Salinity	INM, organic farming. Promotion of seed production, IPM
		Parikshitgarh	Kalirampur	-do-	Insects & disease	Promotion of INM & IPM practices
		Mawana Kala	Meewa, Matoura	-do-	-Do-	Do-
		Machara	Maukhas Hasanpur	Crops, Vegetables, Bee keeping	Marketing	INM, IPM

8. Priority thrust areas

S N	Thrust area
1	Seed production of wheat, paddy, sugarcane by farmers to ensure adequate seed availability and Introduction of inter cropping with sugarcane
2	Due to dense sugarcane cultivation in the region, a late sown variety of wheat is required.
3	Promotion of protected cultivation of Horticultural crops and off-season vegetable under Polly house as Meerut is near to Delhi.
4	Promotion of Aromatic and medicinal plants cultivation to replace the existing cropping system of sugarcane to increase the soil productivity and health.
5	Blue hoarse menace and wild pig problem.
6	Imbalance use of fertilizers
7	Problem of infertility and repeat heat along with low yield of milch animals.
8	Least adoption of Green Manuring in existing cropping system.
9	Vast problem of Partheneium weed
10	Popularization of improved implement to complete the unit operation in time as Meerut is facing labour scarcity problem.
11	Mal-nutrition in rural children from weaker section of farming community.

Muzaffarnagar

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S.No.	Farming System/ enterprises
1.	Agriculture + A.H
2.	Agriculture + Horticulture
3.	Agriculture + A.H + Horticulture
4.	Agriculture + A.H + Fisheries
5.	Agriculture + A.H + Horticulture + Fisheries

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S.No.	Agro – climatic zone	Characteristics
1	Western Plain Zone	Average rain fall- 627-1130 mm Average temperature 1.5 to 5.0 ° C (minimum) 39 to 47 °C (maximum) Soil - Sandy loam, Irrigated

S.No.	Agro – Ecological Situation	Characteristics
1.	AES-1	Sandy Loam Yamuna Catchment
2.	AES-2	Deep ground water table sandy loam
3.	AES-3	Ganga catchment loam sugarcane based
4.	AES-4	Sandy loam vegetable sugarcane based
5.	AES-5	Sandy Loam ganga catchment sugarcane based

3. Soil type/s

S.No.	Soil Type	Characteristics		Area (ha)
		Soil particle Diameter (mm)	Water holding capacity	
1.	Sandy	2 - 0.2 mm,	Poor	17633
2.	Sandy loam	0.2 - 0.02 mm,	Medium	276578
3.	Loam	0.02 - 0.002 mm	Average	78186
4.	Clay loam	>than 0.002 mm	Good	5126
		Total		377523

4. Area, Production and Productivity of major crops cultivated in the district 2008-09

S.No	Crop	Area (HA)	Production (qt)	Productivity (Qt./ha)
1.	Sugarcane	201436	151752584	596.00
2.	Wheat	124530	4749574	38.14
3.	Paddy	38000	1160140	30.53
4.	Black gram	2680	14400	4.33
5.	Lentil	310	3199	10.32
6.	Gram	60	600	10.00
7.	Pea	230	3300	14.35
8.	Pigeon Pea	116	951	8.20
9.	Mustard	620	5201	8.39

10.	Sunflower	58	689	11.88
11.	Potato	3260	74983	230.01
12.	Cotton	274	356	1.30

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
October 2008	15.2	31.2	19.4	72.5
November 2008	20.2	27.1	10.3	68.0
December 2008	--	23.0	8.6	75.0
January 2009	11.6	21.0	7.6	76.0
February 2009	31.2	24.8	9.1	67.5
March 2009	10.2	29.5	12.6	53.5
April 2009	12.2	36.1	18.8	41.5
May 2009	19.6	36.9	21.9	61.5
June 2009	30.4	39.1	23.1	47.5
July 2009	128.8	34.5	25.3	72.0
August 2009	166.4	33.5	25.7	77.5
September 2009	238.2	35.08	25.2	76.2

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cows			
Crossbred	35460	413514 liter/day	1800-3178 liter/lactation
Indigenous	133459		1200-2270 liter/lactation
Buffalo	194306	1790140 liter/day	1360-2270 liter/lactation
Sheep		--	--
Crossbred	223	Wool - 11873 kg/year	--
Indigenous	8478		--
Goats	20429	5294 mt	180-544 lit/lactation
Pigs			
Crossbred	10543	12012000 kg meat	--
Indigenous	24856		--
Rabbits	281	--	--
Poultry			
Hens			
Desi	54502	163589 kg meat	1.0 kg
Improved	109087		
Ducks	1642	--	--
Turkey	19	--	--
Camel	41	--	--

Fisheries

Category	Area (ha)	Production	Productivity
Fish	1239	40887 qt	30-35

7. Details of Operational area / Villages (2008-09)

S. No.	Taluk	Name of Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust areas
1.	Sadar	Baghra	Baghra, Ladava, Mukandpur, Amirnagar, Nasirpur, Titawi, Mandi, Haidernagar Dhansani, Budhina Kalan, Budhina Khurd, Tiripadi, Kajikheda, Jagga heri, Muradpura, Narottampur Gadhi, Deshraj	Sugarcane	Low yield due to imbalance fertilizer	Balance use of fertilizer
				Wheat	Low yield due to high infestation of weeds	Weed management
				Mustard	Poor yield due to aphid infestation	IPNM
				Mango	Poor yield due to no use of micronutrients	Fertilizer management
				Guava	Poor quality yield due to fruit fly infestation	Fruit fly management
				Cauliflower	Poor yield due to use of local variety	Introduction of HYV
				Brinjal	Poor quality of fruits due to foot & shoot borer	IPM
2.	Sadar	Purkaji	Baseda, Rohana Kala, Barala	Sugarcane	Poor yield due to use of low organic matter	Promoting of organic manure
				Potato	Poor yield due to high infestation of disease	Disease management
				Wheat	Low yield due to imbalance use of fertilizer	IPNM in Wheat
				Paddy	Low yield due to infestation of pest & disease	IPM in Paddy
3.	Khatauli	Khatauli	Ladpur, Gangadhari, Rukanpur Sathedi	Sugarcane	High infestation of insect & disease	Insect & disease mgt. through IPM
				Gladiolus	Low yield due to use of local variety and rotten corm	Introduction of HYV IPDM
				Vegetables	Local variety, Imbalance fertilizer application, Infestation of pest	Introduction of HYV IPNM IPM
4.	Budhana	Shahapur Budhana	Shorum Gadhi Navabad	Sugarcane	Low yield of Sugarcane	Introduction of HYV Balance fertilizer application IPNM & IPM
				Mango	Low yield of Mango	IPNM & IPM Rejuvenation of old orchard Introduction of regular bear

						variety
				Wheat	Low yield	Water management IPM Weed mgt. Introduction of HYV
				Barseem	Low fodder production	Timely sowing
5.	Kairana	Oon Jhinjana	Sikanderpur Oon Jhinjana	Sugarcane	Degradation of land High pH Low organic matter	Introduction of HYV Balance fertilizer application IPNM & IPM Land reclamation Promotion of organic manure
				Paddy		
				Wheat		
				Mango	Poor yield due to no use of micronutrients	Fertilizer management
				Vegetable	Local variety, Imbalance fertilizer application, Infestation of pest	Introduction of HYV IPNM IPM
6.	Shamli	Shamli	Hathi Karoda, Raghnathpur Banat, Jalalpur, Fathepur,	Sugarcane	High infestation of insect & disease	IPM in Sugarcane
				Wheat	Low yield due to imbalance use of fertilizer	IPNM in Wheat
				Okra	High infestation of disease (YMC)	Disease mgt.
				Brinjal	Poor quality of fruits due to foot & shoot borer	IPM
				Garlic	Use of local seed Infestation of disease	Introduction of HYV Disease mgt.
				Barseem	Low fodder production due to use of local seed	Introduction of HYV
				Sorghum		
7.	Jansath	Jansath	Meerapur, Deval, Rajpur, Puthi, Ibrihmpur, Salarpur	Sugarcane	Poor yield due to no use of organic matter	Promoting of organic manure
				Wheat	Low yield due to imbalance use of fertilizer	IPNM in Wheat
				Merigold	Use of local seed High infestation of disease	Introduction of HYV Disease mgt.
				Potato	Poor yield due to high infestation of disease	Disease management
				Fodder		
8.	Jansath	Moorna	Morna	Sugarcane	Poor yield due to use of low organic matter	Promoting of organic manure
			Sukurtal	Wheat	Low yield due to imbalance use of	IPNM in Wheat

					fertilizer	
			Bhokerheri	Mango	Poor yield due to no use of micronutrients	Fertilizer management
				Sorghum & Barseem	Low fodder production	Timely sowing & introduction of HYV
9.	Sadar	Charthawal	Mahabalipur Charthawal	Sugarcane	Poor yield due to use of low organic matter	Promoting of organic manure
				Wheat	Low yield due to imbalance use of fertilizer	IPNM in Wheat
				Mustard	Poor yield due to aphid infestation	IPNM
				Barseem	Low fodder production	Timely sowing

8. Priority thrust areas

- Promote the use of balance fertilizers on soil test basis.
- Promotion of Autumn planted Sugarcane alongwith various intercrop.
- Promotion of Organic fertilizers (Vermi Compost, NADAP Compost, Green manuring & Brown manuring)
- Promotion of Soil & Water conservation techniques.
- Promotion of horticultural crops (Vegetable, Fruits & Flowers) by using high yielding varieties.
- Impart vocational training for unemployed rural youth.

Pilibhit

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Wheat , Rice & sugar cane are the major crop of the district. Mainly five farming system are existing in district i.e. Agriculture-sugarcane-Horticulture; Agriculture-sugarcane-Animal husbandry; Agriculture-Animal husbandry-Sericulture; Agriculture-sugarcane-Animal husbandry-Horticulture & agriculture alone.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	Tarai & Bhawar as well as mid-western plain Zone.	District comes under Tarai & Bhawar as well as mid-western plain agro climatic zone of Uttar Pradesh. The soil of district mainly made up of transported and deposited material of aluminum dominated rocks of Tarai region having pH 7.0 to 8.1. The total Geographical area of the district is 377775 ha and net cultivated area is 235092 ha. Total irrigated area is 2.25 lac. ha..Which show that 96% area is irrigated. 2.19, 1.90 & 0.19850 lac ha area is under Kharif, Rabi & Zaid crop, respectively. Cropping intensity of the district is 182%, therefore, there is a great scope to increase the cropping intensity in the district. Normal rainfall is 1256mm and temperature between 4.5 to 47 ^o C.

S. No	Agro ecological situation	Characteristics
1.	AES - I	The district having sandy loam & loam soils with water table 12 to 15 feet and moderate fertility. It is most suitable for paddy, wheat, sugarcane, Pulses & banana etc. Lalaurikhera, Marauri and Barkhera development blocks fall under this AES.
2.	AES - II	The district having sandy loam to loam soils with moderate fertility medium rainfall, 15 to 20 feet water table. Two development blocks Viz. Bisalpur and Bilsanda come under this AES.
3.	AES - III	The district having clay & clay loam soil with high fertility, high rainfall and most suited for paddy, summer paddy, wheat and sugarcane cultivation. Two blocks Puranpur and Amaria come under this AES & waterlogging occurs during rainy season. Water table ranges between 10 to 12 feet.

3. Soil types

S. No	Soil type	Characteristics	Area in ha (Blockwise)						
			Marauri	Lalaurikher	Amaria	Barkhera	Bisalpur	Bilsanda	Puranpur
1.	Loam	Well drain low organic matter	8849	717	13916	8947	945	13481	3056

	Soil	deficient in NPK	38%	0 40%	34%	40%	4 45%	50%	7 35%
2.	Sandy Loam Soil	Well drain low organic matter deficient in NP	11644 50%	896 4 50%	19135 55%	11184 50%	945 4 45%	9436 35%	4803 4 55%
3.	Sandy soil	Well drain low organic matter & medium texture soil.	2794 12%	179 3 10%	1740 5%	2237 10%	210 1 10%	4044 15%	4367 5%
4.	Clay Loam Soil	Water logged rich organic matter fine texture soil. Low NP & medium K available.	--	---	---	---	---	---	4367 5%

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qtl /ha)
1.	Wheat	155439	516990	33.26
2.	Paddy	169962	407739	23.99
3.	Sugarcane	82508	2774504	578.00
4.	Rai/Mustard	6559	5310	8.10
5.	Lentil	2886	1509	5.23
6.	Potato	936	13317	200.00

5. Weather data (2009)

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
January	NIL	NA	NA	NA
February	NIL	NA	NA	NA
March	NIL	NA	NA	NA
April	1.80	NA	NA	NA
May	2.00	NA	NA	NA
June	16.16	NA	NA	NA
July	101.06	NA	NA	NA
August	315.87	NA	NA	NA
September	213.85	NA	NA	NA

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Cow			
<i>Crossbred</i>	152208	NA	NA
<i>Indigenous</i>	107688	NA	NA
Buffalo	187688	NA	NA
Sheep			
<i>Crossbred</i>			
<i>Indigenous</i>	882	NA	NA
Goats	86976	NA	NA
Pigs			
<i>Crossbred</i>	842	NA	NA
<i>Indigenous</i>	8011	NA	NA
Rabbits	NA	NA	NA
Poultry			

Hens			
Desi/Backyard	12984	NA	NA
Improved	74915	NA	NA

7. Details of Operational area / Villages (2009-10)

Sl.No.	Taluk/Tehsil	Name of the block	Name/No. of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Pilibhit	Amaria	437	Wheat, Paddy & Sugarcane	1. Imbalance use of fertilizer in wheat, paddy & sugarcane crops. 2. High incidence of diseases & pests in rice, wheat & sugarcane. 3. Lack of micronutrients in horticultural and agronomical crops. 4. Unavailability of improved variety of crops. 5. Lack of improved breed of Buffaloes & cows. 6. Imbalance feeding of milch animals. 7. Repeat	1. Imbalance use of fertilizer & high incidence of diseases & pests in wheat, paddy & sugarcane crops. 2. IPNM in agricultural & horticultural crops 3. Unavailability of open pollinated high Yielding & hybrid varieties in crops. 4. Decline in soil fertility. 5. Malnutrition in children. 6. Lack of knowledge regarding parenting
2.		Marauri	140	Wheat, Paddy & Sugarcane, Summer Paddy		
3.		Lalaurikhera	100	Wheat, Paddy & Sugarcane		
4.	Bisalpur	Barkhera	134	Wheat, Paddy & Sugarcane		
5.		Bisalpur	125	Wheat, Paddy & Sugarcane		
6.	Bisalpur	Bilsanda	168	Wheat, Paddy & Sugarcane		

7.	Puranpur	Puranpur	437	Wheat, Paddy & Sugarcane, Summer Paddy	breeding in milch animals. 8Lack of awareness regarding malnutrition. 9. Lack of knowledge regarding nutritive value of locally available meals among working men & women as well as lactating & pregnant women.	style existing in rural areas. 7. Value addition. 8.Scientific Food grain Storage.
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8. Priority thrust areas

S. No	Thrust area
1	IPM in rice, Wheat & sugarcane
2	Poor yield of basmati rice & scented indigenous.
3	Low organic matter contents in soil
4	Imbalance use of fertilizers in major crops
5	Non adoption of plant protection measures
6	Problem of insects, diseases & lack of micronutrients in orchards
7	Lack of improved breeds of buffalo and cows
8	Lack of the feeding quality of milch animals
9	Depletion in ground water
10	Decline in soil fertility
11	Malnutrition in children
12	Value addition.
13	Scientific Food grain Storage

Rampur

1. **Major farming systems/enterprises (based on the analysis made by the KVK)**
Not available

2. **Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)**

S. No	Agro-climatic Zone	Characteristics	Agro ecological situation	Characteristics
1	Mid western plain zone	The soils are coarse to medium in texture, neutral to slightly alkaline in nature. Moderately well drained , consistently deep and neutral to slightly alkaline in nature. Climate are the zone in general to subtropical mansoon type. The rain fall in distt,. rampur varies from 600 mm to 965 mm. About 77% area of the distt,. is irrigated and rest 23% area is un irrigated. The crop of the zone are rice, urd , wheat s, toria , sugarcane, lentil and mentha. Tha max temp of the distt. varies form 42 to 44°C and min 1 to 6°C.	AES-I	The soils are low to medium in available phosphorus, medium to high in organic carbon. Bilaspur and Suar tehsils area falls under this AES. The major crops grown are paddy, wheat, sugarcane, toria, mentha, sunflower etc.
2			AES-II	The soils are low to medium in available phosphorus and organic carbon. Shahabad, Sadar, Tanda and Milak tehsil area falls under this AES. The major crops grown are paddy, wheat, sugarcane, toria, lentil , mentha etc.

3. **Soil types**

S. No	Soil type	Characteristics	% Area
1	Silt clay loam	-	25
2	Loam and Sandy loam	-	55
3	Loamy Sand	-	15
4	Sandy Soil	-	4

4. **Area, Production and Productivity of major crops cultivated in the district**

S. No	Crop	Area (ha)	Production (m.t.)	Productivity (Qtl /ha)
1	Rice	138590	274294	19.65

2	Wheat	146951	496838	33.81
3	Barley	3251	7192	22.12
4	Jwar	1181	2029	10.40
5	Bajra	2459	3500	14.23
6	Maize	134	175	14.06
	Total Cereals	292566	784028	-
7	Urd	2607	2985	11.45
8	Moong	8	3.00	3.75
9	Lentil	1227	712.00	5.80
10	Gram	78	59.00	7.56
11	Pea	555	521.00	9.39
12	Arhar	43	36.00	8.37
	Total Pulses	4518	4316	-
	Total Food Grains	297084	788344	-
13	Mustard	4416	4198	9.51
14	Til	60	10	1.67
15	Soyabean	11	9	8.18
	Total Oilseeds	4487	4217	-

Source of information: Kharif/Rabi karyashala, Krishi Vibhag Uttar Pradesh- 2008-2009

5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
Oct., 08	50.0	-	-	-
Nov., 08	Nil	-	-	-
Dec., 08	Nil	-	-	-
Jan., 09	Nil	-	-	-
Feb., 09	10.9	-	-	-
Mar., 09	Nil	-	-	-
Apr., 09	7.15	-	-	-
May., 09	8.33	-	-	-
June., 09	17.83	-	-	-
July., 09	130.38	-	-	-
August., 09	212.31	-	-	-
September., 09	127.77	-	-	-

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	29585	-	-

<i>Indigenous</i>	101510	-	-
Buffalo	348998	-	-
Category	Area (ha)	Production	Productivity
Fish	360.636	-	26 q/ha

7. Details of Operational area / Villages (2008-09)

SI.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Sadar	Chamroua	Daniapur Shankarpur	Paddy	Low yield	<ul style="list-style-type: none"> • Integrated Nutrient Management • Integrated Pest Management • Weed management • Water management
				Wheat	Low yield	<ul style="list-style-type: none"> • Integrated Nutrient Management • Integrated Pest Management • Weed management
				Urd	Low yield	<ul style="list-style-type: none"> • Integrated Nutrient Management • Integrated Pest Management • Replacement of variety
				Toria	Low yield	<ul style="list-style-type: none"> • Integrated Nutrient Management • Integrated Pest Management • Replacement of variety
				Mentha	Low yield	<ul style="list-style-type: none"> • Integrated Pest Management • Replacement of variety
				Mango	Low yield	Poor management

				Poplar	Low growth	<ul style="list-style-type: none"> • Integrated Pest Management • Scientific planting technique
				Cattle	Low yield	<ul style="list-style-type: none"> • Green fodder production • Supplementation of mineral mixture and salt in feed • Management and balanced feeding of farm animals • Control of Animal Disease and abdominal worms
				Buffalo	Low yield	<ul style="list-style-type: none"> • Green fodder production • Supplementation of mineral mixture and salt in feed • Management and balanced feeding of farm animals • Control of Animal Disease and abdominal worms
2.	Bilaspur	Bilaspur	Mullakhera	Paddy	Low yield	<ul style="list-style-type: none"> • Integrated Nutrient Management • Integrated Pest Management • Weed management • Water management • Seed production

				Wheaet	Low yield	<ul style="list-style-type: none"> • Integrated Nutrient Management • Integrated Pest Management • Weed management • Seed production
				Urd	Low yield	<ul style="list-style-type: none"> • Integrated Nutrient Management • Integrated Pest Management • Replacement of variety
				Toria	Low yield	<ul style="list-style-type: none"> • Integrated Nutrient Management • Integrated Pest Management • Replacement of variety
				Mentha	Low yield	<ul style="list-style-type: none"> • Integrated Pest Management • Replacement of variety
				Mango	Low yield	<ul style="list-style-type: none"> • Poor management
				Poplar	Low growth	<ul style="list-style-type: none"> • Non adoption of scientific planting methods and plant protection measures

				Cattle	Low yield	<ul style="list-style-type: none"> •Green fodder production •Supplementation of mineral mixture and salt in feed • Management and balanced feeding of farm animals •Control of Animal Disease and abdominal worms
				Buffalo	Low yield	<ul style="list-style-type: none"> •Green fodder production •Supplementation of mineral mixture and salt in feed • Management and balanced feeding of farm animals • Control of Animal Disease and abdominal worms
3.	Milak	Milak	Loha Patti Bhagirath	Paddy	Low yield	<ul style="list-style-type: none"> • Integrated Nutrient Management • Integrated Pest Management • Weed management • Water management
				Wheat	Low yield	<ul style="list-style-type: none"> • Integrated Nutrient Management • Integrated Pest Management • Weed management

				Urd	Low yield	<ul style="list-style-type: none"> • Integrated Nutrient Management • Integrated Pest Management • Replacement of variety
				Toria	Low yield	<ul style="list-style-type: none"> • Integrated Nutrient Management • Integrated Pest Management • Replacement of variety
				Mentha	Low yield	<ul style="list-style-type: none"> • Integrated Pest Management • Replacement of variety
				Mango	Low yield	<ul style="list-style-type: none"> • Poor management
				Poplar	Low growth	<ul style="list-style-type: none"> • Non adoption of scientific planting methods and plant protection measures
				Cattle	Low yield	<ul style="list-style-type: none"> • Green fodder production • Supplementation of mineral mixture and salt in feed • Management and balanced feeding of farm animals • Control of Animal Disease and abdominal worms

				Buffalo	Low yield	<ul style="list-style-type: none"> • Green fodder production • Supplementation of mineral mixture and salt in feed • Management and balanced feeding of farm animals • Control of Animal Disease and abdominal worms
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8. Priority thrust areas

Crop/Enterprise	Thrust area
Rice	Integrated Nutrient Management
Rice	Integrated Pest Management
Rice	Weed management
Rice	Water management
Rice	Seed production
wheat	Integrated Nutrient Management
Wheat	Integrated Pest Management
Wheat	Weed management
Wheat	Seed production
Urd(Black Gram)	Integrated pest management
Urd(Black Gram)	Replacement of variety
Lentil	Integrated pest management
Lentil	Replacement of variety
Mustard	Integrated Nutrient Management
Mustard	Integrated Pest Management
Mustard	Replacement of variety
Toria	Integrated Nutrient Management
Toria	Integrated Pest Management
Toria	Replacement of variety
Mentha	Integrated Pest Management
Mentha	Integrated Nutrient Management
Mentha	Replacement of variety
Sugarcane	Integrated Pest Management
Sugarcane	Integrated Nutrient Management
Small scale entrepreneur	Mushroom production
Small scale entrepreneur	Bee keeping
Live stock	Management and balanced feeding of farm animals
Live stock	Green fodder production
Live stock	Supplementation of mineral mixture and salt in feed
Live stock	Control of Animal Disease and abdominal worms
Fisheries	Availability of quality fish seed for stocking
Fisheries	Balanced nutritional feed in fish culture.
Home Science	Balanced diet and nutrition management in human being

Home Science	Popularizing handicraft
Home Science	Drudgery reduction
Home Science	Value addition to food products

Saharanpur

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Sl. No.	Farming system/enterprise
1	Agri. + Hort. + A.H.
2	Agri. + A.H.
3	Landless + A.H.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Table – Agroecological Situations Of Saharanpur District

Sl. No.	AES	Characteristics of AES	Major Commodities	Farming System	Blocks
1.	I	More than 60 % of area rain fed, sandy and sandy loam	Maize, Wheat, Groundnut, Lentil, Guava, Mango, Brinjal, Bitter-guard, Cow, Goat, Sheep	Maize, Groundnut based+ Hort+AH (Cow, Goat, Sheep)	S. Kadeem, Muzaffarabad
2.	II	Irrigated Loam, Clay Loam soils	Rice, Wheat, S.cane, Mango, Vegetables, Buffalo, Cow	Paddy, Wheat, S. cane based+A.H. (Cow, Buffalo)+ Hort	Rampur, Baliakheri, Puwanrka
3.	III	Irrigated Sandy Loam, Loam (S.cane predominant)	S.cane, Wheat, Urd, Paddy, Mustard, Buffalo, Cow	S.cane based +Horticulture+A.H. (Cow, Buffalo)	Deoband, Nagal, Sarsawa, Nakur, Nanauta, Gangoh

3. Soil types

Sl. No.	Soil type	Area (ha)
1	Sandy	44280.00
2	Sandy loam & Loam	147706.00
3	Clay loam	81420.00
	Total:	273406.00

4. Area, Production and Productivity of major crops cultivated in the district

Sl. No.	Name of the commodity	1995			2000			2007		
		A	P	PY	A	P	PY	A	P	PY
1	Paddy	70700	184173	26.05	71740	170530	23.77	32345	72129	22.30
2	Wheat	122100	331000	27.11	125396	370927	29.58	118054	315204	26.70
3	Sugarcane	117000	670410	573.00	126300	764115	605.00	125157	767224	613.00
4	Groundnut	7810	5412	6.93	4062	4992	12.99	2682	2269	8.46
5	Urd	304	205	6.74	--	--	--	817	3047	3.73
6	Maize	10600	14310	13.50	7920	11870	14.28	7431	10953	14.74
7	Gram	240	227	9.64	52	44	8.53	102	93	9.12
8	Lentil	5400	3600	6.80	3975	3263	8.21	3149	1864	5.92

9	Mustard	3680	3440	9.37	1070	1040	9.72	1461	1427	9.77
10	Pea	400	600	15.00	189	199	10.54	214	278	12.97

A- Area in ha.
qt./ha

P- Production in M. tons.

PY- Productivity in

AREA, PRODUCTION AND PRODUCTIVITY OF IMPORTANT COMMODITIES IN SAHARANPUR DISTRICT

Sl. No.	Name of the commodity	1995			2000			2007		
		A	P	PY	A	P	PY	A	P	PY
Vegetables										
1	Cauliflower	1880	41500	22.0	2596	50550	19.47	2650	5300	20.0
2	Cabbage	1500	51500	34.0	2195	64995	29.0	2250	67500	30.0
3	Brinjal	880	4100	4.65	1130	50010	44.25	1186	53580	45.0
4	Tomato	1000	46000	46.0	1835	60010	32.7	1920	62400	32.5
5	Pea	2000	32050	16.0	2623	38000	14.48	2675	40125	15.0
Fruits										
1	Mango	17950	178500	9.94	20000	204000	10.02	20700	206700	9.98
2	Guava	1590	19850	12.48	1876	25050	13.35	1918	26470	13.80
3	Peach	245	1000	4.08	345	1655	4.79	360	1735	4.81
4	Litchi	160	1200	7.5	238	1885	7.92	240	1944	8.1

A- Area in ha.

P- Production in M. tons.

PY- Productivity in tons / ha

5. Weather data (Rainfall)

Sl. No.	Month	Average Rainfall in mm
1.	October 08	16.80
2.	November 08	14.75
3.	December 08	5.01
4.	January 09	42.18
5.	February 09	13.82
6.	March 09	10.02
7.	April, 09	2.5
8.	May, 09	20.41
9.	June, 09	--
10.	July, 09	28.05
11.	Aug., 09	102.92
12.	Sept., 09	148.78
	Total	405.24

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity (kg/day/animal)
Cattle			
Crossbred	9511		3.2
Indigenous	68335		1.6
Buffalo	244105		3.7
Sheep			
Crossbred	2060		
Indigenous	30351		
Goats			
Pigs			
Crossbred	7058		
Indigenous	35079		

Poultry	224623		
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Category	Area (ha)	Production (qt.)	Productivity (qt./ha)
Fish	400.00	12000 .00	30.00

7. Details of Operational area / Villages

Sl. No.	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Baliya Kheri	Nandi Firozpur, kankarcoi	Sugarcane, Wheat, paddy, Lentil, Brinjal, Mango, Cows & Buffaloes	Poor quality seed, Imbalance fertilizer application, No seed treatment, Improper plant protection majors, Imbalanced feeding in animals, Improper hygenic condition, Lack of technical knowledge, Marketing problem etc	Promoting seed production, IPNM, IPM, IDM, Proper health & nutrition management in animals, Promoting Vallabh Krishak Club, Resource Conservation Technologies, Improving technical skills
2	Nagal	Badedi	Sugarcane, Wheat, paddy, Lentil, Mustard, Mango, Cows & Buffaloes	Poor quality seed, Imbalance fertilizer application, No seed treatment, Improper plant protection majors, Imbalanced feeding in animals, Improper hygenic condition, Lack of technical knowledge, Marketing problem etc	Promoting seed production, IPNM, IPM, IDM, Proper health & nutrition management in animals, Promoting Vallabh Krishak Club, Resource Conservation Technologies, Improving technical skills
3	Punwaraka	Dinarpur, Budhakhera	Sugarcane, Wheat, paddy, Lentil, Urd, Mustard, Mango, Cows & Buffaloes	Poor quality seed, Imbalance fertilizer application, No seed treatment, Improper plant protection majors, Imbalanced feeding in animals, Improper hygenic condition, Lack of technical knowledge, Marketing problem etc	Promoting seed production, IPNM, IPM, IDM, Proper health & nutrition management in animals, Promoting Vallabh Krishak Club, Resource Conservation Technologies, Improving technical skills
4	Nakur	Jaghta Gurjar, Sabdalpur	Sugarcane, Wheat, paddy, Lentil, Urd, Mustard, Mango, Cows & Buffaloes	Poor quality seed, Imbalance fertilizer application, No seed treatment, Improper plant protection majors, Imbalanced feeding in animals, Improper hygenic condition, Lack of technical knowledge, Marketing problem etc	Promoting seed production, IPNM, IPM, IDM, Proper health & nutrition management in animals, Promoting Vallabh Krishak Club, Resource Conservation Technologies, Improving technical skills

8. Priority thrust areas

Crop/Enterprise	Thrust area
Rice	IPNM, Weed management, Hybrid rice, IPM, IDM, Seed production
Sugarcane	IPNM, Weed management, IPM, IDM, Seed production
Wheat	Integrated Nutrient Management, Weed management, IPM, IDM, Seed production
Oilseeds & Pulses crop	Sulphar application & IPM
Vegetables	IPNM & IPM
Animals	Endo & Ecto parasite control, Improving fertility

1. Maintenance of soil productivity through IPNM and soil Testing
2. Promoting export quality Basmati production
3. Popularizing IPM technologies for management of insect pests
4. Mineral mixture supplementation among animals for improving fertility
5. Promoting Group Approach of Extension through Vallabh Krishak Clubs

Shahjahanpur

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprises
1	Crop production system
2	Crop production and livestock production system
3	Fruits / Vegetable /Floriculture /farming
4	Fisheries , Poultry , Mushroom production and Goatary

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	Mid Western plain zone	Alluvial , Calcareous , Clay , Saline Alkaline Annual rainfall 807 mm

S. No	Agro ecological situation	Characteristics
1	AES-1 (Powayan Tehsil) Block 1. Sindhauli 2. Powayan 3. Banda 4.Khutar	<ol style="list-style-type: none"> 1. Productive plain land under canal and tubewell irrigation 2. Main cropping system rice wheat sugar cane potato . 3. Soil type – Loam ,Clay loam , Sandy loam,
2	AES-2 (Sadar and Tilhar Tehsil) Block- 1. Bhawalkhera 2. Dadraul 3. Nigohi 4. Khudaganj 5. Tilhar	<ol style="list-style-type: none"> 1. Plain and water logged under canal and tubewell irrigation 2. Major crops grown i.e.Rice, Wheat, S.Cane.Toria, Potato, Lentil ,Urd, Til 3. Soil type loam,clay loam.
3	AES-3 (Jalalabad Tehsil) Block- 1. Jalalabad 2 Kanth 3.Madnapur 4. Kalan 5. Mirjapur 6. Jaitipur	<ol style="list-style-type: none"> 1. Rainfed and tubewell irrigated cultivable land 2. Major crop – Jowar , Bajra , Til , Ground Nut, maize, Mustard , Lentile ,Urd , Wheat ,S.Cane , Paddy. 3. Soil type – Sandy /sandy loam

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1	Sandy soil	About 50% sand in this soil mostly rain fed farming	157677
2	Loam /Clay loam	Irrigated land all crop grown	208899
3	Loam	In this soil paddy wheat and other oil seed and pulses crops	60818

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Rice	204915	459829000	22.44
2	Maize	297	5610000	18.87
3	Jowar	1553	1592000	10.25
4	Bajra	4666	5291000	10.25
5	Pulses(Kharif)	8483	5455000	-
6	Ground nut	6101	6278000	10.29
7	Seasmum	4765	548000	1.15
8	Soybean	56	55000	9.76
9	Wheat	247112	864892000	35.00
10	Barley	574	1169000	20.36
11	Gram	543	483000	8.89
12	Pea	1600	1872000	11.70
13	Lentil	5412	3969000	7.33
14	Linseed	289	119000	4.13
15	Mustard	7677	7351000	9.58
16	Toria	12000	9608000	8.00

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
Oct-08	71.6	32.1	19.6	70.00
Nov-08	-	28.3	13.0	75.00
Dec-08	-	23.3	10.2	83.50
Jan-09	-	21.3	09.3	82.00
Feb-09	1.8	25.0	11.0	68.00
Mar-09	6.4	30.9	14.9	60.00
Apr-09	16.2	37.7	21.4	39.00
May-09	22.2	37.8	24.6	46.00
Jun-09	70.6	40.3	26.2	43.00
Jul-09	221.7	35.5	25.4	68.70
Aug-09	343.4	33.5	23.7	80.50
Sep-09	265.0	32.6	22.5	80.00

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbreed / Indigenous</i>	772260		
Buffalo	121582		
Sheep+Goats	432958		
Pigs	34021		
Rabbits	787		
Poultry			
Hens			
<i>Desi</i>			
<i>Horse</i>	16691		
Dog	107283		

Category	Area (ha.)	Production (Mt.)	Productivity (kg/ha)
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Fish	1910.285	5865.56	370.00
Marine			
Inland			
Prawn			
Scampi			
Shrimp			

* No.of pond -2773

7. Details of Operational area / Villages (2008-09)

Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Sadar	Bhawalkhera, Madnapur, Kant, Dadraul	Badavan, Daudpur, Niyampur, Painabujurg, Tikri, Madnapur, Chndokha, Khai khera, Mathana, Satwankhurd, Roshannagar, Guwari, Rampur Barkatpur, Basak, Kakrakalan, Salliya	Rice, Wheat, Sugar cane, Ground nut, Potato, Urd, Lentil, Toria, Musterd / Musroom production, Vermi compost, Seed production, Animal husbandry, Vegetable production, Soil and water conservation, preservation of fruits and vegetable	1. Non use of HYV seeds 2. Non use of balance fertilizers 3. Non use of PP measures 4. Non use of sulphur and boron in oilseed crop	1. Need to enhance productivity 2. Need to promote INM and IPM 3. Need to adopt organic farming 4. To promote agro based activities like Mushroom cultivation and value addition
Powayan, Jalalabad, Tilhar	Sindhauri, Powayan, Jalalabad, Tilhar	Barapur, Moorchha, Karnapur, Chak Kanhau, Paina khurd, Siklapur, Mudiypawar, Nagariya, Nahil, Puraina, Dakia Hameednagar, Razau, Chadari, Benipur, Dumkapur, Laharapur, Mahaudurg, Mahaumahesh	-----do-----	-----do-----	-----do-----

8. Priority thrust areas

Crop/Enterprise	Thrust area
Paddy	Integrated crop management
Paddy	Integrated pest management
Groundnut	Integrated crop management
Groundnut	Integrated pest management
Urd	Integrated crop management
Urd	Integrated pest management
Til	Integrated crop management
Til	Integrated pest management
Toria	Integrated crop management
Toria	Integrated pest management
Lentil	Integrated pest management

Wheat	Integrated Weed management
Wheat	Integrated pest management
Gram	Integrated crop management
Gram	Integrated pest management
Kheera	Integrated pest management
Bhindi	Integrated pest management
Tomato	Integrated pest management
Cauliflower	Integrated pest management
Cabbage	Integrated pest management
Mango	Integrated pest management
Guava	Integrated pest management
Buffaloes	Feed management
Buffaloes	Disease management

Baghpat

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No.	Farming system/enterprise
1	Agriculture + Animal Husbandry
2	Agriculture + Animal Husbandry + Horticulture

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No.	Agro-climatic Zone	Characteristics
1	North Western Plain Zone	Sub humid to subtropical climate, maximum and minimum temperature 43 °C and 3 °C respectively. Average rainfall is about 750 mm
S. No.	Agro ecological situation	Characteristics
1	AES – I	Sandy loam to loam soils, normal PH, Good quality irrigation water, Canal/tube-well irrigation
2	AES – II	Sandy loam to loam soils, normal PH, Good quality irrigation water, slightly crowded and unlevelled soils

3. Soil types

S. No.	Soil type	Characteristics	Area in ha
1	Sandy loam to loam with normal pH	The soils have enough clay to store adequate amounts of water and plant nutrients for optimum plant growth. They contain enough slit to hold sufficient available water for plants, to gradually form more clay and to release fresh plant nutrients by weathering. Clay content is not much as to cause poor aeration or to make working with them difficult. A soil containing between 7 to 27% clay and approximately equal amount of silt and sand has a loam texture.	110065

4. Area, Production and Productivity of major crops cultivated in the district

S. No.	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Rice	3279	75940	23.16
2	Urd	361	1940	5.37
3	Moong	06	20	3.33
4	Arhar	930	7930	8.53
3	Wheat	51320	1827505	35.61
4	Total Pulses (Rabi)	280	2629	9.39
5	Total oil seeds (Rabi)	1680	23385	13.92
6	Sugarcane	76047	49050315	645
7	Jawar (grain)	50	402	8.05
8.	Maize	24	530	22.08

5. Weather data

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category		Population	Production	Productivity
Cattle	Crossbred Cow	14332	150486 lit./day	10.5 lit./day
	Indigenous Cow	21538	139997 lit./day	6.5 lit./day
Buffalo		139763	838578 lit./day	6.0 lit./day
Sheep	Crossbred	3782	-	-
	Indigenous	2924	-	-
Goats		22660	-	-
Pigs	Crossbred	5866	-	-
	Indigenous	16083	-	-
Poultry –Hens				
Desi		3446	-	-
Improved		41157	-	-
Turkey and others		2358	-	-
Fish	Inland	53.843 Ha.	1615.99 Q	30 Q/ Ha.

8. Priority thrust areas

S. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Khekra	Khekra	46	Dairy, sugarcane, mustard, moong, arhar, poultry & vegetables	<ol style="list-style-type: none"> 1. Low production in late sown wheat 2. Weed infestation in wheat 3. Reducing production area of pulses due to blue horse 4. White grub attack in sugarcane 5. Red rot in sugarcane 6. Late sowing of sugarcane 7. No use of potash in all crops 8. Deficiency of minor elements and organic matter in soil 9. Depletion of ground water 10. Low production of old orchards 11. Insect attack in vegetables 12. Low production of milk in cow & buffalo. 13. Long dry period in milch animals 14. Undeveloped marketing system of Agriculture of produces 	<ol style="list-style-type: none"> 1) Increase productivity of wheat in late sown conditions. 2) Increase milk production in Buffalos. 3) Balance use of fertilizer in sugarcane. 4) Balance use of fertilizer in wheat. 5) Weed management in wheat. 6) Management of pests in sugarcane. 7) Creating awareness about human nutrition /nutritional needs to mitigate the problems of nutritional deficiency in rural woman & children. 8) Management of mango orchard. 9) Pest and weed management in paddy. 10) Maintenance of soil health. 11) Disease management in okra. 12) Promotion of oilseed and pulses crops.
2.	Baghp at	Baghp at Pillna	51 50	Dairy, Sugarcane, paddy, wheat, fodder, vegetables Dairy, sugarcane, mustard, moong, arhar, poultry		

3.	Baraut	Baraut	54	Dairy, Sugarcane, wheat, fodder, vegetables, crops		
		Chhopr-oli	27	Dairy, sugarcane, wheat, fodder & vegetables		
		Binoli	59	sugarcane, wheat, fodder, mustard, paddy, other enterprises- Dairy, poultry		

8. Priority thrust areas

S. No	Crop/Enterprise	Thrust area
1	Wheat	Increase productivity of late sown conditions.
2	Buffalos	Increase milk production.
3	Sugarcane	Balance use of fertilizer.
4	Wheat	Balance use of fertilizer.
5	Wheat	Weed management.
6	Sugarcane	Management of pests.
7	Nutritional management	Creating awareness about human nutrition /nutritional needs to mitigate the problems of nutritional deficiency in rural woman & children.
8	Mango	Management of orchard.
9	Paddy	Pest and weed management.
10	Soil	Maintenance of soil health.
11	Okra	Disease management.
12	Oilseed and Pulses	Promotion of oilseed and pulses crops.

Moradabad

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S.N.	Farming system/enterprise
1.	Major crops – Paddy, Wheat, Mustard, Sugarcane, Mentha, Lentil, Potato.
2.	Crop rotation– Rice-Sugarcane, Rice- Wheat, Urd-Mustard-Mentha, Jowar-Mustard-Mentha
3.	Agriculture + Hort. + Livestock
4.	Agri. + Livestock
5.	Landless + Livestock

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No.	AES	Characteristics of A.E.S.	Major commodities	Farming system	Block
1	I- Central western plain zone of the district	-Loam and clay loam with high fertility - medium rainfall	Rice, wheat, mentha, sugarcane, chilli, cauliflower, cabbage, mango, guava, buffalo, cows	Paddy, wheat, sugarcane+ Poplar+ A.H. (Cow, buffalo)	Thakurdwara, Dilari, Moradabad, Bhagatpur tanda and Chhajlait
2	II. Central western Plain zone/ Central east southern region of the district	-Sandy loam to loam soil of medium fertility - medium rainfall	Rice, wheat, mentha, sugarcane, mustard as well as vegetables (pea, cucumber, chilli, tomato, potato) and mango fruit, buffalo, cows	Paddy, wheat, potato, sugarcane, mentha, mustard based systems + horticulture + A.H.	Billari, Baniyakhera, Bahjoi, Panwasa and Sambhal
3	III Central western plain zone Central region of the district	-Sandy loam to loam and clay soil of medium fertility - medium rainfall	Rice, wheat, mentha, sugarcane, potato, guava, mango, poplar etc.	Paddy, wheat, sugarcane, mentha based systems poplar + A.H.+ Hort.	Munda pandey, Kundarki and Asmoli

3. Soil types

S.No.	Soil type	Area (ha)
1	Clay loam	81930
2	Sandy soil	25537
3	Sandy loam	84518
4	Loam	126433
	Total	317919

4. Area, Production and Productivity of major crops cultivated in the district (2007-08)

S.No.	Crop	Area (ha)	Production (MT)	Productivity (Qtl /ha)
1	Wheat	205981	605.2	29.38
2	Lentil	1160	0.7	5.87
3	Mustard /Toriya	10235	12.4	12.09
4	Paddy (Rice)	139065	325.7	23.42
5	Bajra	31231	38.3	12.27

6	Urd	11177	9.6	8.60
7	Potato			

5. Weather data (rainfall)

S. No	Month	Moradabad	Bilari	Chandausi	Sambhal	Kanth	Thakurdwara	Total rainfall	Average rainfall
1	Oct. 08	-	-	-	-	-	-	-	-
2	Nov. 08	-	-	-	-	-	-	-	-
3	Dec. 08	-	-	-	-	-	-	-	-
4	Jan. 09	-	-	-	-	-	-	-	-
5	Feb 09	-	-	-	-	-	-	-	-
6	Mar 09	-	-	-	-	-	-	-	-
7	Apr 09	13.0	-	1.00	-	-	7.40	21.40	3.56
8	May 09	7.0	-	9.00	3.00	-	-	19.00	3.80
9	June 09	23.00	6.20	1.00	2.00	2.00	30.50	64.70	10.78
10	July 09	148.50	43.50	125.0	25.00	63.00	67.98	472.98	78.83
11	Aug. 09	277.00	289.40	186.00	89.00	93.50	135.30	1070.20	178.36
12	Sept. 09	256.80	155.00	42.00	181.00	157.00	140.90	932.70	155.45
	Total	725.30	494.10	364.0	300.0	315.50	382.08	2580.98	430.78

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	11824	Data not available	Data not available
<i>Indigenous</i>	49989		
Buffalo	327097		
Sheep			
<i>Crossbred</i>	220		
<i>Indigenous</i>	5667		
Goats	168248		
Pigs	-		
<i>Crossbred</i>	3165		
<i>Indigenous</i>	27159		
Rabbits	-		
Poultry	143957		
Hens	-		
<i>Desi</i>	-		
<i>Improved</i>	-		

Ducks	-		
Turkey and others	-		
Fish	172	5051	29.36

7. Details of Operational area / Villages (2008-09) : PRA Survey under Progress

S. No.	Name of block	Major crops & enterprises	Major problem identified	Identified thrust area

8. Priority thrust areas

S. No	Thrust area
1	<ol style="list-style-type: none"> 1. High yielding varieties as per area. 2. Low organic matter in soil. 3. Promotion of bio-fertilizers and bio-agent. 4. Improving oil seeds and pulses productivity. 5. Promoting quality seed production. 6. Promoting quality nursery production. 7. Die-back and wilting problems in horticultural crops (mango, guava etc.) 8. Balance nutrition in horticultural crops. 9. IPM in different crops. 10. Improved finger lings production. 11. Feeding management in fish ponds. 12. Balance feeding of animals. 13. Preservation of fruits and vegetables. 14. Diversification in Agriculture.

G.B. Nagar

1. Major farming systems/enterprises (based on the analysis made by the KVK)

SN	Farming system / enterprises
1	Agri-pastural (Dairy)
2	Agri-horti (Fruit)
3	Agri-horti (Vege) – Pastural Farming system
4	Mixed Farming system
5	Dairy

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

SN	Agro-climatic Zone	Characteristics
1	Western Plain Zone	Sandy loam and loamy soil texture, canal and tube well irrigation, medium rainfall, sub-tropical climate, rice-wheat crop rotation and dairy based farming system.

SN	Agro-ecological situation	Characteristics
1	AES - I	Soil type - Sandy loam soil Crop rotation - Sugarcane-wheat, Rice-Wheat-Jawar, Arhar-wheat, Jawar-lentil, Vegetables Orchard – Mango, Guava Mixed farming system
2	AES - II	Soil type - Sandy loam, Loam soil Crop rotation - Rice based crop rotation, Rice-wheat, Jawar-wheat, Arhar-wheat, Jawar-lentil, Vegetables Mixed farming system Some area water logged

3. Soil types

SN	Soil type	Characteristics	Area in (ha)
1	Sandy loam	Sand percentage medium and water holding capacity medium.	37880
2	Loam	Soil fertility status and water holding capacity is high	100937

4. Area, Production and Productivity of major crops cultivated in the district

SN	Crop	Area (ha)	Production (Qt)	Productivity (Qt/ha)
1	Rice	20017	52844	26.58
2	Wheat	63852	203715	31.52
3	Barley	3077	8570	27.80
4	Bajra	7879	13189	15.94
5	Maize	4210	70010	15.85
6	Urd	81	440	05.75
7	Moong	197	1370	07.10
8	Lentil	187	1540	08.60
9	Gram	49	450	9.28
10	Arhar	2598	28084	10.97

11	Mustard	1163	15084	13.30
12	Sugarcane	2759	174312	610.00
13	Potato	194	45473	247.50

5. Weather data

Month	Rainfall(mm)	Temperature ^o C		Relative Humidity (%)
		Maximum	Minimum	
Oct.,08	-	33.3	17.8	85.0
Nov, 08	-	31.1	16.6	80.0
Dec, 08	-	22.9	10.0	63.0
Jan, 09	-	24.2	07.5	65.0
Feb, 09	10.00	30.0	12.5	66.0
Mar, 09	-	31.2	14.0	70.0
April 09	-	42.5	23.8	68.0
May 09	-	43.8	27.0	67.8
June 09	-	43.0	28.0	69.0
July 09	10.00	42.7	26.9	72.6
Aug 09	65.00	39.6	26.0	78.0
Sept 09	50.00	36.2	26.3	81.0

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Crossbred	15196	121568	8.00
Indigenous	16398	106587	5.50
Buffalo	272847	2319199	7.30
Sheep			
Crossbred	3770	4713	1.20
Indigenous	898	674	0.75
Goats	18176	327168	18.0
Pigs			
Crossbred	808	44440	51
Indigenous	7369	359788	44.0
Poultry			
Improved	22233	24456	1.20
Category	Population	Production	Productivity
Inland	-	3735 Q	25/ha/year

7. Details of Operational area / Villages (2008-09)

Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust area
Dadri	Dadri	Kot Khendra Bisada Dadipur Dairymacha Khatana Saithali Veerpura Shahpur	Paddy, Jwar, Wheat, Mustard, Lentil, Veg. & Dairy	Low yield of cereal, Pulse and Oilseed crop. Use of Desi variety. Repeat breeding Worms's infestation, Low soil fertility status.	IPNM, IPM, Variety replacement, Soil testing, Balance animal feeding, De worming

	Bisrakh	Badalpur Sadopur Dujana Itana Kherpur	Paddy, Jwar, Wheat, Mustard, Lentil, Veg. & Dairy	Low yield of cereal, Pulse and Oilseed crop. Use of Desi variety. Repeat breeding Worms infestation	IPNM, IPM, Variety replacement, Soil testing, Balance animal feeding, De worming
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8. Priority thrust areas

SN	Thrust area
1	IPNM in cereals, pulse and oilseed crops
2	IPM in cereals, pulse and oilseed crops
3	Use of bio-agent
4	Soil testing and fertility analysis.
5	Seed and variety replacement
6	Protective vegetable nursery raising
7	Anoestrous in cow and buffalo
8	De-worming
9	Balance animal feeding

Lucknow

FARM PROFILE OF THE DISTRICT - Lucknow

Lucknow is centrally placed district in Uttar Pradesh, surrounded by Sitapur in north, Bara Banki in east, Rae Bareli in south, Hardoi in northwest and Unnao in southwest. The entire district falls in Gomati subbasin of Ganga basin. The district forms part of the great Indo-Gangetic plain and is situated almost in the middle of the area between Ganga and Ghaghara rivers. The total area of the district is 2528sq. km. supporting a population of 36.81 lacs with a density of 1456 persons per square km. It has eight blocks, namely Malihabad, Mal, Bakshi ka Talab, Kakori, Chinhat, Sarojininagar, Gosainganj, and Mohanlalganj. The brief profile of the district is given in Table 62.7% of the population lives in urban areas. Net sown area of the district is 1,38,108 hectare out of which 47.4% irrigated.

1. General Census:

SI.No.	Characters	Value
1.	Population	
	Male (000)	19.32
	Female (000)	17.15
2.	Population below poverty line (000)	6.618 (17.9%)
3.	Population density	331/ sq km
4.	Sex ratio (no.per 1000 male)	827
5.	Literacy (%)	69.39 %
	Male	76.63 %
	Female	61.22 %
6.	Agricultural labours	6.5% of total population
7.	Farmers	21% of total population

2. Agriculture and allies sector:

	Item	Characteristics	Value
1	Area Geographical area (Sq km) 2528		
	1.	Forest (ha)	11609
	1.2	Net sown area (ha)	138108

	1.3	Area sown more than once (000 ha)	64
	1.4	Total cropped area (000 ha)	214.39
	1.5	Cropping intensity (%)	154 %
	1.6	Fallow land (ha)	45216
	1.7	Land not available for cultivation (ha)	8838
2 Administrative			
	2.1	No. of tehsil	4
	2.2	No of blocks	8
	2.3	No. of nyay panchayat	97
	2.45	No. of gram panchayat	628
	2.5	No of villages inhabited and electrified	824 villages electrified out of 824
	2.6	No of villages with potable water supply	822
3 Rainfall (mm) 953			
4 Agro-climatic region and zone Middle Gangetic Plains/ Eastern Plains			
6 Credit Infrastructure			
	6.1	Nationalized bank branches	334
	6.2	Regional Rural Banks	12
	6.3	Cooperative Banks	22
	6.4	Cooperative and Village Development Bank	7
7 Agriculture workforce			
	8.1	Cultivators	189279 (5.19 %)
	8.2	Of whom small & marginal ones	153488 (93.14 %)
	8.3	Agricultural labourers	58384 (1.60%)
	8.4	Artisans	14.3 %
	8.5	Household/cottage industries	5.9 %
9 Irrigation (000 ha) 1198.72			

	7.1	Net irrigated area (ha)	125224
	7.2	By canals (ha)	22910
	7.3	By wells (ha)	5792
	7.4	Tube wells (ha)	90800
9.	Chemical fertilizers (kg per ha) 57,632		
10	Agriculture support facilities		
	10.1	Seed/fertilizers/pesticides depots	1294
	10.2	Rural markets/ mandis (No.)	2
	10.3	Sub-yards	1
11	Dairy animals		
	11.1	Cattle (cows)	2,38,760
	11.2	Buffaloes	2,20,328
	11.3	Sheep/goat	6,751/ 1,41,936
	11.4	Poultry birds	1,68721

(Source: PLP, Lucknow, 2008-09, NABARD)

Land holdings are dominated by small and marginal farmers. More than 77 % of the holdings are less than one hectare and more than 92% holdings are under two hectares.

Table 3.2: Distribution of Operational Holdings, 2006-07

Farm size Ha	Operational holdings		Area operated	
	Number	%	ha	%
Up to 1	167403	77.76	77464	44.36
1 - 2	32604	15.15 %	47307	27.09 %
2 - 10	15131	7.02 %	47330	27.10 %
Above 10	142	0.07 %	2537	1.45 %
Total	215280	100 %	174638	100 %

(Source: PLP, Lucknow, 2008-09, NABARD)

3.1. Crop Sector

Cropping is done in all the three seasons, i.e. kharif, rabi and summer. A total area of 1,38,108 hectare is put under various crops in district Lucknow in a year. Wheat is the main crop, followed by paddy. Potato is the main commercial crop. Masoor, gram, arhar, pulses, oilseeds, bajra, vegetables and fruits are other important crops.

Block wise details of area under different crops (ha) :

S.N.	Block	Wheat	Paddy	Maize	Urad	Pigeon pea	Jowar	Bajra	Potato
1	Malihabad	6168	2525	811	729	164	765	35	246
2	Mal	7142	2984	584	1109	211	1152	381	480
3	Bakshi ka Talab	15136	9506	426	1809	354	458	305	1748
4	Kakori	7273	2806	502	445	112	268	225	423
5	Chinhat	3954	2119	78	300	54	120	186	649
6	Sarojininagar	12430	4574	367	1743	551	812	27	277
7	Gosainganj	12336	10159	41	1167	233	339	218	259
8	Mohanlalaganj	17329	13430	17	2040	288	630	124	302
	Total	81768	48103	2826	9342	1967	4544	1501	4384

(Source: Statistical Patrika, 2006-07, Department of Agriculture, U.P.)

Area, production and productivity of major crops:

The area, production and productivity of major crops grown in kharif and rabi seasons in the district during 2006-07 are given in Table below, respectively. Sunflower, roses, and marigold are also cultivated in large area. Apart from this many medicinal and herbal plants are also grown in the district.

Area, production and productivity of major Kharif crop

S.N.	Crop	Area (ha)	Production (MT)	Productivity (q/ha)
1	Paddy	48103	93520	19.44
2	Maize	2826	2779	10.99
3	Bajra	1501	1379	14.69
4	Jowar	4544	1424	9.81
5	Coarse Grain	54	33	6.11
	Pulses			
6	Urd	9342	3080	3.92
7	Moong	64	29	4.54
8	Arhar	1967	2894	10.57
	Oil Seed			
9	Groundnut	142	115	8.10
10	Til	986	211	2.14

(Source: PLP, Lucknow, 2008-09, NABARD)

Area, production and productivity of major rabi crop, year 2006-07

S.N.	Crop	Area (ha)	Production (MT)	Productivity (q/ha)
1	Wheat	81768	194437	23.69
2	Jau (Barley)	340	534	15.71
3	Gram	1831	2090	11.42

4	Pea	3173	3712	11.70
5	Lentil	851	323	3.80
6	Rai /Masturd	2806	2242	7.99
7	Alsi	11	4	4.13
8	Toria	3500	3220	9.20

(Source: PLP, Lucknow, 2008-09, NABARD)

The block-wise details regarding availability of major fertilizers are given in Table 3.6 and details of blockwise use of seeds are given in Table below.

Block-wise NPK consumption:

S.No.	Block	N	P	K	Total
1	Malihabad	2658	1083	152	3867
2	Mal	2558	1067	139	3764
3	Bakshi ka Talab	2897	1341	239	4477
4	Kakori	2362	829	157	3348
5	Chinhat	2262	811	126	3198
6	Sarajininagar	2819	911	186	3916
7	Gosainganj	2760	1311	166	4237
8	Mohanlalaganj	2735	1277	172	4184
	Total	21045	8630	1336	31011

(Source: S. patrika, Government of Agriculture, U.P.)

Block wise details of seed distribution:

S.No.	Block	Cooperative society	Agriculture Dept.	Another
1	Malihabad	11	1	5
2	Mal	12	1	4
3	Bakshi ka Talab	23	1	30
4	Kakori	9	1	7
5	Chinhat	3	1	15
6	Sarajininagar	15	1	9
7	Gosainganj	14	1	17
8	Mohanlalaganj	16	1	12
	Total	103	8	99

(Source: PLP, Lucknow, 2008-09, NABARD)

The district is covered under 'State horticulture Mission' launched in 2005 which is a part of National Horticulture Mission (NHM) of GOI. The mission involves establishment of nursery, potato seed production, establishment and rejuvenation of guava orchards, organic farming, pack house and provision of marketing infrastructure. There is one Government nursery and 205 private nurseries in the district. Malihabad orchards are the major producers of Dashehari, kalmi, lungra, safeda and chausa mangoes. Aonla also has good scope in the district. Malihabad, Mal and kakori have been identified as agro export zone for mangoes. The area, production and productivity of major fruits of the district are given in Table. At Malihabad there is progeny which makes available kalmi mango plants for plantation.

Area, production and productivity of major fruit crops of district:

S.N.	Crop	Area (ha)	Production (MT)	Productivity (MT/ha)
1	Mango	18400	184000	10
2	Guava	550	11000	20
3	Banana and papaya	120	2800	30
4	Kathal	69	980	25
5	Bhindi	1500	24000	16
6	Lauki	1500	15000	10
7	Kaddu	900	30000	30
8	Karela	1500	22500	15
9	Onion	3000	61750	20
10	Cauliflower/ cabbage	825	24750	30
11	Chilly	200	500	25

(Source: PLP, Lucknow, 2008-09, NABARD)

An in-depth study into cultivation pattern of the district reveal many important gaps which need to be addressed, to realize the full production potential. The district has large number of cold storages in all the eight blocks and provides easy and nearly access to farmers for storing potato and vegetables. The district has 21 functional cold storages having a capacity of 133788 MT. The cold storages play important role in value enhancement of potato crop, vegetables, check on immediate post-harvest losses, distress sale and provide interim finance to farmers. In order to reduce post harvest losses, there is a need for accelerating the growth of agro processing industries.

Lucknow district is one of the major producers of wheat and paddy. It is also a producer of potato and is among the 5 districts covered under agri export zone for potato. Medicinal and aromatic plant cultivation, marigold plantation and mushroom cultivation have been taken up as innovative activities by some entrepreneurs. The nurseries in the district have limited facility for production of planting material. There are Krishi Upaj Mandi Samities in the district.

Livestock Sector

Animal husbandry sector within the agriculture sector contributes to more than 26% of total output in terms of its value. Lucknow district is dominated by small and marginal farmers (93 percent). To generate additional income, nearly three animals are attached to each land holding, at an average. There are no organized dairy activities in the private sector of the district. Lack of farm yard manure and use of cow dung as fuel has added to depletion of organic matter in the soil. Under such situations, encouraging dairy activity in the district will be beneficial. The dairy profile of Lucknow district is given in Table below

Dairy Profile

1.	Population of breedable Cross bred cows	21967
2.	Milk Production of CBC (Tonne/year)	2,70,000
3.	Average yield (kg/day)	3.5
4.	Population of breedable Desi Cows	216793
5.	Milk Production of Desi cows (Tonne/year)	9,12,500
6.	Average yield (kg/day)	2.5
7.	Population of breedable Buffaloes	2,20,328
8.	Milk Production of buffaloes (Tonne/year))	141932.
9.	Average yield (kg/day)	3.2
10.	Total Milk production(000MT)	1097000
11.	Nos. of milk plants	1
12.	Number of Milk Societies	464
13.	Number of District Milk Cooperative Federation	1 (Lucknow Milk Production Cooperative)
14.	District level chilling facility	1 (55,000 Litres)

(Source: PLP, Lucknow, 2008-09, NABARD)

The block-wise population of livestock as per 2003 census is given in Table below, which indicates that there are 4.3 lakh mulch animals, i.e. cows and buffalos. The scenario of dairy is good in Lucknow and can improve livelihood of marginal farmers and landless farmers by providing supplementary source of income and check large scale migration to cities.

Population of major livestock in district, 2006-07

S. No.	Block	Cow	Buffalo	Pig	Sheep	Poultry
1	Malihabad,	26566	23720	4471	745	17339
2	Mal	25277	23155	4178	686	16798
3	Bakshi ka Talab	38798	31934	7677	1177	26116
4	Kakori	21110	20205	2998	418	14225
5	Chinhat	14946	15640	1193	110	9608
6	Sarojininagar	35651	29908	6870	1120	24186
7	Gosainganj	30263	26408	5471	987	20124
8	Mohanlalganj	37368	31217	7351	1432	25458

	Total	229979	202187	40209	6675	153944
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(Source: PLP, Lucknow, 2008-09, NABARD)

5. Major production System:

1. Rice - Wheat
2. Rice - potato- Urd
3. Rice - potato- Mentha
4. Rice – Mustard-Mentha
5. Jowar-Wheat-Mentha
6. Arhar
7. Rice - Wheat-Sunhemp

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Agricultural crop: Irrigated - wheat, paddy, sugarcane, mentha, fieldpea, mustard Rainfed - urd, arhar, gram and groundnut
2.	Fruit crops: mango, banana, guava and papaya. Vegetable crop: potato, brinjal, okra, vegetable pea, cabbage, Floriculture: Gladiolus, marrigold, rose
3.	Animal husbandry: Cow, buffaloes and goat

Agricultural and allied census:

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	Central plain zone	Alluvial, calcareous silty loam salt affected (4.2 lac ha)

S. No	Agro ecological situation	Characteristics
1	AES-I	Sandy loam, loam and silty loam soil, irrigated through borewell. Major crops mango and other horticultural crops. dairy is the major subsidiary occupation.
2	AES- II	Silty loam and silty clay soil is existing this AES and mainly irrigated through borewell and canal. Main crops are paddy and mentha
3	AES-III	Loamy sand and loamy soils in main dominated soil, irrigation facility is poor, mainly rainfed area and some areas are covered through borewell
4	AES-IV	Silty clay loam, silty loam and loamy soil is predominant. Irrigated through borewell. Diversified crops are being cultivated i.e. paddy, wheat, pulses, oilseeds, vegetable, fruits and flowers

3. Soil types

S. No	Soil type	Area in ha
1	Loamy soil	17304
2.	Sandy loam	22970
3.	Silty loam	99301

4.	Loam	28352
5.	Silty clay loam	18357
6.	Clay loam	8725
7.	Silty clay	4526
Total		199715

Metrological data of district (at KVK, IISR, Lucknow):

Month	Rain fall in mm	No. of rainy days	Temperature		R.H.		Sun Shine in Hr
			Max.	Min.	Max.	Min.	
October 08	5	1	32	18.44	901.38	50.6	3.46
November 08	0	0	27.83	12.3	92.65	42.5	0.43
December 08	0	0	24.23	10.1	94.5	54	0.75
January 09	0	0	23.04	9.02	93.8	46.4	2.06
February 09	0	0	27.85	11.65	82	32	4.58
March 09	0	0	32.85	15.23	75.5	25.38	4
April 09	0	0	38.35	20.98	45.5	15.5	5.1
May 09	7	2	35.73	24.7	62	33.25	3.95
June 09	50.8	3	39.63	25.73	58.5	32.75	2.7
July 09	123.2	10	35.88	26.78	78.75	62.23	3.75
August 09	392.4	15	33.82	26.02	86.6	69.20	2.04
September 09	9.2	1	32.71	24.37	90.1	69.4	2.56

Bareilly

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Agriculture+ Animal hisbandry
2.	Agriculture+ Animal husbandrty+Fishries
3.	Agriculture+ Horticulture
4.	Agriculture+ Horticulture+Animal Husbandry

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

District Bareilly falls between Tarai and Mid-Western Plain agro-climatic zone and administratively grouped into western zone (Rohilkhand Region) of Uttar Pradesh. Geographically, the district is situated between latitude 28.10°N and 28.54°N and longitude 78.58°E and 79.47°E. Pilibhit and Shahjahanpur district on east, Rampur district on west, and Udham Singh Nagar district on the north and Badaun district on south side surround it.

S. No	Agro-climatic Zone	Characteristics
1	Tarai agro-climatic zone	Tarai Region of the district having heavy soils i.e. clay loam with high fertility, high rain fall and most suited for paddy, wheat and sugarcane cultivation, Oat of 15 development block of Bareilly district, Five blocks v iz. Baheri, Damkhoda, Shergarh Nawabganj and Bhadpura falls in this Agro climatic zone.
2.	Mid-Western Plain agro-climatic zone	Mid Western plain region of the district with loamy soils is having medium fertility, medium rainfall and suitable for all type of crops covers Meerganj, Fateganj West and Bhojipura blocks, Sandy soils with medium fertility and medium rain fall having proximity to the city and suitable for vegetable cultivation covers Bhuta,Kyara blocks and Bithri Chainpur block, and sandy loam soils having low fertility and low rainfall but water logged with salinity problem most suited for paddy, oilseeds, pulses cov ers Faridpur, Alampur,Jaffrabad, Ramnagar, Majhgawan development blocks.

3. Soil types

According to soil and geographical condition, the district is divided into three sub-regions, sub-region I comprises of Shergarh, Damkhoda, Baheri, Nawabganj and Bhadpura blocks whereas sub-region II covers Meerganj, Fatehganj (West), Kyara, Bhojipura and Bithri-Chainpur blocks while sub-region III consists of Ramnagar, Alampur-Jaffrabad, Majhgawan, Faridpur and Bhuta blocks. The soil type is loam to silt loam. Tarai soil is very fertile. Southern part is plain; Northern and Eastern parts have alluvial soil. The soils in the area are low in nitrogen and medium in potash and phosphorous content.

S. No	Soil type	Area in ha
1.	Sandy soil	182540
2.	Sandy loam	179185
3.	Others (alluvial)	71253

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1.	Rice	187930	3606376.7	19.19
2.	Wheat	208765	5127268.4	24.56
3.	Jau	102	21.56.28	21.14
4.	Jawar	936	7141.68	7.63
5.	Bajra	10128	120737.68	11.92
6.	Maize	558	8570.88	15.36
7.	Urd	5598	24295.32	4.34
8.	Moong	255	708.9	2.78
9.	Masoor	15396	97302.72	6.32
10.	Channa	16	147.52	9.22
11.	Matar	1041	18925.38	18.18
12.	Arhar	233	2269.42	9.74
13.	Mustard	14101	106069.52	7.52
14.	Til	2015	1994.85	0.99
15.	Groundnut	239	1966.97	8.23
16.	Sunflower	305	5993.25	19.65
17.	Sugarcane	64088	40106270	625.8
18.	Potato	5275	1068978.8	202.65
19.	Turmeric	38	660.44	17.38

5. Weather data

Average Rainfall (mm)	Average Temperature °C		Average Relative Humidity (%)
	Maximum	Minimum	
1096mm	45	4.8	NA

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	9948	4.5 lt /day	Not Available
<i>Indigenous</i>	229126	2.55 lt /day	
Buffalo	485484	3.55 lt /day	
Sheep			
<i>Crossbred</i>	25		Not Available
<i>Indigenous</i>	2726		
Goats	168285	0.50 lt /day	
Pigs			
<i>Crossbred</i>	2049		Not Available
<i>Indigenous</i>	21988		
Rabbits	-		
Poultry			
Hens	162470	128.8 eggs/year	Not Available
Turkey and other Poultry	20830		
Fish	343.2	10577	30.82

7. Details of Operational area / Villages

Sl.No.	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Bhijipura	Kamua	Paddy, Wheat Sugarcane, Cattle and buffalo	Low Productivity of crops. High incidence of pests and diseases	Animal health and care Round Low availability of green fodder Crop production and management
2.	Bithrichaipur	Ahladpur	Paddy, Wheat Oilseed, Pulses, Cattle and buffalo, poultry	Low milk yield	Integrated Pest Management Integrated Plant Nutrient Management
3.	Bithrichaipur	Singhai Kayasthan	Wheat Oilseed, Pulses, Paddy, Cattle and buffalo	Poor availability of green fodder Problem of infertility in animals	

8. Priority thrust areas

Thrust area

- 1) Animal health and care – piggery, goatry and Dairy
 - A. (Timely vaccination, deworming and insemination)
- 2) Fertility management in dairy animals.
- 3) Balanced/ supplement feeding in livestock
- 4) Round the year availability of green fodder
- 5) Crop production and management (Basmati rice, pulses and oilseed)
- 6) Integrated Pest Management (IPM), Integrated Plant Nutrient Management (IPNM) and Organic Farming
- 7) Composite fish culture
- 8) Production of Basmati rice
- 9) Vegetable production and post harvest management
- 10) Orchard development and management
- 11) Women empowerment
- 12) Crop-diversification (bee keeping, mushroom)
- 13) Post harvest management and marketing of food-grains, seed, fruit, vegetables fish milk ,and meat products

Kushinagar

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No.	Farming system/enterprise
1.	Agriculture
2.	Agriculture + Horticulture
3.	Agriculture + Livestock
4.	Agriculture + Livestock + Horticulture
5.	Agriculture + Livestock + Poultry + Horticulture
6.	Livestock
7.	Agriculture + Fisheries
8.	Agriculture + Fisheries + Livestock + Poultry

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Agro-climatic Zone	Characteristics
Zone IV North Eastern Plain Zone	The annual average rainfall is 1240 mm and the temperature ranges from 4.9 ^o C to 44.20C. The relative humidity ranges from 39% to 85%. Rice, wheat, maize, gram, peas, rapeseed and mustard are major crops. Potato, chillies, banana, litchi, jackfruits, cucurbits especially parwal and few spices are also cultivated.

3. Soil types

Two main soil types are found, namely alluvial and calcareous.

4. Area, Production and Productivity of major crops cultivated in the district (2006-2007)

Crop	Total Cultivated Area (ha)	Under Irrigation (ha)	Total Production (q)	Average Yield (q / ha)
Rice	122469	108108	2764720	22.57
Wheat	112391	110752	3153310	28.06
Barley	91	52	1770	19.42
Jowar	14	0	160	11.45
Bajra	101	2	1600	15.8
Maize	6091	2993	104840	17.21
Total Cereal	241200	221907	6026660	18.16
Urd	204	94	1080	5.29
Mung	105	65	590	5.62
Lentil	3735	1290	23420	6.27
Gram	9	7	60	7.17

Pea	534	279	5230	9.8
Pigeon pea	987	1	5330	5.4
Total Legumes	5574	1736	35710	6.41
Mustard	9733	3752	3230	7.52
Groundnut	287	34	2610	9.11
Til	80	6	150	1.93
Total Oilseed	10198	3416	77570	7.61

OTHER CROPS

Onion	82	78	-	-
Potato	1613	1210	297280	184.3
Other vegetables	42611	2934	-	-
Sugarcane	70163	33350	37826280	539.12
Turmeric	904	20	34700	38.39
Sun hemp	244	2	730	2.98
Fodder	50	48	-	-

5. Weather data

S. No.	Rainfall (mm)	Temperature (°C)		Relative humidity (%)
		Max.	Min.	
1	1270	44	05	81

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district (2006-2007).

Category	Population	Production (q)	Productivity
Cattle	151237	NA	NA
Crossbred	32281	NA	NA
Indigenous	118956	NA	NA
Buffalo	198312	NA	NA
Sheep	5695	NA	NA
Indigenous	5695	NA	NA
Goats	277042	NA	NA
Pigs	16301	NA	NA
Crossbred	15980	NA	NA
Indigenous	321	NA	NA
Poultry	233677	NA	NA
Ducks	2946	NA	NA
Fish	1171000	2573	NA

7. Details of Operational area / Villages (2008-2009)

S. No	Taluk	Block	Village	Major crops & enterprises	Major problems identified	Thrust area
1	Tamkuhiraj	Dudahi	Dharampur Parwat Dumahi, Mathia Bhokaria,	Sugarcane, wheat, rice, Vegetables, banana, litchi	Low yield of crops due to existing cultivars and traditional method of cultivation	Enhancing production & productivity through improved var. & tech.
2	Tamkuhiraj	Seorahi	Mukundpur, Tarya sujan, Karanpatti	Sugarcane, wheat, rice, Vegetables, banana, litchi	-do-	-do-
3	Tamkuhiraj	Tamkuhiraj	Turpatti Mahuwa, Amwa Bujurg, Semra Hardopatti	Sugarcane, wheat, rice, Vegetables, banana, litchi	-do-	-do-
4	Padrauna	Padrauna	Laxmipur, Padri , Lamkan Baklolahi, Semra,	Sugarcane, wheat, rice, Vegetables, banana, litchi	-do-	-do-
5	Fazil Nagar	Fazil Nagar	Ahladpur, Fazilnagar, Patkhauli	Sugarcane, wheat, rice, Vegetable	-do-	-do-
6	Kassia	Kassia	Malludih, Mainpur (Khadahi)	Vegetable, wheat, rice, Sugarcane	-do-	-do-

8. Priority thrust areas

Crop/Enterprise	Thrust area
Crop Production	Production technology for important Kharif, Rabi and Zaid crops
RCT	Promotion of resource conservation technologies
Entrepreneurship	Entrepreneurship development in rural youth
Drudgery reduction	Drudgery reduction skill and entrepreneurship development in farm women
Horticultural crops	Promotion of Horticultural crops (Mango, guava, litchi, papaya, banana)
Horticultural crops	Quality seed/ planting material production
Livestock	Livestock: Care and management.
Organic inputs production	NADEP and vermi -composting.
Integrated Pest Management	Integrated Pest Management

Deoria

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No.	Farming system/enterprise
1.	Agriculture
2.	Agriculture + Horticulture
3.	Agriculture+ Livestock
4.	Agriculture + Fisheries
5.	Agriculture + Fisheries + Agro forestry
6.	Agriculture + Fisheries + Horticulture
7.	Livestock
8.	Agriculture + Livestock + Horticulture
9.	Agriculture + Fisheries + Livestock

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No.	Agro-climatic Zone	Characteristics
1	Zone IV	Ø Sandy, loam, calcareous clay, deep alluvial

S.No.	Agro-ecological situation	
1	North Eastern Plain Zone	Ø Sandy to loam, calcareous clay, deep alluvial

3. Soil types

Soil Type	
	Sandy
	Loam
	Sandy loam
	Alluvial

4. Area, Production and Productivity of major crops cultivated in the district

Crop	Total Cultivated Area (ha)	Total Cultivation Under Irrigation (ha)	Total Production (q)	Average Yield (q / ha)
Rice	130,543	-	2131767	16.33
Wheat	147,932	-	3503030	23.68
Barley	662	-	12770	19.29
Sorghum	46	-	541	11.76
Pearl Millet	314	-	5435	17.31
Maize	8168	-	114270	13.99
Total Cereal	287665	-	5767813	17.06
Black Gram	49	-	200	4.08
Green Gram	114	-	755	6.62
Lentil	666	-	5974	8.97
Gram	130	-	1113	8.56
Pea	1,836	-	20839	11.35
Pigeon pea	7,596	-	46336	6.10

Total Legumes	10391	-	75217	7.61
Mustard	1,574	-	10703	6.80
Groundnut	2,895	-	18673	6.45
Sesame (Til)	108	-	173	1.6
Rapeseed	7	-	32	4.60
Total Oilseed	4584	-	29581	3.25
Potato	1,688	-	269692	159.77
Sugarcane	11,072	-	6152046	555.64
Turmeric	10	-	174	17.38

5. Weather data

S. No.	Rainfall (mm)	Temperature (°C)		Relative humidity (%)
		Max.	Min.	
1	1203	44	05	81-85

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production (q)	Productivity
Cattle		NA	NA
Crossbred	13993	NA	NA
Indigenous	169626	NA	NA
Buffalo	164328	NA	NA
Sheep	3842	NA	NA
Indigenous	NA	NA	NA
Goats	199952	NA	NA
Pigs	18799	NA	NA
Crossbred	NA	NA	NA
Indigenous	NA	NA	NA
Poultry	202851	NA	NA
Ducks	NA	NA	NA
Fish	NA	NA	NA

7. Details of Operational area / Villages (2010-2011)

S.No	Taluk	Block	Village	Major crops & enterprises	Major problems identified	Thrust area
1	Bhatpar Rani	Bhatpar Rani	Khampar, Khandeshar, Chhotkagaon, Ruchapar, Jagahatha	Rice, wheat, Sugarcane, Pulses, Vegetables, Mango, banana, litchi	Low yield of crops due to existing cultivars and traditional method of cultivation	Enhancing production & productivity through improved var. & tech.
2	Bhatpar Rani	Bankata	Bangara Bazar	Rice, wheat, Sugarcane, Pulses, Vegetables, Mango, banana,	-do-	-do-

				litchi		
3	Salempur	Salempur	Malhana, Malhani, Bankata Mishra, Mathdanaur	Rice, wheat Sugarcane, Pulses Vegetables, Mango, banana, litchi	-do-	-do-

8. Priority thrust areas

Thrust Areas / Needs

- Promotion of high yielding varieties in cereals, oilseeds, pulses, vegetables and fruit crops
- Promotion of farming system approach for sustainable agriculture
- Promotion of seed village concept among farmers
- Entrepreneurship development on dairying, poultry, goatery, bee keeping, fisheries, floriculture, vegetable production and mushroom production
- Promotion of SHG's, Farmers club, Cooperative societies
- Promotion of INM, IPM & IWM
- Value addition for agriculture and horticulture produce
- Safe use and maintenance of farm Machinery and Equipments
- Drudgery reduction of farm women
- Promotion of Resource Conservation of Technologies

Etah

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
A-Crop	1-Paddy-Wheat
	2- Pigeon Pea-Wheat
	3- Maize-Potato-sunflower/groundnut/onion
	4- Bajra/maize-wheat
	5-Fallow-Mustard-Sunflower/groundnut./urd/moong
	6- Fallow-Garlic/Cole crops
	7- Fallow-Brinjal/tomato/Cole crops
	8- Jwar-berseem/oat
B-Livestock	9-Dairy
	10-Goatery
Orchard	11-Mango
	12-Guava
	13-Ber
	14-Papaya
	15-Anola

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics			
		Temperature °C	Rainfall(mm)	Total area	Irrigated
	South (West Semi)			Lac(ha)	Area (%)
	Arid Zone				
		3.5	46.7	647	3.5
					90

SN	Total Area (%)	Agro ecological situation			
		Block	Major Crops	Animal Birds	Forest/Orchard
1.Clay loam	25	Nidholikalan Sakit, Awagarh Jalesar	Paddy, Jwar, Maize, Wheat, Gram, Mustard, Pea, Pigeon Pea, Veg. Moon, Lentil	Cows, Buffaloes, Sheep, goats, Pigs, Poultry	Shisham, Babool, Eucalyptus, Aarjun, Mango, Guava, Ber
II-Loam	34	Amapur, Marhra, Kasganj, Soron, Sahavar, Jaithra, Aliganj	Paddy, Wheat, Bajra, Maize, Gram, Mustard, Pea, Pigeon Pea, Urd, Veg. Potato, Sugaracane, Moong, Lentil, Tobacco	Cows, Buffaloes, Sheep, Goats, Pigs, Poultry	Shisham, Babool, Eucalyptus, Aarjun, Mango, Guava, Ber, Jackfruit
III-Sandy loam	16	Marhara, Kasganj, Shitalpur, Sidpura, Jalesar	Paddy, Wheat, bajra, maize, mustard, pea, Pigeon Pea, urd, vegetable, potato, sugarcane, moong, sunflower	Cows, buffaloes, sheeps, goats, pigs, Poultry	Shisham, Babool, Eucalyptus, Aarjun, Mango, Guava, Ber, Jackfruit
IV-(i) Loam, sand, (ii)Recent Alluvium soil (pocket of loam silt, sandy loam & loamy sand)	23	Soron, sahar, ganj, dundwara, patiali, Aliganj	Til, wheat, bajra, maize, mustard, Pigeon pea, urd, groundnut veg., potato, summer, moong sugarcane, sunflower, tobacco	Cows, buffaloes, sheep, goats, pigs, poultry	Shisham, Babool, Eucalyptus, Aarjun, Mango, Guava, Ber,
V-Sodic land	2	Awagarh, nidholikalan, sakit, jalesar	Paddy, wheat, mustard, barley in reclaimed area of sodic land	Cows, buffaloes, goats, pigs, Poultry	Babool, Eucalyptus

3. Soil types

S.No.	Soil type	Characteristics (pH)	Area (lac ha.)
1	Loam	7.8-8.4	1.19
2	Clay loam	8.0-8.7	0.88
3	Sandy loam	7.5-8.0	0.56
4	Alluvium	7.0-7.8	0.80
5	Sodic land	8.5-10.0	0.07

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Paddy	51796	77584	24.98
2	Wheat	217924	645729	29.63
3	Bajra	70549	104211	13.89
4	Maize-kharif	60425	106106	17.56
	Maize-summer	2789	4543	16.29
5	Chickpea	2131	2659	12.48
6	Field pea	35	62	17.73
7	Lentil	3745	2992	7.99
8	Moong (kharif)	260	72	2.70
	Moong (summer)	2543	4143	4.85
9	Pigen pea	5233	4191	8.01
10	Urd	2036	752	3.69
11	Mustard	13449	15828	11.77
12	Groundnut	46	39	8.39
13	Sunflower	154	176	11.44
14	Til	475	138	2.90
15	Sugarcane	8490	488694	529.12
16	Tobacco	10264	70419	68.61
17	Potato	8941	201950	225.87

5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity(%)
		Maximum	Minimum	
October,08	-	34.8	20.4	89
November	-	29.1	13.6	86
December	-	24.7	9.9	91
January, 09	-	22.9	8.7	92
February	-	28.5	12.1	86
March	-	33.8	16.9	74
April	18.33			
May	12.33			
June	-			
July	39.73			
August	97.53			
September	75.22			
Total	243.14			

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population (No.)	Production	Productivity
Cattle	181435	Not available	Not available
Buffalo	683303	-do-	-do-
Sheep	8443	-do-	-do-
Goats	275632	-do-	-do-
Pigs	32118	-do-	-do-
Rabbits	3148	-do-	-do-
Poultry	77629	-do-	-do-
Ducks	1745	-do-	-do-
Turkey and others	750	-do-	-do-
Fish	84.23 ha.	-do-	-do-

7. Details of Operational area / Villages

SN	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified
	Jalesar	Awagarh	Babarpur- kalan, Babarpur-khurd Bhoornagria N. Fatte		
1.				Paddy	Imbalance fert, improved variety, weeds
				Maize	Shoot borer, Imbalance fertilizer
				Pigeon Pea	Pod borer & leaf roller, imbalance fert. Weeds
				Bajra	Weeds, imbalance ferti.
				Wheat	Imbalance fert, improved variety Weeds
				Mustard	Imbalance fert, insect-disease
				Groundnut	Non availability of improved variety, imbalance fert.
				Chickpea	Imbalance fert, podborer, wilt
				Moong	Imbalance ferti, yellow mosaic virus.
				Potato	Imbalance ferti, blight, weeds
				Garlic Onion	Imbalance ferti., insect, disease, weeds, Seed availability
				Cucurbits	Insect-disease, Seed availability
				Cole crops	Imbalance Ferti. Insect-disease
				Mango	Malformation, Nutrition
				Guava	Wilt
				Ber	Stem borer
				Anola	Root rot

				Brinjal	Shoot & fruit borer
				Tomato	Mosaic & fruit borer
				Buffalo	Anestrus, low milk yield, calf mortality
				Cow	Poor breeding facility
				Goat	Mortality
				Farm Machinery	Non availability of improved implements

8. Priority thrust areas

S. No.	Crop/Enterprise	Thrust area
1.	Paddy, wheat, maize, pigeon pea, chick pea, moong, potato and summer groundnut.	Availability of improved variety seeds
2.	Paddy, wheat, maize, potato, garlic.	Application of balance fertilizer
3.	Potato, garlic, groundnut, mustard, paddy, maize,	Application of micronutrients-sulphur and zinc.
4.	Paddy, wheat, Pigeon Pea, moong, potato and garlic.	Weed control.
5.	Chickpea and Pigeon Pea.	Control of pod borer.
6.	Brinjal, maize, tomato and petha	Control of shoot borer and fruit borer.
7.	Moong and tomato.	Control of mosaic.
8.	Potato	Control of blight.
9.	Buffalo calves and goats.	Control of mortality.
10.	Dairy animals.	Mineral feeding, deworming and vaccination.
11.	Diesel Engine and Sprayer.	Technical know how for maintenance, operation and repairing.
12.	Diesel Engine Mechanic, Mini Dairy, stitching and Goatery.	Technical know how for self employment.
13.	Maize sheller, zero till seed drill, rotavator, paddy weeder and paddy transplanter.	Availability of improved agriculture machinery.
14.	Seed and Grain storage.	Technical know how.

Allahabad

Geography Layout

District Allahabad is situated in Southern Eastern part of the State Uttar Pradesh. It lies between the parallels of 24° 47' north latitude and 81° 19' east longitudes. Allahabad is bounded on the eastern side by district Sant Ravi Das Nagar (Varanasi). North side by district Jaunpur and Pratapgarh, western side by district Kausambhi (Earlier Allahabad) and Chitrakoot. South-Eastern side by district Mirzapur and on the southern side by district Rewa of Madhya Pradesh state. From north to south the breath is 109 kms and from east to west length is 117 kms. The total geographical area of the district is 5437.2 (as per 1991 data) sq.kms. The rivers 'Ganga and Jamuna divides Allahabad in three distinct regions namely, Gangapaar, Jamunapaar and Dwaba. The Gangapaar and Jamunapaar and the City comprise of Allahabad district whereas Dwaba area comes under district Kaushambhi. All the three areas were earlier one district Allahabad and it was only recently Kaushambhi got the status of a new political district.

Political Setup

Allahabad district consists of 7 Tehsils, 20 Blocks, 218 Naya Panchayats having 1425 Gram Panchayats and 2799 populated plus 275 unpopulated villages.

S.No.	Tehsils	Blocks
1	Handia	Handia, Dhanupur, Pratapur, Saidabad
2	Phulpur	Phulpur, Bahadurpur, Bahariya
3	Soraon	Soraon, Holagarh, Mau-Aima, Kaurihaar
4	Karchana	Karchana, Kaundhiyara, Chaka
5	Bara	Jasra, Shankargarh
6	Meja	Meja, Manda, Urwa, Koraon
7	Chail	-

Socio-Economic Status:

According to 2001 census, the population of Allahabad district is 4936105 out of which the rural population is 3729320 . The population of Scheduled Caste is 1065097 , which is 21.6 % of the total population. Urban population is 1206785 .

The block-wise area and demographic pattern for Allahabad district is presented in table

BLOCK-WISE AREA AND DEMOGRAPHIC PATTERN

Sl. No.	Block	Area (Sq.kms)	No. of families ('000)	Total Popn ('000)	Male Popn ('000)	Female Popn ('000)	S.C.Pop. (000)
GANGA-PAAR							
1	Karihaar	420.35	53.271	328.958	175.638	153.320	89.608
2	Holagarh	148.46	24.828	154.329	79.520	74.809	39.690
3	Mau Aima	150.60	23.516	149.461	77.066	723.95	36.267
4	Soraon	134.85	26.931	168.694	88.979	797.15	45.108
5	Bahariya	248.75	33.665	227.458	118.579	108.879	57.258
6	Phulpur	225.29	28.343	191.258	99.753	91.505	44.558
7	Bahadurpur	264.68	37.068	247.297	131.188	116.109	61.050
8	Pratappur	211.01	26.631	186.996	94.985	92.011	46.042
9	Saidabad	191.42	30.087	209.645	110.869	98.778	47.368

10	Dhanupur	173.22	25.832	191.992	99.022	92.970	39.866
11	Handia	160.67	23.734	171.203	89.582	81.621	33.473
JAMUNA-PAAR							
12	Jasra	269.58	21.879	143.231	76.526	66.705	30.661
13	Shankargarh	468.08	22.745	135.486	71.739	63.747	45.885
14	Chaka	153.59	26.789	168.867	90.596	78.271	45.226
15	Karchana	232.81	27.373	197.219	105.391	91.828	34.190
16	Kaundhiyara	200.46	18.943	125.128	66.699	58.429	30.752
17	Urwa	168.90	21.452	165.826	87.117	78.709	37.050
18	Meja	442.21	22.590	158.971	84.247	74.724	34.759
19	Koroan	719.42	37.631	248.803	131.382	117.421	72.224
20	Manda	346.43	21.799	158.498	83.547	74.951	38.886
	Total	5331.78	555.107	3729.320	1962.425	1766.895	909.877

Literacy:

The percentage of literacy in the districts of Allahabad is 62.11%. The literacy rate among female is 46.38% whereas in case of male it is 75.81%.

Occupation:

Being an Agriculture oriented district the major work force depend upon Agriculture and Allied agricultural activities. The block wise information(s) on work force engaged in Agricultural activities is given in Table .

BLOCK-WISE WORKFORCE ENGAGED IN AGRICULTURE SECTOR

Sl. No.	Blocks	Agriculture Workers ('000)	Agriculture Labors ('000)	Others Worker	Total Main Worker ('000)
1	Karihaar	29.487	18.023	24.359	75.736
2	Holagarh	16.327	7.990	6.833	32.722
3	Mau Aima	22.024	6.432	8.100	38.819
4	Soraon	15.932	6.630	16.050	40.611
5	Bahariya	31.148	8.580	9.689	52.700
6	Phulpur	24.941	5.588	9.766	44.339
7	Bahadurpur	15.611	7.352	20.506	49.338
8	Pratappur	21.809	4.028	7.690	38.704
9	Saidabad	19.011	7.642	13.174	48.631
10	Dhanupur	19.726	4.035	8.167	41.275
11	Handia	14.933	5.004	7.482	33.385
12	Jasra	15.291	7.182	8.433	33.522
13	Shankargarh	18.541	8.977	14.409	43.432
14	Chaka	6.365	3.986	18.192	32.515
15	Karchana	17.125	6.944	11.229	38.630
16	Kaundhiyara	15.192	5.476	4.804	29.924
17	Urwa	12.477	4.384	8.613	29.708
18	Meja	20.339	8.570	6.161	36.693
19	Koroan	40.376	19.435	6.129	69.355
20	Manda	17.818	6.748	8.122	35.408
	Total	394.473	153.006	217.908	845.447

LAND UTILISATION PATTERN IN THE DISTRICTS OF ALLAHABAD (000 ha) 2006-07

Sl. No.	Particulars	Allahabad
1	Total Reported Area	557.012
2	Gross Irrigated Area	392.142
3	Forest	21.454
4	Cultivable Waste	12.363
5	Current Fallow	76.060
6	Other Fallow	25.359
7	Usar and uncultivable land	16.630
8	Under non-agriculture use	77.988
9	Pasture land	1.652
10	Orchards, tree & bushes	8.921
1	Net sown area	315.684
2	Area sown more than once	184.347
3	Gross sown area	500.031
4	Area sown in:	
	Kharif	230.122
	Rabi	259.330
	Zaid	105.79
5	Cropping intensity (%)	158.3

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Farming system/enterprise

Agriculture

In case of Agriculture crops Paddy has the largest share followed by Bajra, Arhar, Urd & Moong in declining order during the Kharif season.

In Rabi, Wheat is pre dominant followed by pulses and oilseed. Among oilseed crops, Mustard has very less area under pure farming and is grown mainly as a mixed crop. Linseed dominates the oilseed scenario of the district and is mainly grown in Jamunapar area. In case of pulses gram has largest area followed by Pea and Lentil (Masoor). There is fairly good acreage under Barely.

Horticulture

In case of Horticultural vegetable crops, the cultivation of Potato, Brinjal, Tomato, Ladies finger and the Pea are the main crops. Guava is the main horticulture fruit crop grown largely in Gangapar area. Watermelon (Hirminji) and Melon (Kharbuja) are largely grown in riverbed area of Gangapar.

There is a vast scope for development of Horticulture as an enterprise.

Animal Husbandry

Both big and medium farmers prefer to keep one or two live stocks. Overall Buffalo is preferred over cow but the Dwaba and Jamunapar area has preference for now. In Gangapar area both Cow and Buffalo are important. Some Scheduled Caste family are involved in pig keeping. Goat and Sheep are preferred in low-lying area. Poultry, Duckery, Fish Farming is catching up.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

District Allahabd is situated in the South-Eastern part of the State Uttar Pradesh. It lies between the parallels of 24° 77' and 25° 47' north latitudes and 81° 19' and 82° 21' east longitudes.

Allahabad district has such tropical climate that the average maximum temperature ranges between 43°C - 45°C which may go as high as 46°C during peak summers. The minimum average temperature is 8-9°C which may fall as low as 4°C during peak winter months (Dec.-Jan.) The average rainfall of the district is 960 mm and the monsoon season is spread between July-September.

Topographically, the district of Allahabad belongs to the central plane zone of Uttar Pradesh. The district Allahabad may be divided in four different agro-ecological situations AES i.e:

- (i) Black and Coarse-grey land
- (ii) Jamuna khaddar and Alluvial
- (iii) Ganga Low land and Sodic
- (iv) Ganga plain.

The northern part of Allahabad district popularly known as Gangapar provides rich loam soil for cultivation of food grains, pulses, oilseeds and vegetables. The Southern part of Allahabad district also known as Yamunapar is partly rocky and somewhat agriculturally backward. Out of total cultivated land 64% of the area is irrigated (Canal, Tube well Govt. & Public) and 36% is rainfed.

3. Soil types

AES	Situation	Soil type	Area in % / x000 ha	Block
AES1	Black & coarse gray land (Jamunapar)	Clay loam to sandy loam	48% / 230.1	Shankargarh, Koraon, Manda, Meja
AES2	Jamuna Khaddar & alluvial ((Jamunapar)	Loam & Sandy Loam	10% / 51.1	Jasra, Karchhana, Chaka, Kaundhiara
AES3	Ganag low land & sodic (Gangapar)	Sandy loam to sodic	15% / 92	Pratappur, Handia, Phulpur
AES4	Ganga plane (Gangapar)	Sandy loam & clay	27% / 138.1	Phulpur, Saidabad, Soraon

4. Area, Production and Productivity of major crops cultivated in the district 2006-07

SI	Crop	Area (ha)	Production (MT)	Productivity (q/ha)
1	Paddy	170653	361694	21.19
2	Wheat	212020	494527	23.32
3	Barley	5014	7483	14.93
4	Jowar	6183	8506	13.76
5	Bajra	28243	25834	9.15
6	Urd	3577	2373	6.63
7	Moong	3532	2599	7.36
8	Masoor	6880	4589	6.67
9	Gram	15255	13837	9.07
10	Pea	4329	3584	8.28
11	Arhar	17701	14676	8.29
12	Lahi/mustard	962	590	6.13
13	Alsi	890	309	3.47
14	Til	473	84	1.78
15	Sunflower	0	0	0
16	Soybean	0	0	0
17	Sugarcane	723	28789	398.18
18	Potato	11750	239688	203.99
20	Maize	129	174	13.28

5. Weather data

Month	Rainfall (mm)	Temperature °C Average		Relative Humidity (%) Average	
		Maximum	Minimum	Max	Min
Oct 08	72.4	36.0	18.0	98	43
Nov 08	1.0	33.4	9.0	96	36
Dec 08	0.0	27.6	5.8	100	35
Jan 09	0.0	28.4	5.8	100	27
Feb 09	0.0	32.4	11.0	92	26
Mar 09	0.2	37.0	14.8	77	16
Apr 09	2.8	44.2	19.8	72	14
May 09	55.4	44.8	23	82	14
Jun 09	3.5	45.2	23.2	81	16
Jul 09	149.4	38	24.4	92	27
Aug 09	102.2	37.6	25.2	100	34
Sep 09	114.2	34.6	26.0	95	60

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	79599		
<i>Indigenous</i>	599123		
Buffalo	472671		
Sheep	116682		
<i>Crossbred</i>	5662		
<i>Indigenous</i>	111020		
Goats	246288		
Total Pigs	124798		
<i>Crossbred Pigs</i>	6171		
<i>Indigenous Pigs</i>	118627		
Poultry	288397		
Horse & tattu	4955		

Fisheries (2007-08)

Category	No.	Area(ha.)	Production(q)
<i>Govt. Pond</i>	20	572.01	313.70
Private Pond	240	522.00	5420.00
Fish seed distributed by Govt.(ooo)	17960		

7. Details of Operational area / Villages

SI.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Karchhana	Karchhana	Bendo, Bastar	(A). <u>Crop production</u> § paddy § pigeon pea § wheat § seed production	§ Low yield of paddy § Wilt problem in pigeon pea § Seed problem	Promotion of hybrid paddy Bio fertilizer usage Wild resistant variety of pigeon pea Promotion of HYV of wheat Seed production
2	Bara	Jasra	Tikri taluka, Budawa			
1	Karchhana	Karchhana	Bendo, Bastar	(B) <u>Horticulture</u> § orchard § tomato § brinjal § okra & green pea § marigold & gladiolus	§ Maintenance of orchard § Low yield of tomato & brinjal § Nursery preparation problem § Marigold & gladiolus cultivation	Layout, management of orchard Hybrid tomato & brinjal cultivation Tech of nursery preparation & management Promotion of floriculture
2	Bara	Jasra	Tikri taluka, Budawa			

1	Karchhana	Karchhana	Bendo, Bastar	(C) <u>Agri Engineering</u> Raised bed • Planter • Zero tillage • Wheel hoe • Sickle	Loss of pigeon pea crops due to heavy rain fall Low yield of wheat due to late sowing condition Weed problem Harvesting problem	Reduction of cost of cultivation, saving in the time in agril. Operation
2	Bara	Jasra	Tikri taluka, Budawa			

1	Karchhana	Karchhana	Bendo, Bastar	(D) <u>Fisheries</u> § Indian major carp § Fish cattle integration	Low yield of fish EUS in carp	Nursery management Composite fish farming Integrated fish farming Promotion of exotic fish species
2	Bara	Jasra	Tikri taluka, Budawa			
1	Karchhana	Karchhana	Bendo, Bastar	(E) <u>Agri. Extension</u> § Self help group § Farmer's interest group § Vermicompost	Problem of group formation Problem of vermicompost preparation Self employment problem	Self help group formation Vermiculture promotion Entrepreneurship development
2	Bara	Jasra	Tikri taluka, Budawa			

1	Karchhana	Karchhana	Bendo, Bastar	(F) <u>Home Science</u> § Tailoring & handicraft § Live stock § Kitchen garden	Self employment problem Foot & mouth disease problem Clean milk production Kitchen garden Weeding & harvesting problem in crops	Entrepreneurship development Live stock maintenance & care Hygienic milk production Drudgery reduction
2	Bara	Jasra	Tikri taluka, Budawa	§ Weeding & harvesting		

8. Priority thrust areas

S. No	Thrust area
1	<p>AGRONOMY</p> <ul style="list-style-type: none"> - Vermiculture promotion. - Promotion of hybrid paddy - Bio-fertilizer usage - Integrated nutrient management - Seed production of pulses & cereal crops
2	<p>HORTICULTURE</p> <ul style="list-style-type: none"> - Layout & management of orchards - Nutrition, Pruning, Plant Protection. - Hybrid Tomato and Brinjal cultivation. - Techniques of nursery preparation and management. - Promotion of Floriculture.
3	<p>AGRICULTURAL ENGINEERING</p> <ul style="list-style-type: none"> - Correct preparation of seed bed - Repair and maintenance of Tractor, Diesel engine. - Maintenance and correct use of spraying equipment. - Demonstration of latest harvesting and threshing and sowing equipment. - Promotion of Raised Bed Planter. - Promotion of ZTSD - Management of irrigation water - Harvesting implements and machines - Use of rotavator for seedbed preparation and puddling
4	<p>HOME SCIENCE</p> <ul style="list-style-type: none"> - Entrepreneurship development. - Self help groups formation. - Livestock maintenance and care. - Hygienic milk production. - Balanced nutrition and hygiene for family. - Drudgery reduction
5	<p>FISHERIES</p> <ul style="list-style-type: none"> - Renovation of old ponds - Composite fish farming - Integrated fish farming
	AGRICULTURAL EXTENSION

6	<p>Resource Poor</p> <ul style="list-style-type: none"> – Need based research and Extension – Participatory Rural Appraisal before implementing of any project. – Group approach to solve their financial and vocational requirement.
7	<ul style="list-style-type: none"> – Development of Self help group in form of Science Clubs. – Tailor made specific package and practices – dissemination. – Motivation for development.
8	<p>RURAL YOUTH : Training of : Resource rich & poor farmers to develop specific skill and management techniques so as to put up individual enterprises like piggery, fishery & poultry, Nursery, Goatery, Dairy.</p>

Mirzapur

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Agriculture + Animal Husbandary
2.	Agriculture + Animal Husbandary + Horticulture
3.	Agricultural Crops (Irrigated): Wheat, Paddy, Rainfed: Wheat, Gram, Bajra, Arahar, Paddy, Groundnut
4.	Horticultural Crops (Orchard): Mango, Guava, Ber, Citrus, Vegetables
5.	Animal Husbandary: Cow, Buffalo, Sheeps, Goats, Pigs

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics	Agro ecological situation	Characteristics
1.	Vindhyan Zone	Rocky , red lateritic soil and rainfed conditions	AES I	Hilly areas, covered with rocks, rainfed
			AES II	Mix (Hilly+Plain) zone areas, rainfed/irrigated
			AES III	Plain zone, irrigated

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1.	Red lateritic & sandy loam	Mostly covered with rocks, forest and bushes	

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Q)	Productivity (Q/ha)
1.	Paddy	90318	996210	11.03
2.	Wheat	98249	1423660	14.49
3.	Barley	5324	37410	7.03
4.	Jowar	3579	23060	6.44
5.	Bajra	10871	94780	8.72
6.	Maize	2081	12030	5.78
7.	Kodon	787	3780	4.80
8.	Urd	863	3190	3.70
9.	Mung	159	430	2.70
10.	Lentil	5906	43590	7.38
11.	Gram	14864	145170	9.77
12.	Pea	4724	51070	10.81
13.	Arhar	13827	92180	6.67

14.	Mustard/Toria	2437	17090	7.01
15.	Linseed	4043	13670	3.38
16.	Til	1738	2560	1.47
17.	Groundnut	2927	31760	10.85
18.	Sunflower	2	40	20.00
19.	Sugarcane	1525	755730	495.56
20.	Potato	2046	316180	154.54
21.	Onion	295	-	-
22.	Other vegetables	5049	-	-
23.	Sunnhemp	96	180	1.88
24.	Rabi fodder	678	-	-
25.	Kharif Fodder	1066	-	-
26.	Zaid Fodder	67	-	-

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
October 2008	Nil	Not Available	N/A	N/A
November 2008	Nil	N/A	N/A	N/A
December 2008	Nil	N/A	N/A	N/A
January 2009	Nil	N/A	N/A	N/A
February 2009	Nil	N/A	N/A	N/A
March 2009	Nil	N/A	N/A	N/A
April 2009	Nil	N/A	N/A	N/A
May 2009	29.8	N/A	N/A	N/A
June 2009	25.6	N/A	N/A	N/A
July 2009	354.2	N/A	N/A	N/A
August 2009	123.2	N/A	N/A	N/A
September 2009	168	N/A	N/A	N/A

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	454720	-	-
<i>Indigenous</i>	422158	-	-
Buffalo			
	195126	-	-
Sheep			
<i>Crossbred</i>	2606	-	-
<i>Indigenous</i>	80723	-	-
Goats			
	154181	-	-
Pigs			
<i>Crossbred</i>	4191	-	-
<i>Indigenous</i>	18958	-	-
Rabbits			
	-	-	-
Poultry			

Hens	284032	-	-
Turkey and others	29071	-	-

Category	Area (ha)	Production (Q)	Productivity (Q/ha)
Fish	4292.82	920.22	0.2144

7. Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Marihan	Patehara	Bahuti	Arhar, paddy bajra	Water scarcity and lack of suitable varieties	Soil and Water management, Varietal introduction and nutrient management
2.	Marihan	Patehara	Hardi	Arhar, bajra, paddy, wheat, vegetables	Attack of diseases in Vegetables, Arhar and paddy	Plant Protection and nutrient management in vegetables and crops
3.	Marihan	Patehara	Hadaura	Gram, wheat, lentil, linseed, arhar, goat and sheep rearing	Use of old varieties and imbalanced fertilization, poor management of farm animals	Varietal introduction and nutrient management in crops, management of goat and sheep.
5.	Marihan	Patehara	Gulalpur	Arhar, wheat, gram, goat and sheep rearing	Lack of suitable varieties and imbalanced fertilization, poor management of farm animals	Varietal introduction and nutrient management in crops, management of goat and sheep.
6.	Marihan	Patehara	Hinauta	Arhar, til, wheat, gram, goat and sheep rearing	Use of old varieties and imbalanced fertilization, poor feeding of farm animals	Varietal introduction and nutrient management in crops, feed management of goat and sheep.
7.	Marihan	Patehara	Atari	Arhar, wheat, gram, goat and sheep rearing	Lack of suitable varieties and imbalanced fertilization, poor management of farm animals	Varietal introduction and nutrient management in crops, management of goat and sheep.
8.	Marihan	Patehara	Patewar	Arhar, til, wheat, gram, goat and sheep rearing	Use of old varieties and imbalanced fertilization, poor feeding of farm animals	Varietal introduction and nutrient management in crops, feed management of goat and sheep.
9.	Marihan	City block	Phuliari	Arhar, paddy bajra	Water scarcity and lack of suitable varieties	Soil and Water management, Varietal introduction and nutrient management

10.	Sadar	City block	Barkachha	Guava, lemon, goat and sheep rearing, wheat, mustard, arhar, til	Poor orchard management, lack of balanced diet	Nutrient and water management in orchards, feed management in animals
11.	Sadar	City block	Shahpur Chausa	Guava, lemon, wheat, arhar, paddy, til	Use of old varieties, poor management of orchards	Orchard and crop management
12.	Sadar	City block	Mulhwan	Bajra, paddy, wheat, gram	Old varieties, imbalanced fertilizer use, broadcasting	Improved varieties, balance fertilizer, line sowing
13.	Sadar	City block	Sirsi Gaharwar	Paddy, wheat, goat rearing	Use of old varieties and poor feeding of goats	Varietal introduction and feed management in goats
14.	Sadar	City block	Aghwar	Paddy, wheat, gram	Old varieties, pod borer	Improved varieties, IPM
15.	Sadar	City block	Chakesar	Bajra, paddy, wheat, gram	Old varieties, imbalanced fertilizer use, broadcasting	Improved varieties, balance fertilizer, line sowing
16.	Sadar	Pahadi	Bharpura	Gram, Arhar, til, mustard	Scarcity of irrigation, no use of sulphur	water harvesting/conservation, use of sulphur
17.	Sadar	Pahadi	Putarihan	Arhar, jowar, bajra, gram, lentil, lined	Poor performance of varieties and imbalanced fertilization	Varietal introduction and nutrient management

8. Priority thrust areas

S. No	Thrust area
1	Promotion of Dryland Agriculture/Resource Conservation
2	Promotion of Oilseeds and Pulses
3	Promotion of Dryland Fruits (Ber, Bael, Aonla, Karonda, Phalsa etc.)
4	Promotion of Hightech Kharif Vegetable Crops
5	Use of Biofertilizers, IPM, INM and IWM
6	Raising Productivity of milch/meat animals
7	Entrepreneurship Development in Rural Youth/Farm Women

Agra

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Farming system/enterprise
 Agriculture+ Animal Husbandry
 Agriculture+ Horticulture+ Animal Husbandry

2. Description of Agro-climatic Zone & major agro ecological situations

Agro-climatic Zone	Characteristics
Semi-arid Zone- IV of U.P.	<p>Agra district is situated in South-West semi-arid zone of UP. It is located at altitude of 27.2° North and longitude of 77.9° easts. River Chambal makes the southern boundary of district and flows from West to East separating district Bhind (M.P) In the North Agra is bounded by districts of Firozabad and Etawah.</p> <p>The average rainfall (annual) of the district is 750 mm. Temperature varies from 4°C (During December-January) to 48°C (During May-June) respectively. The district is comprised of six thesils, 15 blocks and 904 villages. The total reported population is 3.62 million with density of 899/ km² and literacy of 62.60%. The total reported area of the district is 398460 ha, out of which net sown area is 285496 ha and irrigated area is 235063 ha with cropping intensity of 139.51%.</p> <p>The soils of the district are loam sandy loam ravines and wasteland. The fertility status of the soil is poor to very poor.</p> <p>The major crops of the district are Bajra (99841 ha with the productivity of 19.55q/ha), Rice (1097 ha , with the productivity of 23.47 q/ha), Sorghum (4289 ha with the productivity of 7.55q/ha), Arhar (4005 ha with the productivity of 10.52q/ha), Urd (402 ha ha with the productivity of 3.81 q/ha), Til (968 ha with the productivity of 1.60 q/ha), in kahrif. In Rabi major crops are grown wheat (124278 ha with the productivity of 32.34 q/ha), Mustard (88236 ha with the productivity of 12.30q/ha), Potato (31616 ha with the productivity of 278.34q/ha), Barley (8593 ha with the productivity of 25.06q/ha), Gram (622 ha with the productivity of 12.35q/ha) and other vegetables. The total coumpntion of NPK (90.53, 37.34 and 5.09 kg/ha) was 132.95 kg/ha.</p> <p>As per live stock census 2003 Agra district have 160929 cattle, 710522 buffaloes, 72296 sheep, 250990 goats, 41855 pig and 61317 poultry. The district also has 641 ponds covering 359 ha of land.</p>

Agro ecological situation	Characteristics
AES.I	AES I is having sandy loam soil of average Ph 8 with problem of irrigation water (saline and oily water). Blocks comprising this AES are Akola, Achnera, Fatehpur Sikari and Kheragarh. The soils of this AES are alkaline in reaction and low in organic carbon contain.
AESII	AES II is having sandy loam soil of average ph 8 with medium quality to saline and oily irrigation water, canal tube wells irrigated. This AES comprised of Etmadpur, Khandauli, Barauli Ahir, Shamshabad, Bichpuri, Saiyan & Fatehabad Blocks. The soil of this AES is deficient in major and micronutrients, alkaline in reaction and low organic carbon contain.

AES III.	AES III is having sandy-to-sandy loam with soil erosion affected, average pH 8 with medium quality of irrigation water, canal tube wells irrigated. In some areas the under ground water is salt affected. This AES comprised of Bah, Jetpurkala, Pinahat and Jagner Blocks of the district.
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3. Soil types

Soil type	Area in ha.	Area (%)
Sandy Soil	49741	13.22
Sandy Soil	169532	45.07
Erosion Soil	17940	4.77
Micronutrient Deficiency	7800	20.74
Others	60924	16.20

4. Area, Production and Productivity of major crops cultivated in the district

Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
Paddy	1097	257500	23.47
Wheat	124278	40187100	32.34
Barley	8593	2153000	25.06
Jwar	4289	323700	7.55
Bajra	99841	19514400	19.55
Maize	156	31500	20.19
Urd	402	15300	3.81
Moong	118	4100	3.47
Lentil	1319	87000	6.60
Gram	6226	768700	12.35
Pea	224	35700	15.94
Arhar	4005	421300	10.52
Mustard	88236	10857300	12.30
Til	968	15500	1.60
Potato	31616	88000000	278.34
Cotton	240	3500	1.45

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
Oct. 2008	-	39.40	15.20	87.0
Nov. 2008	-	33.60	8.60	87.5
Dec. 2008	-	28.20	6.20	90.2
Jan. 2009	-	27.40	4.20	91.9
Feb. 2009	-	29.60	9.00	86.2
March 2009	-	39.40	14.30	74.2
April 2009	7.20	43.50	17.20	58.4
May 2009	25.60	45.30	21.30	60.0
June 2009	-	42.90	26.80	52.4
July 2009	116.30	38.60	23.50	84.1
Aug 2009	191.00	38.40	25.10	88.2
Sept. 2009	70.10	37.60	21.30	88.6

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	160929	NA	NA
<i>Crossbred</i>	26070	NA	NA
<i>Indigenous</i>	134859	NA	NA
Buffalo	710522	NA	NA
Sheep	72296	NA	NA
<i>Crossbred</i>	614	NA	NA
<i>Indigenous</i>	71682	NA	NA
Goats	250990	NA	NA
Pigs	41885	NA	NA
<i>Crossbred</i>	2982	NA	NA
<i>Indigenous</i>	389025	NA	NA
Poultry	61317	NA	NA
Hens	NA	NA	NA
Ducks	662	NA	NA
Fish	359 ha.	NA	NA

7. Details of Operational area / Villages

Name of the block	Name of the village	Major crops	Major problem identified	Identified Thrust Areas
Bichpuri	Nanpur, Sahara	Bajra, Wheat, Mustard, Potato, Til & dairy	<ol style="list-style-type: none"> 1. Low yield of crops and Vegetables. 2. Problem of weeds in Wheat, Mustard & Bajra. 3. Attack of insect pest on Crops & vegetable. 4. Non-availability of good Seeds. 5. Low milk yield from dairy animals 6. Adulteration in fertilizers. 7. Seed production of Wheat & Mustard 8. Nursery raising of Vegetables. 9. Production of seed of Methi & Coriander. 10. Anoestrous in Buffaloes. 11. Mortality in Buffalo calves and goats 	<ol style="list-style-type: none"> 1. Use balanced dose of Fertilizers in crops & vegetables on the basis of soil testing. 2. Control of weeds in wheat, Mustard & Bajra. 3. Plant protection in crop & vegetables. 4. Supply of good seeds through seed village scheme. 5. Feeding and management of dairy animals. 6. Provide knowledge about adulteration in fertilizers. 7. Provide knowledge About seed production and seed processing through KVK. 8. Provide knowledge About developing good/ off season nursery of vegetables. 9. Provide Knowledge about seed production of Methi & Coriander. 10. Control of anoestrous in Buffaloes. 11. Control of parasites in Buffalo calves and goats

Achenera	Nagar	Bajra, Til, Wheat, Mustard, Barley, Potato, Orchards of Guava, etc, dairying	<ol style="list-style-type: none"> 1. Low yield of crops and Vegetables. 2. Problem of weeds in Wheat, Mustard & Bajra. 3. Attack of insect pest on crops & vegetables. 4. Non-availability of good Seeds. 5. Low milk yield from dairy animals 6. Adulteration in fertilizers. 7. Seed production of Wheat & Mustard 8. Nursery raising of Vegetables. 9. Production of seed of Methi & Coriander. 10. Anoestrous in Buffaloes. 11. Mortality in Buffalo calves and goats. 12. Unemployment. 13. No proper fruiting in Guava. 14. Plant protection in orchards. 	<ol style="list-style-type: none"> 1. Use balanced dose of fertilizers in crops & Vegetables on the basis of soil testing. 2. Control of weeds in wheat, Mustard & Bajra. 3. Plant protection in crops & vegetables. 4. Supply of good seeds through seed village scheme. 5. Feeding and management of dairy animals. 6. Provide knowledge about adulteration in fertilizers. 7. Provide knowledge about seed production and seed processing through KVK. 8. Provide knowledge about developing good/ off-season nursery of vegetables. 9. Provide Knowledge about seed production of Methi & Coriander. 10. Control of anoestrous in Buffaloes. 11. Control of parasites in Buffaloes calves and goats. 12. Employment through sewing, cultivation of flowers, preparation of vermin compost. 13. Rejuvenation of guava orchards. 14. Plant protection in orchards.
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Akola	Davali, Nagla Khandiy a & Ghari Daulta	Bajra, Wheat, Mustard, Potato, Til & dairy	<ol style="list-style-type: none"> 1. Low yield of crops and vegetables. 2. Problem of weeds in Wheat, Mustard & Bajra. 3. Attack of insect pest on crops & vegetables. 4. Non-availability of good seeds. 5. Low milk yield from dairy animals. 6. Adulteration in fertilizers. 7. Seed production of Wheat & Mustard. 8. Nursery raising of vegetables. 9. Production of seed of Methi & Coriander. 10. Anoestrous in Buffaloes. 11. Mortality in Buffalo calves and goats. 	<ol style="list-style-type: none"> 1. Use balanced dose of fertilizers in crops & vegetables on the basis of soil testing. 2. Control of weeds in Wheat, Mustard & Bajra. 3. Plant protection in crops & vegetables. 4. Supply of good seed though seed village scheme. 5. Feeding and management of dairy animals. 6. Provide knowledge about adulteration in fertilizers. 7. Provide knowledge about seed production and seed processing through KVK. 8. Provide knowledge about developing good/ off-season nursery of vegetables. 9. Production of seeds of Methi & coriander. 10. Control of aneestrous in Buffaloes. 11. Control of parasites in Buffalo calves and goats
Saieyan	Nauhari ca	Bajra, Wheat, Mustard, Potato, Til & dairy	<ol style="list-style-type: none"> 1. Low yield of crops and Vegetables. 2. Problem of weeds in Wheat, Mustard & Bajra. 3. Attack of insect pest on crops & vegetable. 4. Non-availability of good Seed. 5. Low milk yield from dairy milk animals. 6. Adulteration in fertilizers. 7. Seed production of Wheat & Mustard. 8. Nursery raising of Vegetables. 9. Production of seed of Methi Coriander. 10. Anoestrous in Buffaloes. 11. Mortality in Buffalo calves and goats. 	<ol style="list-style-type: none"> 1. Use balanced dose of fertilizers on the basis of soil testing. 2. Control of weeds in wheat, Mustard & Bajra. 3. Plant protection in crop's & Vegetables. 4. Supply of good seeds though seed village scheme. 5. Feeding and management of dairy animals. 6. Provide knowledge about adulteration in fertilizers. 7. Provide knowledge about seed production and seed processing through KVK. 8. Provide knowledge about developing good/ off-season nursery of vegetables. 9. Provide Knowledge about seed production of Methi & Coriander. 10. Control of anoestrous in Buffaloes. 11. Control of parasites in Buffaloes calves and goats

8. Priority thrust areas

S. No	Crop	Thrust areas
1.	Oil seed and cereals	Use of micro-nutrients- sulphur zinc etc
2.	Wheat, Mustard, Potato, Coriander & Methi etc.	Seed production and processing
3.	Crops & vegetables	Control of weeds i.e. Chenopodium, Bisakhpara, Parthenium etc
4.	Crops & vegetables	Use of balanced fertilizers on the basis of soil testing, seed and soil treatment
5.	Soil and water	Soil and water testing
6.	Fertilizers	Knowledge about adulteration
7.	Crops, vegetables & orchards	Plant protection
8.	Crops & vegetables	Cultivation of crop/vegetables in less availability of irrigation water
9.	vegetables	Scientific nursery raising
10.	Employment	Vocational training in Knitting, sewing, fruits & vegetable preservation and production etc.
11.	Buffaloes	Control of Anoestrus
12.	Milch animals	Balance feeding and management
13.	Buffaloes calves and Goats	Control of mortality due to worms
14.	Grain/seeds	Knowledge about storage
15.	Milk	Clean milk production

Bulandshahr

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Rice-Wheat-Dairy
2.	Maize-Potato-Sorghum(Fodder)-Dairy
3.	Maize-Mustard-Moong-Beekeeping
4.	Rice-Wheat-Sugarcane-Ratoon-Beekeeping
5.	Bajra-Toria-Late Wheat-Goatary

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics	Agro ecological situation	Characteristics
1.	Western Plain			

3. Soil types

S. No	Soil type	Characteristics	Area in ha

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	165702		
<i>Indigenous</i>	16432		
Buffalo	1109638		
Sheep			
<i>Crossbred</i>	2454		
<i>Indigenous</i>	5619		
Goats	169199		
Pigs			
<i>Crossbred</i>	9208		
<i>Indigenous</i>	30069		
Rabbits			
Poultry			
Hens	182398		
<i>Desi</i>			

<i>Improved</i>			
Ducks			
Turkey and others			

Category	Area	Production	Productivity
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

7. Details of Operational area / Villages

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Bulandshahr	Bulandshahr	Ghajori, Atmabad, Chawli, Accheja Ghat	Rice, Wheat, Peigon Pea, Sugarcane, Potato, Mango, Animals	Diseases infection (Blast, Sheath blight, BLB) Weed problem, Termite, white grub, Sterility in animal	Low organic matter, More infection of insect , pest , and diseases
2.		Lakhaoti	Lakhaoti, Daultabad, Alwa Rahampur, Pipala, Prempur, Pasoli	Rice, Wheat, Peigon Pea, Sugarcane, Potato, Mango, Animals	Diseases infection (Blast, Sheath blight, BLB) Weed problem, Termite, white grub, Sterility in animal	Low organic matter, More infection of insect , pest , and diseases
3.		Gulaoti	Kota, ,Bharaoti, Bral	Rice, Wheat, Peigon Pea, Sugarcane, Potato, Mango, Animals, Polatry	Diseases infection (Blast, Sheath blight, BLB) Weed problem, Termite, white grub, Sterility in animal	Low organic matter, More infection of insect , pest , and diseases

4.		B.B.Nagar	Saidpur, Kherpur	Rice, Wheat, Peigon Pea, Sugarcane, Potato, Mango, Animals, Beepeeking	Diseases infection (Blast, Sheath blight, BLB) Weed problem, Termite, white grub, Sterility in animal	Low organic matter, More infection of insect , pest , and diseases
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8. Priority thrust areas

S. No	Thrust area
1.(Agronomy)	i) Low Organic Matter content in the soil. ii) Imbalance use of major plant nutrients and minimum use of micro nutrients. iii) Unawareness about crop diversification.
2. (Horticulture)	i) Improper management of orchard. ii) Inadequate knowledge about spices , medicinal and floriculture.
2. (Plant protection)	i) Injudicious use of insecticide and pesticide . ii) Unawareness about resent plant protection majors. iii) Prevalence of parthenium histrophorous(Congress Grass).
3. (Plant Breeding)	i) Unawareness about selection and multiplication of good quality seed. ii) Unavailability of location specific variety of oil seed pulses and other crops.
4. (A.H.& Dairying)	i) Improper nutritional management in cattle. ii) Unavailability of dairy base industry.like Paneer, Dahi, Ghee and others. iii) Lack knowledge about cross breed of milch animal with high genetic potential.
5. (Home Science)	i) Lack of income generating programme for farm women. ii) Unawareness about maintenance of health and hygiene of expecting mother and pre and postnatal conditions. iii) Inscientific knowledge about food preservation techniques. iv) Lack of enthusiasm amongst rural women for the formation of self help groups.

Ghazipur

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Farming system/enterprise
Crops+ Vegetables/Fruits +Dairy Farming

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

SN	Agro-climatic Zone	Characteristics
1.	Eastern Plain Zone	Ghazipur district falls under tropical climate region

SN	Agro ecological situation	Characteristics
1	-	Rice-wheat cropping system is pre-dominant. Temperature varies from 4 degree Celsius to 44.6 degree Celsius maximum from winter to summer. Annual precipitation varies from 800 mm to 1034 mm. Paddy crop suffers when October month or 'Hathia' nakshathra. This failure also affects the succeeding Rabi crops and cropping systems. Major crops are paddy, maize, Arhar, Jwar, Bazra in Kharif season, Wheat, barley, lentil, toria, mustard and winter vegetable in Rabi season.80% of which is received during the month of June to September.

3. Soil types

Clay loam, sandy loam, diara soil (silt), black soil (karail region)

4. Area, Production and Productivity of major crops cultivated in the district

SN	Crop	Area (000 ha)	Production (000 MT)	Productivity (Qt./ha)
1.	Rice	149.754	288.576	19.27
2.	Bajra	13.981	19.793	14.16
3.	Arhar	4.950	5.020	10.14
4.	Wheat	166.361	403.74	24.27
5.	Lentil	15.287	12.887	8.43
6.	Gram	2.680	2.314	8.64
7.	Field Pea	7.849	8.391	10.69
7.	Mustard	0.392	0.404	10.31

5. Weather data

Month	Rainfall (mm)	Temp ° C		Relative Humidity (%)	
		Max	Min	Max	Min
Oct'08	-	-	-	-	-
Nov'08	28.70	35.60	13.20	70	66
Dec'08	0.00	30.00	6.50	74	74
Jan'09	0.80	27.11	6.50	82	100
Feb'09	0.00	32.00	11.00	44	65
Mar'09	0.00	35.60	13.00	37	42
Apr'09	0.00	43.60	17.00	21	43
May'09	12.30	45.00	21.50	21	56

Jun'09	6.00	45.00	24.00	28	33
Jul'09	214.9	38.00	23.50	62	75
Aug'09	337.5	38.00	22.00	56	79
Sep'09	264.80	37.00	21.50	76	85

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>			
<i>Indigenous</i>			
Buffalo			
Sheep			
<i>Crossbred</i>			
<i>Indigenous</i>	46528		
Goats	250194		
Pigs	26649		
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits			
Poultry			
Hens			
<i>Desi</i>			
<i>Improved</i>			
Ducks			
Turkey and others			
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

7. Details of Operational area / Villages

SN	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Sadar	Karanda	Souram	Rice, Wheat, Arhar, Gram, Mustard, Potato, Tomato	Low Yield, Anestrus in animal, weed management, pod-borer in chick pea	To improve productivity per unit area
2.	do	do	Sisaura	do	do	do
3.	do	do	Alipur Bangawa	do	do	do
4.	do	do	Khijirpur	do	do	do
5.	do	do	Bedauli	do	do	do
6.	do	do	Sonhariya	do	do	do
7.	do	do	Manikpur kala	do	do	do
8.	do	do	Mahepur	do	do	do

9.	do	do	Permeth	do	do	do
10.	do	do	Tula Patti	do	do	do

8. Priority thrust areas

SN	Thrust area
1.	Improvement in productivity per unit area in paddy, wheat, bajra, mustard, arhar, field pea, gram, lentil and other vegetable crop potato, tomato, onion, pea, ladies finger, cauliflower, parval
2.	Introduction of mechanization like use of ZT in paddy and wheat
3.	Raising productivity of live stock by upgrading the genetic potential by artificial insemination and use of mineral mixture, disease and parasitic control, proper feeding and management.
4.	Compost making through NADEP and Wormi-compost making in a scientific way
5.	Production and productivity improvement of orchard crop like mango, guavaq through operational guidelines of National Horticulture Mission, Ministry of Ag., Govt. of India
6.	Promotion of kitchen gardening for production of nutritional food by women farmers.
7.	Post Harvest management of food grain seed, fruits, vegetables, milk and milk products
8.	Introduction and Promotion of IPM modules

Mathura

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Crop husbandry & Dairy
2	Crop husbandry & Vegetable cultivation
3	Crop husbandry & Floriculture
4	Crop husbandry & Poultry
5	Crop husbandry & Goatry
6	Crop husbandry & Vermi-composting & NADEP
7	Crop husbandry & Beekeeping
8	Vegetable + Dairying

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	south-west-semi-arid-zone	<p>Mathura district falls in south west semi arid zone comprises of 10 blocks namely farah, goverdhan, mathura, raya, baldev, naujheel, manth, chhata, chaumuha & nandgaun. The topography and geography of the district in general show that mathura is the north western district of agra division, a part of yamuna basin and lies between 27⁰-14'-27⁰-58' north longitude and 77⁰-71' to 78⁰-12' east latitude. It consists of ravenous saline, alkaline and water loged soil but mostly alluvial soils those are formed by the silt of yamuna & gang canal, which are quite fertile whereas, the district is also having large number of water loged area and patches of usar soils, which are mainly found in chhata, goverdhan & nandgaun blocks. The mathura district is having a serious problem of salty/brackish/oily water, which is not suitable for irrigation.</p> <p>The average rainfall of the district varies between 532-620 mm. The climate is generally characterized as hot & dry during summers. The max.temperature varies between 45-48⁰c and the min. Temperature dips up to 2⁰c during winters. In mathura usars and non-cultivable lands are mainly found in the mathura & chhata blocks and in some parts of raya blocks. The max. Area irrigated by canals in the blocks of goverdhan, chhata & nandgaon whereas, the min. Irrigation by canals is done in sadabad block which is mainly irrigated by private tube-wells, because this block is having min. Amount of brackish water, whereas, farah, nandgaon & chhata blocks are having the max. Amount of brackish/salt affected water that is not suitable for irrigation.</p>

S. No	Agro ecological situation	Characteristics
1	AES-1 (Naujheel, Manth, Raya & Baldev blocks)	Manth & Naujheel are be North Eastern part of the district and are bounded on the North & East by district Aligarh & on the West by river Yamuna. It has an area of 858.6 Sq. km with 253 in habited villages. The soils of this AES are loam, sandy loam and are generally fertile. Some parts in this AES are low lying where Paddy is cultivated in Kharif. This AES is mainly irrigated by Gang canal and quality of water is suitable for irrigation except few parts where saline water is available. The main crops of this AES are Paddy, Bajra, Til, Jawar, Mustard, Wheat, Barley and vegetable crops. Floriculture and some fruit crops are also grown.
2	AES-2 (Mathura, Farah, Chaumuha blocks)	This AES forms the Southwest parts of the district, which is bounded by, district Bharatpur (Raj.) on the West and Agra on the South. The total area of this AES is around 1059.3 Sq.km. with over 300 in habited villages and six towns. The soils of this AES are generally loam, sandy loam but not too fertile because of salinity & alkalinity. The quality of water is also varies and do not suitable for irrigation due to high concentration of salt. Some part of this AES are also affected with the spill over of oil from refinery in drainage and hence Bajra, Jawar, Mustard, Barley & Wheat.
3	AES-3 (Chhata, Goverdhan & Nandgaon)	This AES forms the Northwest part of the district and is bounded on the North by Faridabad (Haryana) district and the Yamuna on the East and by district Bharatpur (Raj.) on the West. It has an area of around 1052.60 Sq.km with over 150 in habited villages and 4 towns. The AES is semi waterlogged specially the areas in Chhata & Nandgaun. The soils are loam, sandy loam with some patches of Usar soils. The quality of water for irrigation is not good. Main crops of this AES are Sugarcane, Jawar, Paddy, Wheat & Mustard.

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1	YAMUNA- LOW LAND/ SEDIMENT SOIL	Immature, light sandy colour, coarse, silt loam to clay soils, low to medium salty with high concentration of water soluble salts, medium calcareous, water logged with medium to high water holding capacity, medium carbonic matter nitrogen and parental/soil fertility, responsive to fertilizer use.	108419
2	YAMUNA- UPLAND	Mature, brown-yellow to Red brown, loam, sandy to	86896

	SOIL	Sandy loam, Neutral to slightly salty with low water soluble salt, Non calcareous with good water drainage, low to medium water holding capacity, low carbonic matter, nitrogen and parental fertility, fully responsive to fertilizer use.	
3	YAMUNA-LAVELLED SOILS	Light sandy to brown sandy, Sandy loam to loam, Low salted with medium water-soluble salt, Upper layer is slightly calcareous which increases with the depth. Problematic drainage with small patches of land affected with soil salinity, medium water holding capacity and parental fertility, responsive to fertilizer use, generally with high water level.	102221
4	DE-GRADED/ INFERIOR SOIL	Sandy to dark Sandy and Olive sandy, Loam to silt clay with silt, hard and pasty De-graded soil, Medium salted with medium to high water soluble salt, high water holding capacity, blocked drainaged, lower layers of soil, calcareous, low to medium carbonic matter and medium, Nitrogen and parental fertility, responsive to fertilizer use.	30998
		TOTAL	3,28,534

2.4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
	Kharif (2009)			
1	Paddy	42229	103377	24.48
2	Bajra	38500	52706	13.69
3	Maize	275	624	22.69
4	Jawar (Sorghum)	50	31	6.20
5	Urd (Black gram)	411	180	4.38
6	Moong (Green gram)	37	73.63	1.89
7	Arhar (Pigeon pea)	3372	2857	8.47
	Oil seeds			
8	Til (Seasamum)	455	70	1.54
	Total (A)	85329	159918	-
	Rabi (2009-10)			
	Cereals			
9	Wheat	174954	717152	40.99
10	Barley	14164	39518	27.90

11	Gram	3	7	21.56
12	Pea	11	25	22.17
13	Masoor	41	40	9.78
	Oil seeds			
14	Mustard	53815	88804	18.66
	Total (B)	189173	756742	141.06
	Zaid (2009)			
15	Moong (Green gram)	2713	-	-
16	Urd (Black gram)	28	-	-
17	Maize	120	-	-
18	Sunflower	360	-	-
19	Cotton	7200	-	-
20	Vegetables	8000	-	-
21	Green fodder	5800	-	-
	Total (C)	24221	-	-
	G. Total (A+B+C)	298723	916660	141.06

5. Weather data

Month	Rainfall (mm) of the district Mathura (Av.)	Temperature °C		Relative Humidity (Average) (%)
		Maximum	Minimum	
Oct-2008	9.40	36	17	62
Nov.2008	-	32	9	52
Dec.-2008	10.00	26	6	52
Jan.-2009	12.80	23	4	79
Feb.-2009	12.40	26	8	65
March-2009	16.00	34	13	65
April-2009	28.00	01	44	18
May-2009	100.00	08	45	20
June-2009	05.00	01	45	21
July-2009	157.00	08	41	24
Aug.-2009	190.00	08	37	21
Sep.-2009	74.00	06	39	22

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	114724	-	-
<i>Crossbred</i>	5726	1187 lt/lact.	5.27 lt/lact/day
<i>Indigenous</i>	108998	397 lt//lact.	2 lt/lact/day
Buffalo	416283	1061 lt/lact	5.05 lt/lact/day
Sheep	37054	-	-

Crossbred	1204	-	-
<i>Indigenous</i>	35850	-	-
Goats	71998	143 lt/lact.	780 gm./lact./day
Pigs	35461	-	-
<i>Crossbred</i>	2408	-	-
<i>Indigenous</i>	33053	-	-
Rabbits	9889	-	-
Poultry			
Hens			
<i>Desi</i>	32781	-	-
<i>Improved</i>	-	-	-
Ducks	35	-	-
Turkey and others	1025	-	-
Category	Area	Production	Productivity
Fish	-	-	-
Marine	-	-	-
<i>Inland</i>	-	-	-
Prawn	200x1000	1660 q.	-
Scampi	-	-	-
Shrimp	-	-	-

7. Details of Operational area / Villages

SI.No	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Mathura	Mathura Baldev Goverdhan Farah	Chheoli, Hathiyavli Jachaunda Manoharpur Salempur Mukundpur Barari	Bajra Paddy Til Mustard Wheat Barley Vegetable Potato, Dairying, Berseem & Sorghum	1. Low yield of oilseed crop. 2. Cultivation in brackish water. 3. High mortality of fruit plant 4. Low production from animals	1. Improving productivity of oil seeds crops. 2. Brackish water management 3. Fruit production in saline soil

2.	Manth	Raya	Karav Bandi Itauli Dharampur a	Bajra Paddy Til Mustard Wheat Barley Vegetable Potato, Dairying, Berseem & Sorghum	due to poor breeds 5. Weed problem 6. Imbalance use of fertilizer 7. High infestation of pest & disease 8. Poor soil health	4. Up- gradation of existing breeds of milch animals 5. Weed manage- ment 6. IPNM 7. IPM 8. Use of organic manure
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8. Priority thrust areas

S. No	Thrust area
1	Improving productivity of oil seeds crops.
2	Weed management in crops
3	Promotion of IPNM
4	Promotion of IPM technology
5	Development of the technologies for the use of brackish water
6	Promotion of seed village production programme
7	Application of soil test based micro nutrient in crops
8	Organic farming
9	Seed treatment
10	Seed production of Paddy, Wheat, Til & Mustard etc.
11	Soil health improvement
12	Cultivation of pearl millet in summer
13	Up-gradation of existing breeds of milch animals
14	Promoting Balance diet among rural masses

Chitrakoot

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Rain fed – Crops + Animals + Agro – forestry
2	Irrigated – Crops +Vegetables + Animals + Orchards
3	River Side - Crops + Animals + Vegetables

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

a) Soil type

S. No	Agro-climatic Zone	Characteristics
Bundelkhand Zone		
1	Heavy Soil (Mar)	Land are levelled, minimum irrigation facilities, fertile, black soils, crack in summer
2	Sandy Loam Soil (Parwa)	Soils have no irrigation facilities, medium in fertility, suitable for cereals and vegetables
3	Clay Loam (Kabar)	Soils are suitable for cultivation and orchards, fertile in nature.
4	Sandy (Rokar)	Poor in fertility, not suitable for cultivation, soils are found near the river and good for forest.

b) Topography

S. No	Agro ecological situation	Characteristics
1	Leveled Land	These are called Marwa (heavy clay soil) suitable for pulses, rain fed condition
2	Undulating Rocky Land	Suitable for plant and forestry
3	River Side land	Suitable for vegetable and Arhar

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1	Sandy (Rocker)	Undulated, low fertility	34000
2	Clay (Mar)	Leveled, Heavy Soils	15000
3	Silty Clay (Kabar)	Medium fertility	70000
4	Sandy Loam (Parwa)	Medium fertility, good for plantation	79000

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
1	Paddy	9532	7187	7.54
2	Sorghum	14864	11480	7.72
3	Pigeon pea	16718	10929	6.54
4	Bajra	10330	12205	11.82
5	Wheat	43151	51049	11.83
6	Gram	37541	19881	5.30
7	Lentil	15678	8905	5.68
8	Mustard	2003	216	1.08
9	Linseed	1504	232	1.54
10	Barley	1404	667	4.75

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
Oct. 08	-	38	15	64
Nov. 08	-	38	09	65
Dec. 08	-	29	06	76
Jan. 09	-	29	05	69
Feb. 09	-	35	06	65
March 09	-	40	10	60
April 09	6	46	16	24-67 (45)
May 09	47	46	21	20-74 (44.9)
June 09	34	47	22	28-59 (43.5)
July 09	165	40	22	44-93 (70)
Aug. 09	210	40	25	46-93 (73)
Sept. 09	134	38	23	61-93 (71.93)

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	1282	NA	6.20 lit/day
<i>Indigenous</i>	419052	NA	0.92 lit/day
Buffalo	138847	NA	3.40 lit/day
Sheep			
<i>Crossbred</i>	13	NA	NA
<i>Indigenous</i>	18534	NA	NA
Goats	95788	NA	NA
Pigs			
<i>Crossbred</i>	87	NA	NA
<i>Indigenous</i>	10180	NA	NA
Rabbits	-	NA	NA
Poultry			
Hens	19825	NA	NA
<i>Desi</i>	10272	NA	NA
<i>Improved</i>	9553	NA	NA
Ducks	-	NA	NA
Turkey and others	188	NA	NA
Category	Area (Ha.)	Production (Q.)	Productivity
Fish (Reservoir) Depott.	2375	NA	NA
Fish culture	NA	NA	NA

7. Details of Operational area / Villages

Sl.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Karwi	Karwi	Sabhapur, Chakondh	Wheat, Arhar, Veg. Animals	Old seed, fertilizer mgt.	Varietal+INM
			Ranipur Khaki, Kol Gadahiya	Wheat, Gram, Veg., Rice, Arhar, Animals	Imbalance use of Fertilizer	INM

			Emiliha, Kanhaipur	Wheat, Lentil, Gram, Rice, Arhar, Sorghum	Pod Borer & fly in Arhar & Gram	Integrated pest mgt.
			Look Patauora, Dhaurehi, Karari, Lodhwara	Wheat, Gram, Lentil, Sorghum, Arhar, Animals	Wilt in Pulses	Bio-pesticides
			Kalla, Narayanpur	Vegetables, Arhar, Gram, Wheat	Old variety, Insect pest problem	Varietal+ IPM
	Ram Nagar		Ramakol, Raipura, Karaundi	Arhar+Jowar-Gram + Lentil	<ul style="list-style-type: none"> • Old seed • No use of bio-ferti. • Termite infestation 	Integrated crop management
	Pahari		Kuseli, Bhujauli	Arhar +Jowar, Wheat, Lentil, Gram, Mustard	<ul style="list-style-type: none"> • Old seed • No seed treatment 	Varietal+ IPM
			Bhuihari, Kalvaliya, Bhabhet	Arhar + Jowar, Rice – Wheat, Gram, Mustard	<ul style="list-style-type: none"> • No irrigation facility • Undulating topography • Late sowing 	Integrated crop management
			Kapna	Arhar +Jowar, Wheat, Gram, Lentil, Mustard	<ul style="list-style-type: none"> • Wilt Problem 	Integrated disease management

8. Priority thrust areas

Crop/Enterprise	Thrust area
Gram, Lentil, Wheat	Need of latest draught resistant HYV according to Bundelkhand Agro-climatic condition Through varietal management.
Organic farming	Sustainable agriculture development through bio farming.
Aonla, Tomato, Brinjal, Chilli	Introduce improved varieties of fruits, vegetables and MPTs.
Teak, sesem and other MPTs	Agro forestry and orchard development For integrated farming.
Murrah, Shahiwal, Barbary male	Breed improvement programme in buffalo, cattle and goat.
Employment generation	To establish Poultry, goatry Piggery etc. for self employment.
Soil & water conservation	Control soil erosion and water conservation through water shed development plan.
IMC seed	Boost maximum production from natural pond, the KVK promote fish production by better management practices and to provide improved fingerlings to fishermen.
Employment generation	Employment generating training in the field of Para vet, Poultry, Piggery, Fishery, Fruit and Vegetable production, Seed production etc.

Gonda

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Farming system/enterprise
 Crop production + Live stock
 Crop production + Horticulture
 Horticulture + Live stock

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
District Gonda is divided into four micro -agro-climatic zones		
1.	Tarai :- (Part of Mujehana, Itea thok & Rupai deaha & Mankapur)	This Zone Consist of plain and forest land. Soil is silty clay to loams type. Farming situation is irrigated.
2.	Uparhar (Up land) :- (Part of Jhajhari, Padari Kripal, Wajeer ganj & Rupaideeh)	This Zone comist of upland soil having sandy to sandy loam type os soil. Farming situation is irrigated and unirrigated both
3.	Tarhar (Low land) :- (Part of Cutara, Belsar, Paraspur, Haldharmau, colonelganj & Tarabganj)	This Zone comist of low land type of soil having loam, sandy loam, clay and organic matter rich soil farming situation is irrigated.
4.	Majha :- (Part of Colonelganj, Paraspur, Belsar, Tarbganj)	This zone is situated at the bank of Terhi Sarayu and Ghaghara river. The soil is silty clay & sandy some area of this zone is flood affected for 3-4 months during kharif season.

S. No	Agro ecological situation	Characteristics
1.	AES-I	Clay loam, Paddy ,Sugarcane, Brinjal, tomato, Okra, Mango & Fodder.
2.	AES-II	Sandy soil, wheat, Gram, Groundnut, paddy, Mustard, Potato, Maize, Arhar, Moong, Urad, Borlay, Jowar, Lentil, Okra, Brinjal, Mango.
3.	AES-III	Sandy loam rich in organic matter, paddy, maize, arhar, groundnut, wheat, pea, sugarcane, potato, brinjal, jaikfruit, mango.
4.	AES-IV	Flood prone, sandy soil, paddy tobacco sugarcane, wheat, tomato,muskmelon.

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1.	Sandy soil	Low organic matter content high infiltration and percolation rate	120884
2.	Sandy loam	Fertile soil with rich soil nutrient	197858

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1.	Paddy	127327	251725	19.77
2.	Jowar	59	56	9.43
3.	Maize(Kharif)	54943	49723	9.05
4.	Bajara	37	58	15.60
5.	Wheat	149982	416642	27.78
6.	Barley	1090	2408	22.09
7.	Gram	3434	2568	7.48
8.	Pea	3510	3292	9.38
9.	Pigeon pea	5888	4505	7.65
10.	Lentil	15219	13073	8.59
11.	Mustard	7931	7958	8.77
12.	Linseed	68	17	2.52
13.	Sesamum	152	24	1.54
14.	Potato	2591	56940	219.76

Source : Directorate of Agricultural Statistical Uttar Pradesh year 2006-07.

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
October-08	41.5	31.0	21.0	50
November	--	29.5	12.5	45
Dec.	--	22.5	9.0	60
Jan.-09	--	20.0	7.0	65
Feb.	--	25.5	8.5	55
March	--	32.5	13.5	72
April	--	33.5	15.0	65.
May	185.0	35.0	23.0	71
June	130.0	39.5	28.5	68
July	324.0	34.0	29.0	80
August	392.0	32.5	27.5	90
Sep.	170.0	31.0	24.5	92
Total	1242.5			

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbreed</i>	135048		4 Lit/day
<i>Indigenous</i>	591666		2.7 Lit/day
Buffalo			
<i>Crossbred</i>	173073		3.7 Lit/day
<i>Indigenous</i>	83819		
Sheep	28159		
Goat	183478		0.95 Lit/day
Pigs			

<i>Crossbred</i>	4885		
<i>Indigenous</i>	36043		
Rabbits			
Poultry			
Hens			
<i>Desi</i>	14807		
<i>Improved</i>	89270		
Ducks			
Turkey and others			
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

7. Details of Operational area / Villages (2008-09)

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Colonalganj	Haldharmau	Persohani	Maize, paddy wheat mustard Toria, Banana, Pigeonpea livestock	Low yield of crop, low milk production of milch animal	Use of local seed, imbalance use of fertilizer, infestation of weed pod borer in chick pea, wilt in pigeon pea. Attack of ecto & endo parasite. Lack of green fodder
2	"	Katara	Chhira s	Maize, paddy, wheat mustard Lentil, chickpea, pigeonpea, Mentha, livestock	Low yield of crop, low milk production of milch animal	Use of local seed, imbalance use of fertilizer, infestation of weed, pod borer in chick pea, wilt in pigeon pea,. Attack of ecto & endo parasite. Lack of green fodder
3	Sadar	Rupaideha	Chhitau ni	Sugarcane, paddy wheat mustard Toria, chickpea, pigeonpea Mentha livestock	Low yield of crop, low milk production of milch animal	Use of local seed, imbalance use of fertilizer, infestation of weed pod borer in chick pea, wilt in pigeon pea. Attack of ecto & endo parasite. Lack of green fodder.
4	Tarabganj	Vajzerganj	Chetpur	Maize, paddy, wheat, Sugarcane mustard, toria, Lentil, livestock	Low yield of crop, low milk production of milch animal	- Imbalance use of fertilizer - use of bio-fertilizer - Imbalance use of balance diet for animal.
5	"	"	Lodhiyaghata	Paddy, Chickpea, pigeonpea, wheat, Lentil, Pea mustard, livestock	Low yield of crop, low milk production of milch animal	- Imbalance use of fertilizer - use of bio-fertilizer - Imbalance use of balance diet for animal.

6	“	“	Dhodhi ya para	Groundnut, maize paddy, wheat, lentil, mustard, Vegetable livestock	Low yield of crop low milk producton of milch animal	Use of local seed, using local tools and implements,no use of sulpher in oilseed, wilt in pigeon pea,lack of green fodder.
7	Manka pur	Mankapu r	Rampu r	Sugarcane, Paddy lentil, chickpea, wheat, livestock	Low yield of crop low milk producton of milch animal	Use of local seed Use of local tools and implements Imbalance use of fertilizer . Attack of ecto & endo parasite lack of green fodder.

8. Priority thrust areas

S. No	Thrust area
1.	Use of Improved seed
2.	Balance use of chemical fertilizer and bio-fertilizer
3.	Use of improved variety of seedling and sampling of vegetable & fruits plant
4.	Use of improved tools and implements.
5.	Plants protection measures for disease and insect in crops
6.	Attack of ecto & endo parasites in livestock.
7.	Production of green fodder.
8.	Balance feed for milch animal.
9.	Safe storage of grain.
10	Drudgery reduction by the use of improved tools.

Unnao

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Paddy-Wheat-Fallow, Paddy-Wheat-Moong
2	Paddy-Wheat-Dhaincha, Maize-Toria-Wheat-Fallow
3	Groundnut-Pea vegetable- Groundnut
4	Groundnut-Wheat-Fallow
5	Okra-Vegetable Pea-Cucurbits.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	Central Plain Zone (Zone-IV)	-

S. No	Agro ecological situation	Characteristics
1	Tremendous flood during the rainy seasons and miseries to the human and animal population.	-

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1	Alluvial, Calcareous and Salt affected	Highly fertile Ca rich & usar soil	458900.00

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Mt.)	Productivity (Qtl /ha)
1	Food grain	232452	688.685	29.75
2	Pulse	8446	12.173	14.19
3	Oilseed	14321	15.460	10.86

5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
October 08 to September 09	853	42.5	4.70	46-84

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	37874	-	-
<i>Indigenous</i>	543816	-	-
Buffalo	366444	-	-
Sheep			
<i>Crossbred</i>	2296	-	-
<i>Indigenous</i>	49897	-	-

Goats	264189	-	-
Pigs		-	-
<i>Crossbred</i>	11218	-	-
<i>Indigenous</i>	62943	-	-
Horse & Ponies	3776	-	-
Poultry			
Hens	142079	-	-
Ducks	6517	-	-
Donkey	3639	-	-
Camel	41	-	-

7. Details of Operational area / Villages (2008-09)

Sl. No.	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Hasanganj	Pilkhana, Dhaura Baratikhhera, Buxikhhera, Hasanganj, HazipurTareha, Kamalpur, Unchdwar, Ghuramau, Haraunia, Pichwada, Maljha, Ataullanagar, Koraura, Shankerpur, Panchgayan, Unchgaon, Bibipur Chiryaripur Nindeymau, Farahdpur, Sultanapur, Neotani, Jagdishpur, Dhakwa, Fakrudeenmau, Naisari, Nawai, Sekhupurbujuraj	Wheat, Paddy, Mustard, Urd & Moong Mango Animal Husbandary	Low crop productivity Low Yield of milk, Non-descript animal.	Soil reclamation Mango Malformation, Suitable cropping system in high water table area , IPM & IPNM technology , Salt tolerant varieties, Introduce high yielding varieties A.I. , Deworming, Timely vaccination, Balance ration Entrepreneurship for Rural Youth
2	Bangarmau	Gauriyakala, Dholaua, Asharfabad, Munnakhera, Birajikhhera, Fatehpur, Akbarkhera, Pipari, Jajrauli, Rajakhera, Sikenderpur, Sadipur, Arjupur, Ramdeenkhhera, Kanhikhhera	Wheat, Paddy, Mustard, Urd Groundnut & Moong Animal Husbandary	Low crop productivity Low Yield of milk, Non-descript ani.	Soil reclamation , Suitable cropping system in high warer table area , IPM & IPNM technology , Salt tolerant varieties, Introduce high yielding varieties A.I. , Deworming, Timely vaccination, Balance ration Entrepreneurship for Rural Youth

3	Fatehpur Chaurasi	Baburiya, Mathar, Kakraura, Maumansoorpur, Razakpur, Kurina, Bhadsar Nausara	Wheat, Paddy, Mustard, Urd & Moong Animal Husbandary	Low crop productivity Low Yield of milk,Non- descript ani.	Soil reclamation , Suitable cropping system in high warer table area , IPM & IPNM technology , Salt tolerant varieties,Introduce high yielding varieties A.I. , Deworming, Timely vaccination, Balance ration Entrepreneurship for Rural Youth
4	Safipur	Safiyapur, Kusaila, Mirzapur,	Wheat, Paddy, Mustard, Urd & Moong Animal Husbandary	Low crop productivity Low Yield of milk,Non- descript ani.	Soil reclamation , Suitable cropping system in high warer table area , IPM & IPNM technology , Salt tolerant varieties,Introduce high yielding varieties A.I. , Deworming, Timely vaccination, Balance ration Entrepreneurship for Rural Youth
5	Miyaganj	Hydrabad, Akbarpur, Malhuly	Wheat, Paddy, Mustard, Urd & Moong Animal Husbandary	Low crop productivity Low Yield of milk,Non- descript ani.	Soil reclamation Mango Malformation, Suitable cropping system in high warer table area , IPM & IPNM technology , Salt tolerant varieties,Introduce high yielding varieties A.I. , Deworming, Timely vaccination, Balance ration Entrepreneurship for Rural Youth
6	Auras	Hasnapur,	Wheat, Paddy, Mustard, Urd & Moong Animal Husbandary	Low crop productivity Low Yield of milk,Non- descript ani.	Soil reclamation Mango Malformation, Suitable cropping system in high warer table area , IPM & IPNM technology , Salt tolerant varieties,Introduce high yielding varieties A.I. , Deworming, Timely vaccination, Balance ration Entrepreneurship for Rural Youth

7	Sikandarpur Karan	Saraimanihar, Sumerpur, Rawatpur Namakheda, Rishalkheda, Kalani	Animal Husbandary	Low crop productivity Low Yield of milk, Non- descript ani.	Soil reclamation , Suitable cropping system in high wate r table area , IPM & IPNM technology , Salt tolerant varieties, Introduce high yielding varieties A.I. , Deworming, Timely vaccination, Balance ration Entrepreneurship for Rural Youth
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8. Priority thrust areas

S. No	Thrust area
1	District has large salt affected area, hence low cost soil reclamation technology to be disseminated to make this land productive.
2	Suitable cropping systems need to be introduced in high water table areas.
3	Low crop productivity in comparison to State yield, thus HYV will be introduced.
4	Unnao has sizable area under orchards namely mango. Malformation in mango is a major problem, which needs to be controlled through IPM.
5	Introduce IPM and IPNM technology in crops for improvement of soil and environmental health and to reduce chemical load.
6	Introduction of suitable salt tolerant varieties of rice, wheat, mustard, barley, sugarcane, vegetables etc.
7	The farmers are not aware to vaccination and deworming of animals, thus training required for farmers and farmwomen about animal health.
8	The breeds of different animals are nondescript which needs to be upgraded or crossbred by good germplasm of sire through Artificial Insemination
9	To train rural youths and farm women about mushroom production, bee keeping, vermicompost production, dairy farming, goat rearing, seed production and nursery of fruits, forestry and vegetable for upliftment of their socio economic status.
10	To train farmwomen about improved post harvest technology as well as entrepreneurship development.

Sultanpur

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Mixed and diversified farming is the major system in the district. These systems are directly correlated with physiographic situations, land capability, irrigation facilities as well as land holding, size of the farming community. Rice-wheat is the major crop rotation followed by pulses, oilseed, vegetables, sugarcane, millets etc. Next to crop production, live-stock is another enterprise, which is widely adopted among the farmers. Variation in farming system is also observed with the variation of agro-ecological situation. Broadly, six agro-ecological situations have been identified in the district. The details of each situation is given as under:-

Farming System/ Enterprise

	Particulars	Farming System
AES-1	Productive plain land under Canal and tube-well irrigation.	
a.	Main branch + Tube-well.	Specialized farming i.e. rice, wheat/potato. Urd/ moong, sugarcane supported by buffaloes.
b.	Minor canal +Tube-well	Rice, Arhar +urd +til, vegetables, wheat gram+ mustard, pea horticultural crops with cows / buffaloes.
AES-2	Productive plain land under tube-well irrigation	Mixed and diversified farming i.e. rice, arhar +jowar +til, urd/ moong, fodder crops, vegetables and horticultural crops, wheat gram, pea mustard, toria with few cows and buffaloes.
AES-3	Sodic land under canal +tube-well irrigation	Rice, wheat/ mustard, vegetables and other horticultural crops, arhar +jowar, and some other crops are growing in pockets with few local cows / buffaloes and goats.
AES-4	Waterlogged under canal and Tube-well irrigation.	Rice, wheat, mustard, lentil, gram, pea, vegetables in pockets, fodder crops and other horticultural trees with few cows and buffaloes.
AES-5	Eroded cultivable land under Tube-well irrigation.	Rice, arhar +jowar +til/ urd/ moong, maize, chari as fodder. Wheat/ barley, gram + mustard, peas, lentil, groundnut, vegetables and other horticultural trees with few cows, buffaloes, goats and sheep.
AES-6	Rainfed-eroded cultivable land and ravines.	Arhar +jowar +til/urd, maize. chari as fodder crops, millets, barley / wheat. gram, pea, lentil mixed with mustard. kharif vegetables, fruits and other forest trees with cows/ buffaloes and goats.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Sl. No.	Agro-climatic Zone	Characteristics
1.	Eastern Plain Zone	Soil-light alluvial, loam, sandy loam, calcareous and clay situation and crop, live stock- productive plane land, salt affected ravenous, flood affected, irrigated through canal, tube wells with rice and wheat based cropping system followed by pulses, oil seeds, live stock production and horticultural crops
	AES-1 & 2	a Plain land, productive, temporary water logged situation in canal area. Clay to clay loom, loam soil irrigated.
		b Rice wheat is major crop rotation followed by pulses, oil seeds, horticultural crops, live- stock etc.
2	AES-3	Salt affected soil, clay to clay loom, poor in N & Zn, crop restricted to rice wheat , vegetables, fruit crops specially Aonla, live -stock is secondary enterprise.
3	AES-4	Sub merged condition during rain with clay-to-clay loam soil, crop restricted to rice and wheat followed by vegetables and live-stock production.
4	AES-5 & 6	Undulated land with light textured soil, major crop restricted to pulses, millets, oil seed, rice, wheat and live-stock production. Ravenous area covered with perennial wild grasses. Major area under rainfed followed by assured irrigation.

3. Soil types

:

Sl. No.	Soil Type	Characteristics	Area (in ha)
1	Sandy loam	Plain, productive, major area under irrigation. Major crops are rice, wheat, jwar, pigeon pea, chick pea, field pea, lentil, urd, vegetable crop, sugarcane and live stock production	68798.00
2	Loam	Plain, productive, some of the area under water log major area are irrigated . Major crops are rice wheat, chick pea , field pea, sugarcane, vegetables etc.	193742
3	Clay	Compact in nature major area under temporary water log. Major crops are rice wheat followed by vegetables and live stock production	68798
4	Sandy	Loose textured , partially irrigated, rained condition, ravenous area eroded with perennial wild grasses , majore crops are wheat, pigeon pea, urd, moog, vegetables and live stock production.	193742
			525080

Source : ATMA, SREP Agriculture Department, Sultanpur

4. Area, Production and Productivity of major crops cultivated in the district

Sl. No	Crop	Area in (ha.)			Production (MT)			Productivity (q/ha.)		
		2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
1	2	3	4	5	6	7	8	9	10	11
1	Rice	157713	156243	173427	281833	320923	380110	17.87	20.54	21.91
2	Wheat	165780	166065	-	497340	431569-	-	30.2	27.95	-
3	Barley	2189	1905	-	54625	3496	-	24.95	18.38	-
4	Jwar	7603	8423	6274.0	5779	7165	4489	7.60	8.51	7.15
5	Bajra	305	489	97.0	456	763	160	14.95	15.60	16.49
6	Maize	5102	5049	3616.0	6663	6665	3063	13.06	13.20	8.47
7	Urd	3235	3288	2774.0	1815	2219	1501	5.61	6.75	5.41
8	Lentil	6431	6154	-	3858.6	7007	-	6.0	11.39	-
9	Chickpea	11392	7180	-	15948.8	6052	-	14.0	10.88	-
10	Fieldpea	10420	11203	-	15630	9770	-	15.0	9.38	-
11	Pegionpea	7129	8336	9277	9849	11157	11814	13.82	13.38	12.73
12	Mustard	4980	4171	-	4731	4598	-	9.5	11.58	-
13	Seasamum	400	443	389.0	68	68	64	1.7	1.54	1.65
14	Groundnut	18	23	-	13	14	-	7.22	5.98	-
15	Moong	71	49	57.0	28	10	21	3.98	1.99	3.68
16	Linseed	200	40	-	100	32	-	5.0	2.58	-

5. Weather data October 2008 to Sept.2009 (900-1000 mm.)

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
June- Sept.2008	852.49	----	----	----
October-2008	1.50	----	----	----
November.,2008	----	----	----	----
December,2008	----	----	----	----
January,2009	----	----	----	----

February,2009	5.0	----	----	----
March,2009	----	----	----	----
April,2009	----	----	----	----
May,2009	----	----	----	----
June,2009	13.8	----	----	----
July,2009	178.2	----	----	----
August,2009	124.1	----	----	----
Sept,2009	105.9	----	----	----

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production*	Productivity*
CATTLE			
Crossbred	40953	----	----
Indigenous	524275	----	----
BUFFALO	333839	----	----
SHEEP			
Crossbred	1010	----	----
Indigenous	46186	----	----
GOATS	266933	----	----
PIGS			
Crossbred	5420	----	----
Indigenous	74851	----	----
RABBITS	----	----	----
POULTRY			
HENS			
Desi	253323	----	----
Improved	----	----	----
DUCKS			
Turkey and Others	7161	----	----
FISH			
Marine	----	----	----
Inland	367 ha.	1170.q	
Prawn	----	----	----
Scampi	----	----	----
Shrimp	----	----	----

– DATA NOT AVAILABLE

7. Details of Operational area / Villages (2008- 09)

Sl. No	Taluk	Name of the Block	Name of the Village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	2	3	4	5	6	7
1.	Sultanpur	Bhadaiya	<i>Ahirauli</i>	Rice Wheat	Low productivity, incidence of insects, diseases and weeds, poor soil health due to lack of organic carbon. Difficiency of Zn and S use of late variety of rice in midland condition use of their own seed	Improvement. Of soil health, use of high yielding variety. According to agro eco system, promotion of INM and IPM, diversification of crop to break mono cropping.
			Jadipur	Paddy, Wheat Vegetables Pulse		
			Asarwan	Paddy,wheat		
			Pure Baghrai	Paddy, Wheat Vegetables Pulse		
			Abhiyakalan	Paddy, Wheat Vegetables Pulse		
			Siptapur	Arhar, Urd		
			Narayanpur	Paddy, wheat, vegetable, Pulse		
			Barsara	Paddy, wheat, Oil seed ,pulse		
		Kinaura	Paddy,wheat			
2.	Lambhua	Lambhua	<i>Baragaon</i>	Rice Wheat	Low productivity, incidence of insects, diseases and weeds, poor soil health due to lack of organic carbon. Deficiency of Zn and S use of late variety of rice in midland condition use of their own seed	Improvement of soil health, use of high yielding variety according to agro eco system, promotion of INM and IPM, diversification of crop to break mono cropping.
			Sariyan	Pea Arhar		
			Parsipur	Wheat,pulse Oil seed		
			Bharkhare	Urd Moong		
			Parsurampur	Toria, Urd		
			Vaini	Chick pea, Mustard		
			Ghatampur	Wheat, Paddy		
			Jagannathpur	Wheat, Paddy		
			Budhapur	Arhar, Til ,Gram		
			Khalwa	Wheat, Paddy		
			Dihwa	Wheat, Paddy		
			Singhanpur	Paddy		
			Shankerpur	Paddy		
			Bhateda	Paddy, wheat,pulse & Oil seed		
			Kithauli	Paddy, wheat,pulse & Oil seed		
Kubershah patti	Paddy, wheat,pulse & Oil seed					
3.	Lambhua	Pratappur Kamaicha	<i>Saraijujhar</i>	Rice Wheat	Low productivity, incidence of insects, diseases and weeds, poor soil health due to lack of organic carbon.	Improvement of soil health, use of high yielding variety according to agro eco system, promotion of INM and IPM, diversification
			Musepur	Pea Arhar Gram Lentil Urd, Moong Toria, Mustard Sugarcane		

					Difficiency of Zn and S use of late variety of rice in midland condition use of their own seed	of crop to break mono cropping.
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4.	Jaisinghpur	Jaisinghpur	Bansgaon	Rice Wheat	Low productivity, incidence of insects, diseases and weeds, poor soil health due to lack of organic carbon. Deficiency of Zn and S use of late variety of rice in midland condition use of their own seed	Improvement of soil health, use of high yielding variety according to agro eco system, promotion of INM and IPM, diversification of crop to break mono cropping.
			Bhabhot	Paddy,wheat		
			Mishrauli	Pea Arhar		
		Dostpur	Beramarufpur	Gram Lentil		
			Mustafabad Saraiya	Pddy, wheat		
		Kurebhar	Chandpur	Urd Moong		
			Malikpur	Toria		
				Mustard		
				Sugarcane		

5.	Kadipur	Akhandnagar	Paudhan	Rice Wheat	Problem of sodicity, poor yield incidence of weeds, insects and diseases, deficiency of Zn and N	Selection of proper variety, sowing time, frequent and light irrigation, application of Zn. And N
			Amrathu Dandiya	Pulse,oilseed Sugarcane		
			Bhiti Gopalpur	Paddy,Wheat Oilseed		

6	Sultanpur Sadar	Kurwar	Domanpur	Rice, Wheat, Vegetable Oilseed & Pulses	Low productivity, incidence of insects, diseases and weeds, poor soil health due to lack of organic carbon. Deficiency of Zn and S use of late variety of rice in midland	Improvement of soil health, use of high yielding variety according to agro eco system, promotion of INM and IPM, diversification of crop to break mono cropping.
			Khokhipur	Rice, Wheat, Vegetable Oilseed & Pulses		
			Rajapur Bahmarpur	Rice, Wheat, Vegetable Oilseed & Pulse		
			Bela Paschim	Rice, Wheat, Vegetable Oil seed& Pulses		

					condition use of their own seed	
7	Amethi	Bhadar	Ismailpur Bhadav Khaja	Paddy/Wheat/Oil seed & Pulse	Low productivity, incidence of insects, diseases and weeds, poor soil health due to lack of organic carbon. Deficiency of Zn and S use of late variety of rice in midland condition use of their own seed	Improvement of soil health, use of high yielding variety according to agro eco system, promotion of INM and IPM, diversification of crop to break mono cropping.

8. Priority thrust areas

S N.	Thrust Areas
1	Improvement of productivity of crop, fruits and vegetables with the introduction of HYV ,Hybrid varieties, latest management of technology and package of practices.
2	Reduction in post harvest losses and promotion of value addition.
3	Breed improvement, health care and feeding management in livestock.
4	Promotion of organic farming, improvement of soil health and minimizing of chemical use.
5	Promotion of integrated farming system.
6	Management of farming practice in rain fed area.
7	Crop Diversification and introduction of high value crops.
8	Soil and Water Management.
9	Promotion of INM/IPM.
10	Promotion of Agro-based industries for income generation.

Pratapgarh

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Agri - AH
2.	Agri – Horti – AH

* A.H. – Animal Husbandry

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1.	Eastern Plain Zone	Zone receives low, scanty and uneven distributed rainfall with shallow and poor soil.

S. No	Agro ecological situation (AES)	Development Blocks	Characteristics
1.	AES I	Shivgarh, Sadar, Rampur sangramgarh, Sandwa Chandika, Patti, Mandhata, Aaspur Devsara, Mangraura, Sangipur, part of Bababelkharnathdham, Kunda & Kalakankar	Sandy loam soil, irrigation by canal and borewell, rainfed major crop Jowar-bajara, Arhar, Til & irrigated major crop wheat, paddy, mustard, vegetable crops viz. Tomato, Potato, Cucumber & Mango, Aonla plantation.
2.	AES II	Gaura and part of Aaspur Devsara, Patti, Mandhata, Bihar, Laxmanpur, Babaganj & Lalganj.	Clay loam soil, Irrigation by canal & borewell, paddy & wheat are major crops.
3.	AES III	Babaganj, parts of Aaspurdevsara, Mangraura, Gaura, Bihar & Kalakankar.	Clay soil dominated with sodicity, irrigation by canal, paddy & wheat are major crops.

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1.	Sandy loam soil	Canal/tube well irrigated	215620.30
2.	Clay loam soil	Canal irrigated	88555.10
3.	Sodic soil	Canal irrigated & soil dominated with sodicity.	57421.60

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qt)	Productivity (Qt /ha)
1.	Paddy	98976	1682590	21.83
2.	Wheat	142160	3933300	27.7
3.	Jowar	4033	47620	14.14
4.	Bajara	15160	122950	8.24
5.	Arhar	13380	235300	19.17
6.	Mustard	2671	22910	8.6
7.	Potato	7132	1210640	169.7
8.	Field pea	5660	55100	10.18
9.	Bengal gram	5950	73800	12.4
10.	Urd	5140	24900	5.73
11.	Moong	400	1200	3.69
12.	Barley	1045	28090	14.5
13.	Maize	1130	24910	22.0

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
October	18	33.96	20.38	88.41
November	-	28.90	12.60	86.06
December	-	23.34	9.47	90.87
January	02	23.06	8.33	92.58
February	04	27.77	9.36	82.00
March	-	33.79	13.79	54.35
April	05	40.0	27.5	52.12
May	57	44.5	21.4	71.12
June	41	45.0	20.0	67.85
July	282	38.0	22.0	88.68
August	116	36.0	22.0	86.12
September	112	36.2	21.0	87.57

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	90,841	-	-
<i>Indigenous</i>	4,65,810	-	-
Buffalo	1,89,673	-	-
Sheep			
<i>Crossbred</i>	1,746	-	-
<i>Indigenous</i>	4,289	-	-
Goats	2,31,550	-	-
Pigs			
<i>Crossbred</i>	20,975	-	-
<i>Indigenous</i>	1,18,863	-	-

Rabbits		-	-
Poultry			
Hens	-	-	-
<i>Desi</i>	12,890	-	-
<i>Improved</i>	1,80,999	-	-
Ducks	-	-	-
Turkey and others	-	-	-
Horse	4,136	-	-
Category	Area	Production	Productivity
Fish	-	-	-
<i>Marine</i>	-	-	-
<i>Inland</i>	1,802.89 ha	41682.82	23.12
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

7. Details of Operational area / Villages (2008-09)

Sl. No	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Kunda	Kalakankar	Panigo, Manar, Shekhwapur, Rewali, Ainthu, Kandhai, Barwalia, Kadaro, Misirpur, Sahabad	Wheat, Urd, Moong, Arhar, Mustard, Mentha, Onion, Brinjal, Tomato & Chilli, Cucurbits, Livestock	<ul style="list-style-type: none"> • Non availability of quality seed. • Late sowing of wheat • Imbalance use of chemical fertilizer. • Scanty population of live stock and their improper management. • Poor orchard management in mango. 	<ul style="list-style-type: none"> • Promotion of ZT • Proper management of live stocks. • Rejuvenation & proper management of old orchards.
		Kunda	Barai, Beti, Radhali, Mamauli			
		Babaganj	Meerapur, Mangarh, Kodarkhurd, Dhaurehat, Sarpata			
		Bihar	Jaichandpur			
2.	Lalganj	Rampur sangramgarh	Dhingwas, Veersinghpur	Wheat, Potato, Arhar, Jowar, Mentha, Urd, Moong, Fisheries,	<ul style="list-style-type: none"> • Late sowing of wheat • Imbalance use of chemical fertilizer. 	<ul style="list-style-type: none"> • Promotion of ZT • Overall productivity enhancement • Adoption of RCT.
		Sangipur	Usaraha			

				Orchard	<ul style="list-style-type: none"> Poor water resources. Imbalance feed and improper management of milch animal. 	<ul style="list-style-type: none"> Selection of suitable fruit cultivars.
3.	Raniganj	Shivgarh Gaura Baba Belkharnath dham Sandwachandika Mandhata	Jamtali Tharia Rakha, Payagipur & Aurista Panchakhara Bhawalpur, Katragulabsingh	Wheat, Arhar, Potato, Urd, Moong, Mustard, Fisheries, Orchards of aonla & mango.	<ul style="list-style-type: none"> Poor water resources. Late sowing of wheat Poor nutrient management in orchards. Low productivity of aonla orchard. Improper management of live stock. 	<ul style="list-style-type: none"> Adoption of RCT. Promotion of ZT Use of vermi-composting/fertilizer under orchard management. Proper management of live stock.
4.	Patti	Ashpurdevsara	Dhaurahara, Dhanepur, Bhadvach	Wheat, Mustard, Urd, Moong, Arhar, Maize & orchards of aonla.	<ul style="list-style-type: none"> Low water table. Poor live stock management Late sowing of wheat Poor nutrient management in orchards. 	<ul style="list-style-type: none"> Water Harvesting Proper management of live stock. Promotion of ZT Use of vermi-composting/fertilizer under orchard management.

8. Priority thrust areas

- Production and productivity improvement in crops like Paddy, Wheat, Barley, Jowar, Bajra, Mustard, Arhar, Urd, Moong, and Pea through Integrated Nutrient Management, hybrid variety of seeds, Integrated Pest Management and promotion of Resource Conservation Technology.
- Usar reclamation and its management. Promotion of salt stress varieties of Rice – Wheat and Mustard.
- Overall increase in livestock production by implementing proper health, disease, care and nutritional management.
- Production and Productivity improvement of orchard crops like Aonla, Mango and Guava etc. through proper input management.
- Nutritional care of farmwomen and children.
- Use of RCT for the production & productivity improvement of crops.

Sitapur

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
	Agricultural Crops: Irrigated- Wheat, paddy, sugarcane, menthe, pulses and mustard.
	Rainfed:- Urd bean, Pigeon pea, Gram, Til, Groundnut, Toria
	Fruit Crops:- Mango, Guava
	Vegetable Crops:- Potato, Vegetable pea, Brinjal
	Floriculture:- Marigold
	Animal Husbandry:- Cow, buffalo, sheep, goat and pigs.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	The Sitapur district is situated in central plane at 27°.54' - 27°.60' N and 80°.18- 81°.24' E at 100-150 MSL. The physiographic of the district is mostly plane.	Alluvial, Calcareous, Silty loam, Salt affected

S. No	Agro ecological situation	Characteristics
1	-	--

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1.	Sandy, Sandy loam, Loam	-	-

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1.	Wheat	202272	5534220	27.36
2.	Paddy	142404	2311790	16.20
3.	Sugarcane	136924	75959660	555.76
4.	Sesame	9336	10360	1.11
5.	Lentil	30609	206300	6.74
6.	Toria	16536	143620	8.85
7.	Pigeon pea	7178	49480	6.89
8.	Ground nut	2447	17030	6.96
9.	Potato	3830	660330	172.41
10.	Urd bean	11513	57160	4.96
11.	Maize	16733	160080	9.57
12.	Barley	2061	33400	16.21
13.	Jwar	5895	56810	9.64
14.	Bazra	4604	34910	7.55
15.	Gram	760	5940	7.81
16.	Pea	2036	19950	9.80

5. Weather data - Oct 2008- September 2009

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
October 08	-	35.4°C	17.2°C	95	30
November 08	2.0	31.9°C	9.4°C	64	29
December 08	-	30.2°C	6.3°C	100	32
January 09	-	26.9°C	4.4°C	100	31
February 09	5.6	32.2°C	7.6°C	99	17
March 09	4.0	36°C	10.4°C	89	15
April 09	-	42.7°C	17.1°C	84	05
May 09	102.8	44°C	21.5°C	88	12
June 09	110.0	44.8°C	20.8°C	100	09
July 09	278.0	38.8°C	23.4°C	100	26
August 09	92.8	37.8°C	23.6°C	100	53
September 09	277.4	36.4°C	22.6°C	100	21

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	21242		
<i>Indigenous</i>	583952		
Buffalo	429218		
Sheep			
<i>Crossbred</i>	8		
<i>Indigenous</i>	8578		
Goats	455688		
Pigs			
<i>Crossbred</i>	1808		
<i>Indigenous</i>	62393		
Rabbits			
Poultry			
Hens	205710		
<i>Desi</i>	3656		
<i>Improved</i>	202054		
Ducks			
Turkey and others			

Category	Area	Production	Productivity
Fish	18.81	96.20	5.11
Marine			
Inland			
Prawn			
Scampi			
Shrimp			

7. Details of Operational area / Villages (2008-09)

S. N.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
		Sidhauri, Mahmoodabad, Godlamau, Rampur Mathura, Kasmanda	Akbarpur rewan, Almapur, Alipur, Arjunpur, Balrampur, Bhawanipur, Bhandhiya, Bhikhipur, Baldeo nagar, Chandipur, Chikhari dhandhar, Daulatpur, Devipur, Dariyapur, Gulalpur, Ismileganj, Jasmanda, Jharsaunwa, Jansapur, Kantaine, Kasmapur, Kiratpur, Khartauna, Kavarana, Kewalhar, Madarpur, Mankapur, Manjhari, Muzaffarpur, Neelgaon, Patti nawada, Patoiya, Rampur Tandwa, Reewankala, Sadankhera, Shamsherganj, Tikauli, Tadwan chauriya	Til, Urd bean, Lentil, Wheat, Paddy, Mustard, Ground nut, Sugarcane, Vegetables, Dairy	Use of old seed variety, imbalance fertilization, infestation of termites and irrigation (irregular water supply in canal), infestation of weed	Use of quality seed variety with balance dose of fertilizer, Control of weed

8. Priority thrust areas

S. No	Thrust area
1.	The productivity of major crops in the district is low, which is due to prevalence of old varieties, imbalance use of fertilizers and high incidence of insect and diseases. So there is a need to introduce high yielding, disease resistant varieties with balance use of fertilizers.
2.	Popularizing bio-fertilizer and maintenance of bio-productivity through crop residue management, green manuring and use of FYM and vermi-compost.
3.	Management technique for old orchards needs to popularize.
4.	The district has very poor breed of cattle. It needs cross breeding programme to promote the cattle development.
5.	Infertility in cow & buffaloes are the major problem due to imbalance feeding so promotion of

	balance feeding through locally available feed material is great need of the district for the growth & development of livestock.
6.	Malnutrition is prevalent at a wide range in rural women & children so there is a need to popularize certain recipes using locally available food items and to increase their awareness about major nutritional deficiency diseases, their causes and prevention.
7.	Capacity building of adolescent girls and women with already developed technologies and newly developed technologies and generation of income using non farming activities.

Kaushambi

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Agriculture+ Animal Husbandry
2	Agriculture+ Animal Husbandry + Horticulture
3	Agriculture+ Horticulture

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	Middle Plane (5)	District comprises of 3 revenue sub division i.e. Chail, Sirathu & Manjhanpur, it has 8 development block. Total area of distt lies in between the holy rivers Ganga in north and Yamuna in south.

S. No	Agro ecological situation	Characteristics
1	AES I	This AES comprises of Ganga and yamuna alluvial soil groups which account for 39.74% of the total area of the district. About 44.70% of this area is irrigated. This tract having sandy, sandy loam soil which pH ranging between 6.5-8.0. The major crop of this AES paddy, wheat (irrigated situation), Gram & arhar(un irrigated situation).Orchard vegetable.
2	AES II	This AES is characterized by sandy, sandy loam soil with pH between 7-8.5. It constitute about 30.24% of total area about 46.6% of the area is irrigated. In this AES the major crop & enterprises is Paddy, Wheat, Arhar, Barley, Banana, Guava orchard, cow, buffalo, sheep & goat.
3	AES III	This AES also having sandy, sandy loam soil. The tract share about 24.8% of the total geographical area of the district. This AES is having about 44.6% area under irrigation and the major crop & enterprises existing in this AES are paddy, wheat, gram, arhar, potato banana, guava and in animal sector (cow, buffalo & goat).

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1	Sandy Soil	Ideal soil with neutral pH, good drainage suitable for cultivation of vegetables, pulses, oilseed and millets.	165077
2	Sandy Loam	Ideal soil with neutral pH, good water holding capacity, suitable for cultivation of vegetables, fruits, specially Banana, Papaya, Paddy, Wheat and oilseed	42423
3	Saline Soil	Soil physico-chemical properties are disturbed due to the high pH, ECe and negative effect of sodium ions. Suitable	9177

		for cultivation of paddy and wheat.	
4	Alkaline Soil	High pH, EC & cat ions need reclamation.	411
5	Water Logged	At some extent use for cultivation of paddy need surface and sub surface drainage.	1593

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (00,ha)	Production (Qt)	Productivity (Qt /ha)
1	Paddy	40533	640450	15.8
2	Jawar	7835	135750	17.33
3	Bajara	11593	139170	12.00
4	Maize	173	2490	14.39
5	Pigeon pea	11925	79730	6.69
6	Sesame	2011	4620	2.30
7	Groundnut	1063	6350	5.98
8	Urd	1240	6590	5.31
9	Moong	40	80	1.99
10	Coarse cereals	9	5	5.57
11	Wheat	63597	1322080	20.79
12	Barley	1063	1040	9.78
13	Gram	14516	144680	9.97
14	Mustard	1900	15400	8.11
15	Pea	660	6720	10.18
16	Toriya	887	709	7.99
17	Lintill	140	114	8.14
Total		159185	2505978	162.32

Horticulture

S. No	Crop	Area (00,ha)	Production (Qt)	Productivity (Qt /ha)
1	Mango	1770	121	213285
2	Guava	3150	139	437220
3	Aonla	460	91	41630
4	Ber	40	120	4800
5	Banana	2500	800	2000000
6	Papaya	350	320	112000
7	Okra	1200	125	150000
8	Bottle guard	327	185	60495
9	Ridge guard	318	142	45156
10	Pumpkin	203	161	32683
11	Bitter Guard	172	130	22360
12	Lobiya	212	85	18020
13	Vegetable Pea	2000	140	280000
14	Cauliflower	313	225	70425
15	Cabbage	287	200	57400
16	Tomato	1427	195	278265
17	Brinjal	1256	205	257480
18	Green Chilli	1250	210	262500

19	Rose	23	45	1035
20	Mari gold	53	50	2650
21	Glydolas	51	90000	4590000
22	Rajnigandha	2	150000	300000

5. Weather data (Agro metrological center AAIDU, Allahabad)

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
Oct	2.4	31.38	19.83	84.54
Nov	0.03	26.85	26.85	82.23
Dec	-	22.86	8.9	90.8
Jan	-	23.5	10.12	96.4
Feb	-	27.20	11.79	79.43
Mar	-	36.56	18.41	70.73
April	--	40.05	24.33	56.24
May	43	41.50	27.10	58.00
June	55	42.50	29.00	58.60
July	65	36.60	26.00	89.00
Aug	11	35.15	26.10	91.10
Sep	112	33.60	26.50	89.00

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population (nos.)	Production (nos.)	Productivity (in %)
Cattle			
<i>Crossbred</i>	1174785	493023	0.42
<i>Indigenous</i>	8678486	3336134	0.38
Buffalo	1750872	7952125	0.45
Sheep			
<i>Crossbred</i>	1168809		
<i>Indigenous</i>	133961		
Goats	12941013	3710665	0.29
Pigs			
<i>Crossbred</i>	185931		
<i>Indigenous</i>	20999		
Poultry			
Hens			
<i>Desi</i>	8674141		
<i>Improved</i>	11262108		
Ducks	279352		
Turkey and others	12877		
Category	Area (ha)	Production (M.T)	Productivity (M.T)
Fish			
<i>Marine</i>	939	85.510	9
<i>Inland</i>			
Prawn			
Scampi			

7. Details of Operational area / Villages

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Manjhanpur	Manjhanpur				
		Kaushambi				
		Newada				
2	Chail	Chail	Charwa	Rice, Wheat, Urd , Moongp Pea, Mustard, Tomato, Brinjal, Okra, Mirch, Pumpkin, Lobiya, Gauva, Jack Fruit, Banana, Goat Keeping, Dairy	Lack of improved seed. Lack of Fruit based enterprises. Lack of Good Quality fodder. Poor bread. Lack of Veterinary Services. Soil Fertility degradation.	Seed production of Rice, Wheat & Vegetable Crops. Scientific Management of Guava & Banana orchard. Bread improvement Live Stock maintenance and care. Development of SMS.
		Muratganj	Gauspur	Rice, Wheat, jower, Bajara, Arhar, Gram Toriya, Mustard, Carrot, Palak, Potato, beet root, Tomato, Guava, Dairy, Goat Keeping.	Lack of irrigation facility. Poor soil fertility. Soil erosion. Lack of improved Seed. Lack of Knowledge & Skill. Lack of promoting fruit plant Lack of Promosing Breed. Lack of employment.	Promotion of resource conservation technology. Promotion of fertility Management practices. Scientific Management of orchard & Promotion of seed production in vegetable and Cereal. Breed Improvement. Feeding Management. Promotion of aromatic and medicinal plant cultivation. Establishment of small scale enterprises through SHG's .

			Mohanapur	Rice, wheat, Jower, Bajara, Pea, Gram, Arhar, Mustard, Til, Carrot, Brinjal, Tomato, Potato, Gauva, Banana, Mauha, Dairy & Goot keeping	Lack of irrigation facility. Problematic Soil. Low fertility of soil. Lack of improved seed. Lack of knowledge & skill. Lack of promoting fruit plant. Lack of Promosing Breed. Lack of employment	Promotion of resource conservation technology. Promotion of fertility Management practices. Scientific Management of orchard & Promotion of seed production in vegetable and Cereal. Breed Improvement. Feeding Management. Promotion of aromatic and medicinal plant cultivation. Establishment of small scale enterprises through SHG's .
			Umarcha	Rice, wheat, Jower, Bajara, Pea, Gram, Arhar, Mustard, Til, Carrot, Brinjal, Tomato, Potato, Gauva, Banana, Mauha, Muskmelon, Watermelon, Cucumber, Dairy & Goat keeping	Lack of irrigation facility. Problematic Soil. Low fertility of soil. Lack of improved seed. Lack of knowledge & skill. Lack of promoting fruit plant. Lack of Promosing Breed. Lack of employment	Promotion of resource conservation technology. Promotion of fertility Management practices. Scientific Management of orchard & Promotion of seed production in vegetable and Cereal. Breed Improvement. Feeding Management. Promotion of aromatic and medicinal plant cultivation. Establishment of small scale enterprises through SHG's .

			Husain Mau	Rice, wheat, Jower, Bajara, Pea, Gram, Arhar, Mustard, Til, Carrot, Brinjal, Tomato, Potato, Guava, Banana, Mauha, Dairy & Goat keeping	Lack of irrigation facility. Problematic Soil. Low fertility of soil. Lack of improved seed. Lack of knowledge & skill Lack of promosing fruit plant Lack of Promosing Breed. Lack of employment	Promotion of resource conservation technology. Promotion of fertility Management practices. Scientific Management of orchard & Promotion of seed production in vegetable and Cereal. Breed Improvement. Feeding Management. Promotion of aromatic and medicinal plant cultivation. Establishment of small scale enterprises through SHG's .
		Sarsawa				
3	Sirathu	Kada				
		Sirathu				

8. Priority thrust areas

S. No	Thrust area
1	Use of Quality seed especially in pulses and oil seed crop.
2	Use of balance fertilizer with special emphasis on micro nutrient
3	Promotion of Resource Conservation Technology.
4	Production of Quality planting materials
5	Promotion of Off Season vegetable production.
6	Promotion of aromatic plant cultivation under rain fed conditions.
7	Use of fertilizer on the basis of soil analysis
8	Development of cropping modules according to AES
9	Promotion of Bio-Control agents/ Bio-pesticide.
10	Up gradation of animals.
11	Health and hygiene for live stock according to normal farm condition.
12	Improve the productive trait by balance feed and mineral mixture in milch animal
13	Development of small-scale enterprises by animal farming.
14	Capacity building for income generating activity.
15	Gender main streaming through SHG
16	Refinement & Standardization of ITKs
17	Drudgery reduction of farm produce/ farm women & food security
18	Development of entrepreneurial behavior of rural women
19	Weed Management for field crop
20	Integrated crop management for field crop
21	Management of problematic soil.

Auraiya

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Paddy-wheat –fallow
2.	Bajra-wheat-fallow
3.	Maize- toria- wheat- fallow
4.	Paddy-wheat-dhaincha, Paddy-wheat-moong
5.	Okra-vegetable pea-colocasia/cucurbits

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1.	Central Plain Zone (Zone-IV)	Tremendous flooded during the rainy seasons and miseries to the human and animal population.

3. Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Clay	The soils are broadly affected by salinity, sodicity and ravines. Besides these are found every where low-lying beds of clay in which water collects during the rains and rice can be grown.	141218
2.	Clay loam		
3.	Loam		
4.	Sandy loam		
5.	Sandy		

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1.	Paddy	6100	14792	27.69
2.	Wheat	6300	14584	24.75
3.	Bajra	6400	8000	12.50
4.	Gram	5000	5000	10.00
5.	Mustard	6100	5490	9.00
6.	Sugarcane	1000	-	567.65

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
Average	355.00	46.40	2.5	40-80

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	6382	4.935 (000Mt.)	6.03 Lt.
<i>Indigenous</i>	97293	17.584 (000Mt.)	2.076 Lt.

Buffalo	199690	95.175 (000Mt.)	3.675 Lt.
Sheep		7.009 (000Kg. wool)	1.05 Kg. wool
Crossbred	69		
<i>Indigenous</i>	7958		
Goats	190415	16.446 (000Mt.)	0.703 Lt.
Pigs			
<i>Crossbred</i>	1085	-	-
<i>Indigenous</i>	16382	-	-
Rabbits			
Poultry		55043	-
Hens			
<i>Desi</i>			
<i>Improved</i>			
Ducks			
Turkey and others			
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

7. Details of Operational area / Villages (2008-09)

S. No.	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Bhagya Nagar	Jamuha, Kainjari, Lakhnpur, Vasundhara, Khanpur Phphund, Niyamatpur Bihari, Umri, Kakrahi, Sehud, Khagipur, Phaphund Dehat, Fatehpur beni Tarrai, Pasaipur, Kishanpur, Lahokhar, Parwaha, Piperpur, Kakor, Parghaipur, Taiyabpur, Singanpur, Kutubpur, Jaska Purwa, Chandrapur, Kutharra, Parsad purwa, Gade ka purwa, Ray singh ka purwa, Samadhan ka purwa, Barmupur, Mudena ramdutt, Juaa.	Paddy, Wheat, Maize, Jowar, Mung, Urd, Mustard, Gram, Vegetables, Guava, Animal Husbandary	Low crop productivity Low yield of milk, Non-descript Animal	Soil reclamation, Suitable cropping system, IPM & IPNM technology, Salt tolerant varieties, Introduction high yielding varieties, A.I., Deworming, Timely vaccination, Balance ration, Entrepreneurship for rural youth
2.	Auraiya	Chithauli, Dhamseni, Budadan, Jaura.	Paddy, Wheat, Maize, Jwar, Vegetables, Animal Husbandary	Low crop productivity Low yield of milk, Non-descript Animal	Soil reclamation, Suitable cropping system, IPM & IPNM technology, Salt tolerant varieties, Introduce HYV, A.I., Deworming, Timely vaccination, Balance

					ration Entrepreneurship for rural youth
3.	Ajitmal	Navalpur, Ballapur, Durjanpurawa, Bhikhepur, Ratnipur.	Paddy, Wheat, Maize, Jowor, Mung, Urd, Mustard Vegetables, Animal Husbandary	Low crop productivity Low yield of milk, Non-descript Animal	Soil reclamation, Suitable cropping system, IPM & IPNM technology, Salt tolerant varieties, Introduce high yielding varieties A.I., Deworming, Timely vaccination, Balance rations Entrepreneurship for rural youth.
4.	Sahar	Jawaharpur, Lachiamau, Kanmau, Murlipurva, karaunda, Ghasa ka purwa, Kasaha, Purwa Fakire.	Paddy, Wheat, Maize, Jowor, Mung, Urd, Mustard Vegetables, Animal Husbandry	Low crop productivity Low yield of milk, Non-descript Animal	Soil reclamation, Suitable cropping system, IPM & IPNM technology, Salt tolerant varieties, Introduce high yielding varieties A.I., Deworming, Timely vaccination, Balance rations Entrepreneurship for rural youth.

8. Priority/thrust areas

Crop/Enterprise	Thrust area
1.	Reclamation of sodic soil and conservation of soil through integrated approach.
2.	Watershed development due to ravines and undulating land
3.	Disease and pest management through IPM.
4.	Nutrient management and quality food production through IPNM, SSNM and organic farming.
5.	Introduction of suitable salt tolerant and high yielding varieties of rice, wheat, barley, mustard, maize, bajra, jowar, oilseed, pulses, vegetables, fruits etc.
6.	Introduction of suitable cropping system for different AES.
7.	Promotion of zero tillage technology for sowing of wheat.
8.	Promotion of scientific technologies for vegetable & flower production.
9.	To promote green fodder production round the year for livestock.
10.	Fish farming in low lying areas and unutilized ponds with integrated approach.
11.	Formation of self help groups (SHGs), Mahila mandals & kisan club.
12.	To develop opportunities for rural youth in agriculture based employment i.e. Vermi composting, Fish farming, Mushroom production, Beekeeping, Seed production, Vegetable and fruit nursery production etc.
13.	To develop women's technical awareness skills-preparation of Jam , Jelly, Pickles, Candle making and stitching.
14.	Vaccination and deworming of animals.
15.	To create awareness about drudgery reducing implement during farm activities.
16.	Promotion of balance ration for higher milk production.

UTTARAKHAND

Champawat

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S.No.	Farming system/ enterprises
1.	Farmers have small size land holdings less than 1.0 ha. Agriculture is largely traditional and rainfed. The major crops grown are paddy, soybean, amaranths, madua, maize, wheat, barley, lentil and ragi. The major fruits are apple, citrus, walnut pear, peach, plum, mango and litchi. Potato, radish, onion, colacassia, frenchbean, tomato, capsicum, cabbage, okra and cauliflower are major vegetables grown in the district.
2.	The system of agriculture is mixed cropping to some extent. Majority of the farmers grow two crops in a year. Major crop rotation adopted by the farmers are soybean–wheat, paddy wheat, ragi-wheat. Some farmers grow gladulai on commercial basis. Few of them have poultry and rabbitary also. The major domestic animals found in the district are cows, buffaloes, goats, sheep and pigs. Recently, some farmers have also started fish farming using exotic carp species namely silver carp, grass carp and common carp in small size (50-200m ²) earthen ponds.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S.No.	Agro-climatic Zone/ topography	Characteristics
Hill and mountain agro-eco system		
1	Lower hills (600-1200m AMSL)	<ul style="list-style-type: none"> • Dry and warm climate. • Irrigated- Alluvial and sandy loam • Rainfed sandy loam.
2	Mid hills South aspect (1200-1700 m AMSL)	<ul style="list-style-type: none"> • Warm and humid climate • Mostly rainfed, sandy loam soil • Hail storm & frost are common • Winter cold & summer warm
3	Mid hills North aspect (1200-1700 m AMSL)	<ul style="list-style-type: none"> • Mostly cold climate • Rainfed moist brown forest soil. • Hail storm & frost are common. • Sometimes snowfall also.
4	High hills (1700- 2500 m AMSL)	<ul style="list-style-type: none"> • Cold climate • Rainfed, hail storm & frost & coldness very common • Snowfall frequently • Rainfed & red dark black clay soil.

3. Soil types

S. No.	Soil type	Characteristics	Area in ha.
1	Alluvial sandy loam	Irrigated lower hills (600-1200)msl	-
2	Sandy loam	Rain fed lower hills (600-1200)msl	-

3	Sandy loam	Mid hills (1200-1700) msl	-
4	Red-dark black clay soil	High hills (1700-2500) msl	-

4. Area, Production and Productivity of major crops cultivated in the district

S.No.	Crop	Area (ha)	Productivity (Qtl.)
1	Wheat	14456	15.26
2	Paddy	9426	11.69
3	Maize	1213	11.45
4	Barnyard millet	1697	15.92
5	Lentil	984	8.18
6	Gram	36	9.72
7	Field pea	59	13.84
8	Finger millet	8212	15.92
9	Soybean	1307	
10	Urd	751	4.15

S.No.	Vegetables	Area (ha)	Production (Mt)	Productivity (q/ha)
1	Brinjal	150	2100	140
2	Lady finger	160	960	60
3	Potato	2161	36050	166.8
4	Veg. Pea	485	1415	29.2
5	Cauliflower	41	495	120.70
6	Radish	205	1998	97.5
7	Capsicum	275	760	27.6
8	Onion	70	725	103.6
9	Tomato	725	6714	92.6
10	Cabbage	465	2828	60.80
Fruits				
1	Apple	465	564	12.1
2	Peach	655	1421	21.70
3	Plum	867	1690	19.5
4	Apricot	645	855	13.20
5	Walnut	746	160	2.1
6	Citrus	2060	3893	18.90
7	Litchi	19.71	2897	14.70
8	Others	1780	2566	14.4

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
17 July 08	338	-	-	81
August 08	988	28.6	15.8	75
Sept. 08	301	29.1	12.7	61
Oct. 08	27.6	27.4	7.0	57
Nov. 08	19.8	24.4	4.1	55
Dec. 08	27.6	22.7	3.6	53
Jan. 09	0.4	25.1	1.7	53
Feb. 09	195.7	-	-	48

March 09	60.7	-	-	39
April 09	43.6	26.49	12.50	57
May 09	90.5	25.90	13.7	86
June 09	135.7	28.15	17.3	75
July 09	212.7	26.7	181.1	98
August 09	475.4	26.2	181.4	98
September 09	280.8	24.1	16.2	67

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle (cow)	80482		
Buffalo	34375		
Sheep	07		
Goats	38445		
Pigs	27		
Poultry	4282		
Fisheries	200	9000 kg	45 kg/100 sq. m.
Others	496		

7. Details of Operational area / Villages

S. N	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust areas
1	Lohaghat	Lohaghat	Chouri	Potato	White grub/late blight	Increase production & profitability through IPM
2	Lohaghat	Lohaghat	Dumdai	Ginger	White grub	Increase production & profitability through IPM
3	Lohaghat	Lohaghat	Dumdai	Soybean	Use of Unidentified old variety	Introduction of HYV i.e. VL-47/ PS-1092
4	Lohaghat	Barakot	Bapru	Soybean	Use of Unidentified old variety	Introduction of HYV i.e. VL-47/ PS-1092
5	Lohaghat	Barakot	Bapru	Mandua	Use of Unidentified old variety	Introduction of HYV VL-149
6	Lohaghat	Barakot	Barak	Fisheries	Poor growth of local fish	Introduction of fast growing Grass carp, common carp & silver carp
7	Lohaghat	Barakot	Bapru	Cattles	Low milk production	Proper deworming and feeding of mineral mixture to increase production
8	Pati	Pati	Simalkhat	Paddy	Use of local variety	Introduction of HYV VL- 62/VL-206
9	Pati	Pati	Simalkhat	Wheat	Use of local variety	Introduction of HYV-VL-804 ,VL-829 Up-

						2572
10	Pati	Pati	Simalkhet	Fisheries	Less production due to local fish variety	Introduction of silver carp, common carp, Grass carp
11	Lohaghat	Lohaghat	Sui	Lentil	Less production due to local variety	Introduction HYV-VL-103, PL-5
12	Lohaghat	Lohaghat	Sui	Wheat	Less production due to local variety	Introduction HYV-VL-804, VL-825, up-2572
13	Lohaghat	Lohaghat	Sui	Madua	Less production due to local variety	HYV-VL-149
14	Lohaghat	Lohaghat	Sui	Cabbage	Damping off in seedling stage	Introduction bioagents & vermin compost
15	Lohaghat	Lohaghat	Sui	Tomato	Fruit borer	Introduction pheromones traps & biopesticides
16	Lohaghat	Lohaghat	Sui	Nutritional garden	Low nutritional status in family	Introduction of seasonal HYV-vegetables
17	Lohaghat	Lohaghat	Sui	Citrus squash	Wastage of citrus fruits	Utilization of citrus fruit
18	Lohaghat	Lohaghat	Majhera	Citrus squash	Wastage of citrus fruits	Utilization of citrus fruit
19	Lohaghat	Lohaghat	Majhera	Soft toys	Unemployment in rural women	Income generation
20	Lohaghat	Lohaghat	Majhera	Vermi compost	Use of partially decomposed FYM	Introduction of vermi composting
21	Lohaghat	Lohaghat	Majhera	Soybean	Use of local variety	Intro. Of HYV-VL-47, PS-1092
22	Lohaghat	Lohaghat	Dungrifartyal	Beekeeping	Raring of honey bees through local methods	Introduction of bee hives with wax sheet
23	Lohaghat	Lohaghat	Dungrifartyal	Potato	Low production due to white grub	Introduction IPM to control white grub
24	Lohaghat	Lohaghat	Dungrifartyal	Wheat	Low production of wheat due to loose smut	Introduction of seed treatment
25	Lohaghat	Lohaghat	Dungrifartyal	Soybean	Low yield of soybean	Introduction of Rhizobium & PSB culture
26	Lohaghat	Lohaghat	Dungrifartyal	Rice bean	Low production	Introduction of new pulse crop
27	Lohaghat	Lohaghat	Thuamahra	Capsicum	Low production	Introduction high yielding hybrid variety
28	Lohaghat	Lohaghat	Thuamahra	Tomato	Low production	Introduction high yielding hybrid variety
29	Lohaghat	Lohaghat	Thuamahra	Nandua	Low yield due to local variety	Introduction HYV- VL-149

30	Lohaghat	Lohaghat	Kheskendey	Wheat	Loose smut of wheat	Control of loose smut through seed treatment
31	Pati	Pati	Pardhyani	Capsicum	Low yield due to bacterial belt	Introduction of IPM in capsicum
32	Pati	Pati	Pardhyani	Tomato	Low yield due to buckeye rot	Introduction IPM in Tomato
33	Pati	Pati	Pardhyani	Soybean	Low yield due to local variety	Introduction HYV, VL-47,PS-1092
34	Pati	Pati	Pardhyani	Fish	Low production due to local variety	Introduction of carp fish farming
35	Pati	Pati	Pardhyani	Wheat	Low production	Introduction VL-804, VK-829 ,VL-616, UP-2572
36	Pati	Pati	Pardhyani	Fish Duck farming	Low income from solo fish farming	Introduction of integrated fish farming
37	Pati	Pati	Josura	Brinjal	Low yield	Introduction of HYV
38	Pati	Pati	Josura	Tomato	Low yield	Introduction of hybrid varieties
39	Pati	Pati	Jousra	Protected cultivation	Poor nursery raising during off season	Introduction of polyhouse & polytunnel
40	Pati	Pati	Jousra	Gladiolus	Unemployment in rural youth	Income generation through floriculture
41	Pati	Pati	Jousra	Soybean	Low yield	Introduction of HYV VL-47,PS-1092
42	Pati	Pati	Sango	Groundnut	Low yield due to white grub	Introduction of IPM
43	Pati	Pati	Sango	Soybean	Low yield	Introduce HYV VL-47
44	Pati	Pati	Sango	Mandua	Low yield	Introduction of low variety VL-149
45	Pati	Pati	Kamlekh	Potato	Late blight	Increase production & profitability through IPM
46	Lohaghat	Lohaghat	Jhalan dev	Potato	Late blight	Increase production & profitability through IPM

8. Priority thrust areas

S.No.	Thrust area
1	Increasing productivity of crops & vegetables by using improved varieties & IPM Technology
2	Crop management, soil fertility & moisture management techniques.
3	Increasing productivity and profitability of orchards through: <ul style="list-style-type: none"> * Introduction of new fruit varieties * Rejuvenation management of fruits Plants
4	Increasing productivity of milk in cow and buffalo: <ul style="list-style-type: none"> * Artificial insemination for breed improvement. * Introduction of new fodder crops. * Deworming in large animals.
5	Increasing income & employment through diversification: <ul style="list-style-type: none"> * Cultivation of medicinal and aromatic plants * Mushroom production, beekeeping * Fish farming * Cultivation of Off season vegetables

	<ul style="list-style-type: none"> * Vegetable production under protected cultivation * Nursery raising of horticultural crops * Processing of fruits for Value addition.
6	Introduction of improved manual/ bullock drawn implements
7	Demonstration of moisture management techniques

Tehrigarhwal

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Sl. No.	Farming system/enterprise
1	Rice-wheat
2	Millet based
3	Vegetable based
4	Animal based (fodder/agro-forestry)

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Sl. No.	Agro-climatic Zone	Characteristics
1	Hill and mountain	Valleys ranging from 400-550 m along main drainage Ganga-Yamuna system, however, the secondary and tertiary watersheds along with streams and nalas ranges with valley locations from 700-1200 m. The mid hills faces moderate climate with temp. ranging from 12-31°C. Soil types are based on the rock physiographics i.e. geologically from quaternary origin and sedimentary rocks. Fertility status varies on the basis of humus content and embedded parental matters

Sl. No.	Agro-ecological situation	Characteristics
1	Irrigated lower hills	600-1200 m, 12 %, alluvial sandy loam, oak, pine, rice, wheat, potato, chillies
2	Rainfed lower hills	600-1200 m, 8 %, residual sandy loam, oak, pine, ragi, rainfed rice, wheat, citrus, mango
3	Mid hills south aspect	1200-1700 m, 36 %, sandy loam, pine <i>Grevia optiva</i> , <i>Celtis australis</i> , rainfed rice, ragi, wheat, peach, plum, citrus, potato, tomato
4	Mid hills North aspect	1200-1700 m, 24 %, brown forest soils, <i>Quercus</i> spp., rhododendron, ragi, rice, wheat, tomato, peas, plum, apricot, apple
5	High hills	1700-2500 m, 12 %, red and dark black clay soil, <i>Quercus</i> spp., rhododendron, amaranth, ragi, frenchbean, peas, cole crops, potato, apple, apricot, pear, walnut
6	Very high hills	2500-3500 m, 4 %, red and dark black clay soil, <i>Quercus</i> sp., <i>Abies pindraw</i> , <i>Picia smithiana</i> , amaranth, buckwheat, peas, cole crops, potato, apple, almond, apricot
7	Alpine pastures	>3500 m, 4 %, heavy textured red meadow soils, <i>Picia smithiana</i> , <i>Juniperus</i> spp., No crops and trees only alpine flora

3. Soil types

Sl. No.	Soil type	Characteristics	Area (%)
1.	Hill soils	Developed from graniferous biotite, scetics granites, gneiss, phyllites. These are brown to dark grayish in color. Acidic in reaction	Red loam – 15-20% Brown forest soil – 30% Podzol - 15% Other s– 35-40 %

4. Area, Production and Productivity of major crops cultivated in the district

Sl. No.	Crop	Area (ha)	Production, (ton)	Productivity (q/ha)
Kharif				
1.	Rice	13333	21005	15.75
2.	Maize	1702	1614	9.48
3.	Foxtail millet	16693	22846	13.69
4.	Barnyard millet	20824	30340	14.57
5.	Black gram	1422	590	4.15
6.	Linseed	491	90	1.83
7.	Soybean	331	253	7.64
Total millet		37517	53186	14.18
Total cereals		52552	75805	14.42
Total pulses		1422	590	4.15
Total Food grain		53974	76395	14.15
Total Oilseeds		822	343	4.17
Rabi				
1.	Wheat	30395	37376	12.3
2.	Barley	2232	2569	11.51
3.	Gram	6	6	10
4.	Veg. Pea	242	335	13.84
5.	Pigeon pea	702	525	7.48
6.	Lentil	931	761	8.17
7.	Rape seed and Mustard	789	807	10.23
Total cereals		32627	39945	12.24
Total pulses		1881	1627	8.65
Total Food grain		34508	41572	12.05
Total Oilseeds		789	807	10.23

5. Weather data 2008-09

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)	No. of rainy days
		Maximum	Minimum		
October	14.8 (39.8)	20.5(20.8)	19.4 (10.00)	76 (68)	2 (2)
November	15.7 (12.1)	18.0(17.2)	6.5 (6.2)	68 (62)	2 (1)
December	0.4 (38.9)	16.6 (13.8)	5.4 (3.5)	62 (63)	0 (2)
January	9.6 (61.9)	15.2 (11.7)	4.4 (2.2)	60 (60)	2 (4)
February	44.3 (92.5)	16.0 (13.2)	4.4 (3.10)	53 (64)	2 (5)
March	27.4 (82.7)	18.7 (17.9)	6.9 (6.6)	51 (56)	3 (5)
April	31.1 (57.2)	23.8 (23.6)	11.2 (10.6)	42 (46)	3 (4)
May	62.5 (75.7)	24.9 (25.4)	12.8 (13.6)	56	7
June	14.8 (117.3)	27.9 (25.8)	16.2 (15.9)	50	1
July	117.9 (265.3)	24.0 (23.9)	16.6 (16.8)	83	11
Aug	33.7 (255.1)	23.4(23.40)	16.4 (16.6)	87	5
Sept	200.5 (133.2)	21.9 (22.8)	14.5 (14.6)	89	8

Figure in parenthesis are average value corresponding to that month

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Crossbred	1077	5385 kg/ annum	2.5- 5.0 kg
Indigenous	51222	76833 kg/ annum	1.0- 1.5 kg
Buffalo	105939	264847.5 kg/ annum	2.0- 2.5 kg
Sheep	14811	14811 kg/ annum	1 kg wool/ year
Crossbred	-	-	-
Indigenous	-	-	-
Goats	101981	101981 kg/ day	1 kg / day
Pigs	2065	-	-
Rabbits	1204	301000 gm/ annum	250 gm/ annum
Poultry	29393		

7. Details of Operational area / Villages (2008-09)

S. No	Tehsil	Name of the block	Name of the village	Major crops & enterprise	Major problem identified	Identified Thrust Areas
1	Tehri	Jhaknidhar	Sondhar	Soybean and millet	Poor fertility and low yielding varieties	1*
2	Tehri	Chamba	Silkoti	Millet and vegetables	Poor fertility and low yielding varieties	7
3	Tehri	Chamba	Churatedhar	Millet and vegetables	Poor fertility and low yielding varieties	5
4	Tehri	Chamba	Thangdhar	Millet and vegetables	Poor fertility and low yielding varieties	5
5	Dhanolti	Jaunpur	Buraskhanda	Potato-radish	Poor fertility and low yielding var.	8
6	Narendra nagar	Narendra nagar	Baddal	Rice-wheat	Poor fertility and low yielding var.	1
7	Narendra nagar	Narendra nagar	Jajal	Rice-wheat	Poor fertility and low yielding var.	8
8	Narendra nagar	Narendra nagar	Kot	Rice-wheat	Poor fertility and low yielding var.	8
9	Tehri	Chamba	Veed	Rice-wheat	Nutritional deficiency	7
10	Tehri	Chamba	Sondhkoti	Rice –wheat	Nutritional deficiency	
11	Tehri	Chamba	Sanwali	Millet and wheat	Nutritional deficiency	
12	Tehri	Chamba	Srikot	Millet and wheat	Nutritional deficiency	
13	Narendra Nagar	Narendra Nagar	Khatiyar	Rice –wheat	Poor fertility and low yielding var.	
14	Narendra Nagar	Narendra Nagar	Pali	Rice –wheat	Nutritional deficiency	
15	Chamba	Thauldhar	Kirgini	Rice –wheat	Poor fertility and low yielding var.	
16	Chamaba	Chamba	Kharikhal	Rice –wheat	Nutritional deficiency	

8. Priority thrust areas

Crop / Enterprise	Thrust area
Wheat	Integrated nutrient management
Wheat	Varietal improvement
Wheat	Integrated Pest Management
Oat	Varietal improvement
Barseem	Varietal improvement
Soyabean	Integrated nutrient management
French Bean	Varietal improvement
French Bean	Integrated Crop Management
Urd	Varietal improvement
Urd	Integrated nutrient management
Rice Bean	Varietal improvement
Ricebean	Integrated Crop Management
Toria	Varietal improvement
Toria	Integrated nutrient management
Lentil	Varietal improvement
Rice	Varietal improvement
Pea	Varietal improvement
Rice	Integrated nutrient management
Finger Millet	Varietal improvement
Finger Millet	Weed control
Barnyard Millet	Integrated nutrient management
Amaranth	Varietal improvement
Amaranth	Integrated Pest Management
Maize	Varietal improvement
Maize	Integrated Nutrient Management
Multi purpose tree species	Natural resource management
Pyrethrum , Kuth	Natural resource management
Paddy Thresher	Drudgery Reduction
Large Animal	Productivity Increase
Vermi Composting	Income Generation
Nutrition Gardening	Nutritional improvement

Nainital

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Sl.No.	Farming System/ enterprise
Farming System :	The farming system components include field crop production; horticulture crop-fruits, vegetables, spices, medicinal and aromatic plants, mushrooms, bee keeping, sericulture, animal husbandry and fish culture.
1. Field Crops	The major crops grown in the district are wheat, rice, maize, soybean and sugarcane. Minor crops are Mandua, Urd, lentil, chickpea, mustard, Gahat, Rajmah. As a result of diversification, area under wheat and rice, the two major crops has decreased and part of this area has gone to vegetables. Soybean used to be a very important and high productivity crop, but due to diseases and insufficient input use its production has been decreased during last few years.
2. Vegetable & Spice crops	The major vegetable crops are peas, tomato and cauliflower. Other crops with limited area are French bean, cabbage, capsicum, okra, radish and brinjal. Among spices onion, garlic and ginger are grown. Area under these crops has been increasing and the remarkable increase has been found in the area of tomato crop, which is grown in all the blocks of the district, but there is more concentration in plain areas i.e., Haldwani, Ramnagar and Kotabagh blocks.
3. Fruit crops	Main fruit crops of plains and lower hills (sub-tropical climate) are mango, citrus and litchi. In homestead, people have trees of jackfruit, guava and papaya. In mid and upper hills, apple, peach, plum, pear, apricot and walnut are grown. Due to change in climatic conditions and reduced snowfall, area of apple cultivation is declining. New apple orchards are not being planted and many old ones have been cut due to low productivity. On the other hand, in the same area, numbers of peach orchards are increasing.
4. Seed availability	The use of improved seeds in the district for any crops is insignificant. Improved seed being one of the key input in any production program, negligence of good quality resulting in low productivity of all the crops.
5. Animal husbandry	In this district, there is large cattle population; mostly the cows are of small size with very low productivity. Cross bred cows are few in number and mostly in plain areas. There is no fodder production as such in hills. Grass collected from forest or crop residues are fed as such without chopping. The number of buffaloes is increasing as people are looking for alternative occupations to find work and some income. Number of poultry is increasing particularly in Haldwani block which is in foothills and very well connected to the market.
6. Farm machines	The plain area of the district is well mechanized. The common farm machines used are tractors, harrow and cultivators, threshing machines and sprayers. In hills, the main implement is bullock drawn plough used for land preparation. Rests of the operations are done by hand tools which are mostly made locally.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Agro-climatic region and zones :

Outer Himalayan zone (500-1250m, AMSL) and Lesser Himalayan Zone (1250-2700 m AMSL). The Nainital district comes under agro-climatic zone 1 (or A), which is western Himalayan region. This ACZ is further divided into two sub zones, under the National Agricultural research project (NARP)

1. Hill zone
2. Bhabar and Tarai zone

Nainital district comes under the AER 14. The property of this region is given below

AER	Map unit	Physio - graphy	Soils		Climate	Precipitation (mm)	PET (mm)	Water deficit (mm)	LGP (days)	Land utilization type	Forest type
			Characteristics	Taxonomy							
14	A15C/B/A/4/5	Western Himalaya	Shallow & medium, loamy, Brown forest & Podzolic soils with low and medium AWC; and deep loamy Tarai soils with high AWC	Eutrocherts, Hapludals, Dystroc hrepts, Hapludolls, Haplohumults, Haplumbrepts	Warm, sub humid & per humid	1600-2000	800-1300	300-500	180-210(+)	Wheat, millets, maize and rice	Moist, temperate, subtropical, pine & subalpine forest

3. Soil types

Sl.No.	Soil Type	Characteristics	Area in ha
2.3.1	Sandy loam	Sandy, Fertile, Clay soil	Not Available
2.3.2	Aluvial sandy loam	Sandy, Fertile, Clay soil	
2.3.3	Brown forest soil	Brown forest soil	
2.3.4	Red Black clay	Red black, clay soil	

4. Area, Production and Productivity of major crops cultivated in the district

Sl.No.	Crop	Area(ha)	Production (qtl.)	Productivity (qtl./ha)
2.4.1	Rice	12484	35616	28.53
2.4.2	Maize	7949	11936	16.95
2.4.3	Mandua	370	5387	14.56
2.4.4	Wheat	26630	63912	24.00
2.4.5	Soybean	9876	1204	12.20
2.4.6	Lentil	634	443	7.0
2.6.7	Veg. pea	2522	10088	40
2.6.8	Tomato	2075	17830	85.9

5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
October	0.0	21.5	14.5	65
November	0.0	18.0	8.2	8.5
December	4.5	19.5	7.5	82
January	1.5	20.5	14.1	52
February	2.5	21.5	11.5	57
March	0.0	25.6	11.6	88
April	22.5	23.2	13.5	68
May	5.8	29.6	18.8	77
June	10.6	32.9	22.0	85
July	44.1	30.5	23.0	84
August	91.5	23.2	19.5	83
September	178	32.0	22.8	91

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production
Cattle		
<i>Crossbred</i>	22516	89759 mt of milk
<i>Indigenous</i>	80678	
Buffalo	110317	
Sheep	203	
<i>Crossbred</i>	-	
<i>Indigenous</i>	-	
Goats	70243	1650 kg of wool
Pigs	2153	
<i>Crossbred</i>		
<i>Indigenous</i>		
Rabbits		
Poultry	220343	61.189 lakh eggs
<i>Hens</i>		
<i>Desi</i>		
<i>Improved</i>		
<i>Ducks</i>		
<i>Turkey and others</i>		
<i>Indigenous</i>		
Fish		
<i>Marine</i>		
<i>Inland</i>		
<i>Prawn</i>		
<i>Scampi</i>		
<i>Shrimp</i>		

7. Details of Operational area / Villages

Sl.No.	Taluka/ Tehsil	Name of the Block	Name of Village	Major crops and enterprise	Major problem identified	Identified thrust areas
2.7.1	Nainital	Bhimtal	Rusi	Vegetable	1. Insects and diseases management 2. Micro and macro nutrient deficiency	<ul style="list-style-type: none"> • Integrated Pest management • Production and storage of off season vegetables

2.7.2	Haldwani	Haldwani	Bhawan Singh Naved	Rice, Sugarcane, Wheat, Toria	1. Disease and insect management	<ul style="list-style-type: none"> To increase the cropping intensity using improved variety
2.7.3	Nainital	Bhimtal	Sariatal	Rice, Wheat, coriander	1. Lack of improved variety	<ul style="list-style-type: none"> Integrated nutrient management Integrated Pest Management
2.7.4	Nainital	Bhimtal	Devidhura	Vegetables	1. Disease management	<ul style="list-style-type: none"> Integrated Pest Management
2.7.5	Haldwani	Haldwani	Jaipurkheema	Soybean, Urd, Wheat	<ol style="list-style-type: none"> Lack of improved variety Lack of improved breeds of livestock 	<ul style="list-style-type: none"> To increase the cropping intensity using improved variety Management of livestock
2.7.6	Dhari	Bhimtal	Chafi	Vegetables	1. Disease and insect management	<ul style="list-style-type: none"> Production and storage of off-season vegetables IPM techniques
2.7.7	Dhari	Ramgarh	Alchona	Vegetables	2. Disease and insect management	
2.7.8	Haldwani	Kotabagh	Kaladhungi bandobasti	Soybean, Wheat, Lentil, Urd	<ol style="list-style-type: none"> Lack of improved variety Improper nutrient management 	<ul style="list-style-type: none"> To increase the cropping intensity using improved variety Integrated nutrient management
2.7.9	Nainital	Bhimtal	Matiyali	Soybean, Urd, Wheat	<ol style="list-style-type: none"> Lack of improved variety Improper nutrient management 	
2.7.10	Dhari	Okhalkhanda	Jadapani	Vegetables	<ol style="list-style-type: none"> Water storage devices Lack of quality fodder Improper feeding of Cattle 	<ul style="list-style-type: none"> Construction of water harvesting tank Popularization for forage cultivation to fulfill the fodder requirement Increasing livestock productivity through improvement in health, nutritional status and breeds of cattle
2.7.11	Dhari	Dhari	Sarna	Vegetables	<ol style="list-style-type: none"> Lack of improved variety Disease management in vegetable 	<ul style="list-style-type: none"> Production and storage of off-season vegetables IPM techniques
2.7.12	Koshi Kotali	Betalghat	Ghangreti	Rice, Wheat	1. Lack of Improved variety	<ul style="list-style-type: none"> Production and storage of off-season vegetables
2.7.13	Koshi Kotali	Betalghat	Khairni	Rice, soybean, wheat, barley	<ol style="list-style-type: none"> Lack of Improved variety Improper disease and insect management 	<ul style="list-style-type: none"> IPM techniques To increase the cropping intensity using improved variety
2.7.14	Dhari	Dhari	Palda	Vegetables & Rice, Wheat	1. Timely availability of seeds of improved varieties.	<ul style="list-style-type: none"> To increase the cropping intensity using improved variety Diversification of agriculture to make small and marginal holding more profitable
2.7.15	Ramgarh	Ramgarh	Sakuna	Vegetables & Horticulture	1. Lack of post harvest techniques of local	<ul style="list-style-type: none"> To aware the farmers about

					fruits and vegetables	the post harvest techniques <ul style="list-style-type: none"> • Imparting vocational training in storage and processing for self employment
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8. Priority thrust areas

SI.No.	Thrust area
2.8.1	District has large area with scattered land holding, low use of inputs in hills, hence productivity of the area has to be increased by increasing cropping intensity with the use of improved varieties
2.8.2	Production and storage of off-season vegetables.
2.8.3	Technology for the cultivation of medicinal and aromatic plants needs to be disseminated
2.8.4	Technology for composting of on and off farm wastes need to be disseminated.
2.8.5	Entrepreneurship development for rural and farm women.
2.8.6	Management and use of improved breeds of livestock.
2.8.7	Popularization for forage cultivation to fulfill the fodder requirement of the hilly area.
2.8.8	Integrated pest and disease management techniques needs to be disseminated.
2.8.9	Integrated nutrient management techniques needs to be disseminated.
2.9.0	Imparting vocational training in storage and processing for self employment
2.9.1	Diversification of agriculture to make small and marginal holding more profitable
2.9.2	Increasing livestock productivity through improvement in health, nutritional status and breeds of cattle

Chamoli

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Farming system/enterprise
Agriculture/Horticulture/Animal husbandry.

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S.No.	Agro-climatic Zone	Characteristics
1	Sub tropical (1000 -1700 m.amsl)	Rainfed & irrigated both types of farming situation is available. Sandy loam soils & Humus soils is present.
2	Temperate (>1700 m.amsl)	

S.No.	Agro ecological situation	Characteristics
1	Lower hills / valley (<1000 m.amsl)	Rainfed and irrigated farming situation was found. Wheat-paddy rotation is frequently used by farmers. In rainfed condition Soybean, Mandua, Jhangora and directed seeded paddy are also grown. Mango and Malta were produced by the farmers. In vegetables Cabbage, Capsicum, Radish, French bean, Tomato, Potato, Brinjal, Summer squash & Chilli are grown.
2	Mid hills (1000-1700 m.amsl)	Majority of rainfed and somewhere irrigated farming situation was found. In irrigated area wheat-paddy rotation is frequently used by farmers. However, Paddy-wheat-soybean / mandua-fallow rotation was adopted by the farmers. Pear, Apricot and Plum were grown. In vegetables Cabbage, Capsicum, Radish, French bean, Tomato, Potato, Brinjal, Summer squash & Chillis are grown.
3	High hills (1700-2200 m.amsl)	Mostly Rainfed farming situation was found. Cultivation of Ramdana, Mandua, Jhangora and Wheat was prevalent. Potato and ramdana are main cash crops of this region. Vegetables are grown in kitchen garden only. In horticulture Apple, Almond and Walnut were grown.
4	Very high hills (>2200 m. amsl)	Rainfed and alpine regions. Mostly temperate fruits, Medicinal and aromatic plants and Alpine meadows are found.

3. **Soil types:** Not available.

4. Area, Production and Productivity of major crops cultivated in the district

S.No.	Crop	Area(ha)	Production (Qtl)	Productivity (Qtl/ha)
1	Potato	12341	15717	12.74
2	Paddy	15311	20485	13.38
3	Wheat	1218	1257	10.32
4	Barley	194	226	11.65
5	Maize	10888	17389	15.97
6	Mandua	2327	4001	17.19
7	Jhingora	419	174	4.15
8	Ramdana	62	51	8.18
9	Urd	9	12	13.84
10	Gahat	117	88	7.48
11	Arhar	542	554	10.23
12	Rajma	44	8	1.83
13	Lentil	120	92	7.65

14	Bhatt	361	2445	67.73
15	Other pulses	523	3010	57.55
16	Till	422	3495	82.82
17	Soybean	702		88.39
18	Veg pea	35	262	74.86
19	Toria	98	348	34.69
20	Onion	301	2640	81.73
21	Total Cereal crops	200	2045	102.25
22	Total Pulses	90	840	93.33
23	Total Oilseed	3080	69411	225.36
Fruits:	Apple	3864	5000	12.93
	Pear	1056	1100	10.42
	Peach	1179	1400	11.87
	Plum	871	500	5.74
	Apricot	843	750	8.90
	Walnut	2042	400	1.96
	Citrus fruits	3312	8600	25.97
	Mango	564	800	14.18

5. Weather data: Include month wise data of Temp. Max. Min. RH Max. Min., Rainfall and Rainy day

Month	Temperature °C		Relative Humidity %		Total Rainfall (mm)	Rainy days
	Max.	Min.	Max.	Min.		
Oct 2008	18.91	11.16	77.77	56.39	320	03
Nov 2008	14.78	7.07	75.03	57.76	80	01
Dec 2008	12.63	5.17	67.80	47.80	00	-
Jan 2009	12.83	4.83	59.35	36.32	85	02
Feb 2009	14.16	5.03	58	35.10	190	02
March 2009	17.90	7.39	57.77	35.48	00	-
April 2009	20.8	9.60	70.00	32.00	930 ml	03
May 2009	21.7	12.10	79.00	42.00	2875ml +hailstone	12
June 2009	24.8	18.30	89.00	52.00	880ml	05
July 2009	25.0	19.10	88.00	64.00	5700ml	17
Aug 2009	24.9	19.30	87.00	71.00	5060ml	15
Sept 2009	23.4	16.30	81.00	70.00	5771ml	11

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	243520	Not available	
Crossbred	15367		
Indigenous	173000		
Buffalo			
Sheep	45651		
Crossbred	8070		
Indigenous	37581		
Goats	70138		

Pigs	374	
Crossbred	72	
Indigenous	302	
Rabbits	934	
Poultry	18864	

7. Details of Operational area / Villages (2008-09)

S.No.	District	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Chamoli	Karnprayag	Langasu	Wheat, Rice, Urd, Mustard and Livestock	<ul style="list-style-type: none"> • Lack of interest of new generation towards agriculture. • Gradual declining of Malta, Apple, Pear & Peach trees due to old varieties & old plantation. • Problem of insect pest & disease in Ramdana (Leafwebber), Tomato (Fruit rot & Fruit borer), Potato(White grub), Vegetable (Cut worm), Summer squash (Fruit rot) etc. • Still using traditional method of composting • Imbalanced use of plant nutrients • Late and poor germination in vegetable nursery due 	<ul style="list-style-type: none"> • To inculcate interest of rural youth in agriculture through vocational training in schools /colleges and visit of college going students on KVK farm. • Production of off-season vegetables. • Diversification of agriculture to make small and marginal holdings more profitable. • Improving economic level of far-located villages / farmers by introducing cultivation of European vegetable i.e. low volume high value crops. • Increasing crop productivity by adopting improved production technology i.e. use of high yielding varieties, use of balance dose of fertilizers including compost and bio-fertilizer application, adopting timely and appropriate measures of plant
2	Chamoli	Pokhari	Jalasu	Wheat, Paddy, Mandua, Urd, Soybean, Sarson, Gahat, Tur/Arhar, Tomato, Brinjal, Pea, Methi, Cabbage, Mango, Guava, Peach, Orange & Malta		
3	Chamoli	Dewal	Ullangra	Paddy, Mandua, Gahat, Bhatt, Soybean, Urd, Tuar and Livestock & Poultry		
4	Chamoli	Tharali	Sunautalla	Wheat, Rice, Soybean & Livestock		
5	Chamoli	Gairsain	Malsi	Potato, Ramdana, Mandua & Paddy & Livestock (Cow, buffalo & goat)		
6	Chamoli	Narayanbagar	Maltura	Paddy, Wheat, Cow pea, Cauliflower, Onion, Tomato & Brinjal		
7	Chamoli	Joshimath	Merag	Off season vegetables (Cabbage-all round the year), Chilli, Capsicum, Onion, Cauliflower & Potato, Makka,		

				Wheat, Paddy, Rajma & Ramdana and livestock (cows, buffalos, sheep & goats)	to cold climate.	protection, etc.
8	Chamoli	Dasholi	Mayapur	Soybean (major crop), Paddy, Urd, Mandua, Ramdana & Jhangora, Wheat, Torai, & Lentil and livestock	<ul style="list-style-type: none"> • Non availability of seeds and vegetable seedlings in time. • Lack of awareness for health and hygiene. • Malnutrition in children 	<ul style="list-style-type: none"> • Production of crops, vegetable, fruits, medicinal and aromatic plants in organic mode. • Increasing crop-productivity under rainfed situations by using rainwater harvesting technology and other water conservation techniques.
9	Chamoli	Tharali	Thala	Rice, Wheat, Barley, Ragi, Ramdana, Jhangora, Gahat, Soybean, Masoor, Urd, Bhatt, Mustard, Til, Lahi, Palak, Pea, Cabbage, Bari Elachi, Malta, Neembu, Peach & Livestock	<ul style="list-style-type: none"> • Poor growth & low milk yield of cattle. • Poor egg production in poultry. • Low penetration of mass media in the villages. 	<ul style="list-style-type: none"> • Increasing livestock productivity through increasing green fodder availability and improving nutritional status. • Diversifying Livestock production towards Poultry Production.
10	Chamoli	Ghat	Bhainta	Paddy, Wheat, Mustard, Lentil, Mandua, Jhangora & Rajma, Radish, Tomato, Brinjal, Cucurbits, Potato and livestock		<ul style="list-style-type: none"> • Introduction of low draft improved agriculture implements. • Empowerment of women through their training and participation in the income generating activities.
11	Chamoli	Tharali	Gwaldam	Rice, Wheat, Barley, Ragi, Ramdana, Jhangora, Gahat, Soybean, Masoor, Urd, Bhatt, Mustard, Til, Lahi, Palak, Pea, Cabbage, Bari Elachi, Malta, Neembu, Peach & Livestock		
12	Chamoli	Tharali	Chidinga state			
13	Chamoli	Tharali	Chidinga Khalsa			
14	Chamoli	Tharali	Sunla			

8. Priority thrust areas

S.No.	Thrust area
1	To inculcate interest of rural youth in agriculture through vocational training in schools /colleges and visit of college going students on KVK farm.
2	Production of off-season vegetables.
3	Improving economic level of far-located villages/farmers by introducing European vegetable and cultivating low volume high value crops.
4	Increasing crop productivity by adopting improved production technology i.e. use of high yielding varieties, use of balance dose of fertilizers including compost and bio-fertilizer application, adopting timely and appropriate measures of plant protection, etc.
5	Increasing crop-productivity under rainfed situations by using rainwater harvesting technology and other water conservation techniques.
6	Increasing livestock productivity through increasing green fodder availability and improving nutritional status.
7	To improve the poultry breed for survivability, bodyweight & egg production.
8	Empowerment of women through their training and participation in the income generating activities.

Haridwar

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Paddy-Wheat,
2	Groundnut-Lentil,
3	Sugarcane-Ratoon-Wheat

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	Upper Gangetic Plain Region	Tarai and Bhabar

S. No	Agro-ecological situation	Characteristics
1	Khanpur and Luksar	Water logging condition.
2	Bhagwanpur and some parts of Bahadarabad	Water level is very low.
3	Roorkee and Narson	Irrigated.

3. Soil types

S. No	Soil type	Characteristics	Area (ha)
1	Sandy loam to loam	Sandy loam soil	1200000

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qts)	Productivity (Qt/ha)
1	Paddy	11654	225280	19.33
2	Maize	906	12860	14.19
3	Urd	141	410	3.70
4	Groundnut	1431	15700	10.97
5	Seasamum	269	1010	3.75
6	Sugarcane	76636	46747	610
7	Wheat	47264	1096	23.20
8	Mustard	300	3900	13.00
9	Lentil	247	1827.8	7.4

5. Weather data

Year	Rainfall (mm)	Temperature °C		Relative Humidity (%)	Monthly No of rainy days
		Maximum	Minimum		
2004	904.3	30.5	18.0	63.4	5.3
2005	1146.1	29.8	17.3	63.1	4.2
2006	831.3	30.1	18.4	56.7	5.7
2007	1074.3	30.7	17.2	56.3	5.2
2008	1141.0	30.9	18.1	59.6	5.1

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
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Cattle	139738		
Crossbred	72030	Milk-564000 lit/day Egg-24.444 lakh/year wool-2210 thousand kg/year Meat-0.688 lakh kg/year	Ave- 3.5 lit/day
Indigenous	67708		
Buffalo	272566		Ave-4.0 lit/day
Sheep	4287		
Goats	26160		
Pigs	9855		
Rabbits	166		
Poultry	47243		
Fish	192.301 ha		

7. Details of Operational area / Villages (2008-09)

S. No	Name of the block	Name of the village	Major crops	Major problem identified	Identified Thrust Areas
1	Bahadarabad	Bongla, Panjanhedi, Bisanpur Kundi, Ranimazara, Pherupur, Badshahpur.	Sugarcane, Wheat, Paddy, Til	Wild animal menace. Infertility in animals. Imbalance feeding practices.	Introduction of integrated crop production.
2	Roorkee	Daulatpur, Dhanaura, Emlikhera, Dariypur, Hakimpur, Mewad, Belda, Beldi, Tanshipur	Sugarcane, Wheat, Paddy, Til	Wild animal menace. Seed replacement, Weed Problem. Infertility in animals. Imbalance feeding practices.	Improving livestock productivity.
3	Bhagwanpur	Khanpur, Buggawala Premrajpur, Banjarawala	Sugarcane, Wheat, Paddy, Til	Wild animal menace. Introduction of hybrids. Infertility problem in animals. Imbalance feeding,	Improving livestock productivity.
4	Narson	Naseerpur, Narson, Harchandpur, Thithki Mohhampur jutt, Mandawali, Libberhedi,	Sugarcane, Wheat, Paddy,	Wild animal iproblems, Weed Problem. Infertility in animals. Imbalance feeding practices.	Introduction of integrated crop production system
5	Luksar	Matoli, Nagla Kitab Peperi. Pikampur, Jeetpur, Sultanpur,	Sugarcane, Wheat, Paddy,	Whitegrub, Wild animal problem. Infertility in animals. Imbalance feeding practices.	Introduction of integrated crop production system.
6	Khanpur	Lalchandwala, Sherpur bela	Sugarcane, Wheat, Paddy,	Wild animal menace. Infertility in animals. Imbalance feeding practices.	Introduction of integrated crop production system.

2.8.1 Priority thrust areas

1. Increasing crop productivity by adopting improved production technology i.e. use of high yielding varieties, use of balance dose of fertilizers including compost and bio-fertilizer application, adopting timely appropriate measures of plant protection etc.
2. Production of field crops, vegetables, fruits and medicinal plants in organic mode.
3. Diversification of agriculture to make small and marginal holdings more profitable.
4. Upliftment of birds and livestock productivity through improved rearing and integrated practice.
5. Emphasis on cultivation of spices, medicinal and aromatic plants.
6. Ensure round the year green fodder availability for livestock.

7. IPM in crop management

2.8.2 Priority Thrust Areas

Crop/Enterprise	Thrust area
Wheat and Paddy	Integrated crop Management, INM ,
Sugarcane	Integrated Pest Management
Litchi and Pea	Integrated Nutrient Management
Lentil and chickpea	Soil moisture conservation*
Poultry	Income and Employment Generation
Cattle and Buffaloes	Livestock Production Improvement
Poultry and Fish	Integration of fish and poultry

Almora

1. Major farming system/enterprises (based on the analysis made by the KVK)

S. No.	Farming system/enterprise
1.	Rice-Wheat (Irrigated)
2.	Rice-Potato (Irrigated)
3.	Spring Rice-Wheat- Mandua - Fallow (rain fed)
4.	Cabbage, Tomato, Capsicum, French bean- Veg pea/ Dunagiri round radish/ Wheat (rain fed)
5.	Soybean/ Black Bhat/ Horse Gram/ mandua- Wheat/ lentil/ Toria(Mixed/ Sole) (rain fed)

2. Description of Agro climatic zone & major agro ecological situations (based on soil and topography)

S. No.	Agro-climatic Zone	Characteristics
1.	Hill and Mountain	The area falls under middle and upper shibalik ranges and has the most fragile ecosystem. Geographically the area is of latest origin and is prone to excessive soil erosion. Due to varied physiography high drain, sloppy and undulating topography the aspect varies very frequently and as such the development of the irrigation system is very difficult.

S. No.	Agro ecological situation	Characteristics	Block covered	Altitude (m)	Slope	Rainfall (mm)
1.	ASE-1	High altitude, sandy loam, south slope, rainfed	Dholadevi, Bhaisiachana	1600	South	1100
2.	AES-2	Medium altitude, loam, irrigated	Takula	1400	South	900
3.	AES-3	High altitude, gravely sandy loam, rainfed	Hawalbagh, Lamgarha	1700	North	1000
4.	AES-4	Medium altitude, sandy loam, rainfed	Tarikhet, Dwarahat	1400	West	900
5.	AES-5	Low altitude, sandy loam, irrigated	Chaukhtia, Bhikiasen	950	Valley	850
6.	AES-6	High altitude, sandy loam, rainfed	Syalde, Sult	1600	East	1000

3. Soil type/s

S.No.	Soil type	Soil order	Characteristics	Area (ha)
1.	Red loam	Entisol	Slopy land, rainfed, moderate to severe erosion, low in N,P, Ca, Mg	N.A.
2.	Brown forest soils	Inceptisol	Rainfed, shallow soil depth, high in org. C, N, low in P, deficient in micronutrients	N.A.
3.	Podzol soils	Alfisol	Rainfed, sloppy land, low in P & exchangeable Ca, Mg and deficient in Zn, B, Cu, Mo	N.A.
4.	Meadow soils	Mollisol	Rainfed, sloppy land, high in org. C, low in P and exchangeable Ca, M and deficient in Zn,	N.A.

			B, Cu, Mo	
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4. Area, Production and Productivity of major crops cultivated in the district

S.No	Crop	Area(ha)	Production (Qtl)	Productivity(Qtl/ha)
A. Crops				
1.	Wheat	44955	489110	10.88
2.	Mandua (Finger millet)	36053	424344	11.77
3.	Paddy	23583	241018	10.22
4.	Sava (Barnyard millet)	16538	189029	11.43
5.	Barly	2988	30806	10.31
6.	Maize	2211	28190	12.75
B. Pulses				
1.	Lentil	1328	12589	9.48
2.	Black gram (Urd)	948	8987	9.48
3.	Horse gram (Gahat)	231	1617	7.0
C. Oilseed				
1.	Oilseed	1041	8442	8.11
2.	Soybean	247	2964	12.0
3.	Til	476	1071	2.25
D. Fruits				
1.	Apple	1550	141450	91.25
2.	Pear	3255	342400	105.19
3.	Peach	1520	196610	129.34
4.	Plum	2550	200900	78.78
5.	Khumani	2246	172140	7.56
6.	Walnut	2758	81230	29.45
7.	Limp	4169	329500	79.03
8.	Mango	4512	217360	48.17
G. Vegetables				
1.	Potato	2375	527120	221.90
2.	Veg. Pea	550	29420	53.50
3.	French bean	520	41740	78.3
4.	Cabbage	158	31330	188.3
5.	Onion	200	13200	66.0
6.	Capsicum	370	10570	28.7
7.	Tomato	245	46510	189.8
8.	Total Vegetables	3741	395660	105.76

5. Weather data : Not Available

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)	
		Maximum	Minimum	I	II
October, 2008					
November, 2008					
December, 2008					
January, 2009					
February, 2009					
March, 2009					
April, 2009					

May, 2009					
June, 2009					
July, 2009					
August, 2009					
September, 2009					

Source : VPKAS, Almora

6. Production and Productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle		-	-
Crossbred (Cows and Bulls)	18315	-	-
Indigenous	228846	-	-
Buffalo	113054	-	-
Sheep	4890	-	-
Goat	171732	-	-
Pigs	771	-	-
Donkey	17	-	-
Poultry	62579	-	-
Fish	-	6000 kg/Year	-

7. Details of operational area/villages (2008-09)

S. No	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust areas
CROP PRODUCTION						
1.	Ranikhet	Tarikhet	Naugaon Bhadgaon	Soybean, Horse Gram Mandua Rice Wheat Rapeseed mustard Lentil	Low yield of Crops due to : 1. Non adoption of recommended varieties 2. No or imbalance fertilizer use 3. Non availability of local specific for improved varieties for rain fed 4. Non adoption of recommended weed control measures 5. Non adoption of recommended control measures of insects and diseases 6. Non adoption of moisture conservation measures 7. Non scientific preparation and use of farm yard	Increasing productivity of crops by improved varieties, crop management, soil fertility and moisture management technologies.
2.	Dwarahat	Dwarahat	Jamar Kafra	Soybean Mandua, Jethi rice Lentil Wheat		
3.	Bhikiasen	Bhikiasen Syalde	Hauli	Lentil Wheat Soybean		

4.	Chaukhutia	Chaukhutia	Paithana Timali	Gahat Finger millet	manure	
			Chandikhet Pangaon	Gahat Soybean Hybrid rice Transplanted rice Wheat Lentil	8. Lack of awareness of usefulness of soil testing 9. Lack of awareness of bio-fertilizers and bio inoculants	
5.	Almora	Hawalbagh	Gudkande Salla Ruatela Paser Naula	Wheat Soybean Horse gram Fingermillet Spring rice Transplanted rice Hybrid rice		
6.	Almora	Bhaisiachhanna		Hybrid rice		
7.	Someshwar	Takula	Chhani Manan Tana	Lentil Wheat Spring rice Transplanted rice Hybrid rice		

HORTICULTURE

1.	Ranikhet	Tarikhet	Bajol Naugaon Bajeena Chapar Baniadigi Kalnu	Onion Capsicum & other Vegetable crop	Low yield of Vegetables due to : 1. Non adoption of recommended varieties 2. Non availability of local specific for improved varieties for rain fed 3. Non adoption of recommended control measures of insects and diseases 4. Non adoption of moisture conservation measures Low yield of Fruits: 1. Non adoption of recommended package of practices 2. Lack of awareness and knowledge of grafting, pruning and top working 3. Low yielding traditional	Increasing productivity of vegetables by improved varieties, crop management, soil fertility and moisture management technologies.
			Shivali	Apple		Increasing productivity and profitability of orchards through introduction of new fruit varieties and scientific management of orchards.
2.	Dwarahat	Dwarahat	Dudholi Charee	Vegetables and temperate fruits		

					varieties 4. Damage due to insects and disease	
SOIL HEALTH & FERTILITY MANAGEMENT						
1.	Ranikhet	Tarikhet	Patali	Veg pea	Low yield of Crop/Vegetables due to poor soil heath : 1. No or imbalance fertilizer use 2. Non adoption of moisture conservation measures 3. Non scientific preparation and use of farm yard manure 4. Lack of awareness of usefulness of soil testing 5. Lack of awareness of bio-fertilizers and bio inoculants	Increasing productivity of field crops, vegetables and fruits by soil fertility, organic input production and soil moisture management technologies
2.	Someshwar	Takula	Manan			
HOME SCIENCE						
1.	Ranikhet	Tarikhet	Kunelakhet Bhadgaon	Nutrition garden	Lack of awareness about balanced diet and nutritive value of food Lack of awareness about value addition of locally available natural resources : Surplus vegetables, fruits, unconventional fibers, coarse millets and flowers.	Improvement of health status by incorporating fruit and vegetable in diet Upliftment of economic status of rural mass through diversified agriculture and value addition.
2.	Almora	Hawalbagh	Khatyari Matela Tamra nagri			
AGROFORESTRY						
1.	Dwarahat	Dwarahat	Kafra	Fodder Oat	Less availability of green fodder : Non adoption of HYV Lack of knowledge about fodder production No proper utilization of land Fodder scarcity	Increasing the fodder productivity by promotion of HYV and proper land management
2.	Chaukhutia	Chaukhutia	Tadiyal Bhakhali Basbeena	Berseem Oat		
			Silagari	Turmeric	Low yield of Turmeric due to use of old traditional seed	Increasing the turmeric yield by the promotion of HYV under agroforestry system
3.		Hawalbagh		Fodder	Less availability of green	

4.	Almora Someshwar	Takula	Padula Tana	grass Berseem	fodder : Non adoption of HYV Lack of knowledge about fodder production No proper utilization of land Fodder scarcity	Increasing the fodder productivity by promotion of HYV and proper land management
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8. Priority thrust areas

S. No	Thrust area
1.	Increasing productivity of crops by using improved varieties and crop management
2.	Increasing productivity of vegetables by improved varieties, crop management, soil fertility and moisture management technologies.
3.	Increasing productivity and profitability of orchards through introduction of new fruit varieties and scientific management of orchards.
4.	Increasing productivity of crops, vegetables and fruits by soil fertility, organic input production and moisture management technologies
5.	Upliftment of economic status of rural mass through diversified agriculture and value addition.
6.	Improvement of health status by incorporating coarse millet in diet
7.	Increasing the fodder productivity by promotion of HYV and proper land management

Paurigarhwal

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Area	Farming system/enterprise
1.	Bhabar irrigated	Crop: Rice, wheat, sugarcane, rapeseed-mustard, potato, lentil, mango, guava, and litchi Livestock: Buffalo and cattle, poultry
2.	Irrigated lower hills	Crop: Rice, wheat, onion, chillies, peas, potato, radish, cauliflower, cabbage, pulses, soybean, mango, guava, papaya, plums and peaches. Livestock: Buffalo, goat and cattle, poultry
3.	Rainfed lower hills	Crop: Finger millet, maize, rice, wheat, pulses, mango, guava, plums and peaches, papaya Livestock: Buffalo, cattle, and goat, poultry
4.	Mid hills	Crop: Barnyard millet, finger millet, French bean, rice, wheat, soybean, French Beanpotato, tomato, peas, cole crops, pulses, citrus, plums and peaches Livestock: Buffalo, cattle, sheep and goat, poultry
5.	High hills	Crops: Barnyard millet, amaranth, finger millet, cole crops, French Bean, potato, peas, peaches, French bean, plums, pear, citrus, stone fruits Livestock: Cattle, sheep, goat, poultry

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic zone	Characteristics	Agro ecological situation	Characteristics
1	Zone A	upto 1000 m	Bhabar Irrigated	Alluvial mixed with boulders and shingles
			Low hills Irrigated	Alluvial sandy soil
			Low hills (Rainfed)	Residual sandy loam
2	Zone B	1000-1500 m	Mid hills	Sandy loam
3	Zone C	1500-2400 m	High hills	Red to Dark

3. Soil types Not available

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Apple	5658	2595	4.58
2	Pear	997	2195	22.01
3	Peach	698	1255	17.97
4	Plum	808	160	1.98
5	Apricot	1018	692	6.79
6	Walnut	2298	822	3.57
7	Citrus	3058	9340	30.54

8	Mango	2407	8450	35.10
9	Litchi	1141	552	4.83
10	Other fruits	2314	7005	30.37
	(b) Vegetables			
11	Pea	170	105	6.17
12	Radish	247	347	14.04
13	French bean	199	283	14.22
14	Capsicum	45	135	30.00
15	Okra	85	63	7.41
16	Onion	140	110	7.85
17	Tomato	767	16150	210.50
18	Brinjal	105	570	54.28
19	Turmeric	45	360	80.00
20	Chilli	250	1000	40.00
21	Coriander	124	62	5.00
22	Methi	60	30	5.00
23	Garlic	240	1200	50.00
24	Ginger	50	800	160.00
	(c) Cereals			
25	Rice	24261	25198	10.38
26	Wheat	36548	42751	11.70
27	Barley	6450	7690	11.92
28	Finger Millet	28836	42777	14.84
29	Barnyard Millet	19043	21996	11.55
30	Maize	2066	1653	8.00
	(d) Pulses			
31	Urd	3544	2357	6.65
32	Horse Gram	2070	1453	7.02
33	Lentil	645	528	8.19
34	Arhar	526	393	7.47
	(e) Oilseeds			
35	Soybean	1151	690	11.95
36	Til	49	9	1.75
37	Lahi/ mustard	506	518	10.24

5. Weather data

Month	Temperature °C		Sunshine Hours	Rainfall (mm)
	Maximum	Minimum		
October, 2008	17.5	8.6	8.3	0.0
November, 2008	11.9	3.6	8.9	1.0
December, 2008	8.5	0.8	6.1	0.0
January, 2008	8.1	-0.1	6.0	0.0
February, 2008	14.1	3.4	7.1	12.8
March, 2008	18.0	9.3	6.8	5.0

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	10151	Not available	Not available
<i>Indigenous</i>	351412	Not available	Not available
Buffalo	70115	Not available	Not available
Sheep			
<i>Crossbred</i>	2682	Not available	Not available
<i>Indigenous</i>	31322	Not available	Not available
Goats	151547	Not available	Not available
Pigs			
<i>Crossbred</i>	333	Not available	Not available
<i>Indigenous</i>	1366	Not available	Not available
Rabbits	-		
Poultry	70125	Not available	Not available

7. Details of Operational area / Villages (2008-09)

Sl. No.	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Pabau	Nautha, Buransi, Barsudi, Jitoli, Sankarsain, Khanduli, Chaufanda, Chaplori, Kalgadi, Milai, Odagarh, Dungri, Chaupriyun, Kuyee, Sahnayana, Pokhari, Banekh Sainji, Dhaur, Papadtoli, Chaid, Seeku, Dhulait, Chaufanda	Rice, wheat, finger millet, barnyard millet, lahi, lentil, wheat	Low productivity due to use of old varieties and poor management practices	Seed replacement through HYV and through diversification of vegetables
2	Thalisain	Kaprauli, Randola, Hansuthi, Bhandeli, Dadoli, Jallu, Gadoli, Iddhar, Gadsari, Bheeda, Musaiti, Panau, Gagoan, Panau, Khanduli, Dhaulad,	Rice, wheat, finger millet, barnyard millet, lahi, lentil, wheat	Low productivity due to use of old varieties and poor management practices	Seed replacement through HYV and diversification through vegetables

		Jitoli, Nauni, Kota			
3	Pauri	Kharlota,	Rice, wheat, finger millet, barnyard millet, lahi	Low productivity due to use of old varieties and poor management practices	Seed replacement through HYV
4	Kot	Semali, Aasadh, Dhaudkandi	Rice	Low productivity due to use of old varieties and poor management practices	Seed replacement through HYV
5	Beronkhal	Arkandaidhar, Gadhsari, Sera, Padinda, Jaspur	Barnyard millet, lentil	Low productivity due to use of old varieties and poor management practices	Seed replacement through HYV
6	Nainidanda	Kalilangu, Shankarpur, Badait, Patautia, Sidiyo	Urd, Finger millet, Barnyard millet, rice	Low productivity due to use of old varieties and poor management practices	Seed replacement through HYV
7	Ekeshwar	Ransua, Kimadi, Chandkot	Urd, Barnyard millet, Finger millet, French bean, tomato, capsicum, brinjal	Low productivity due to use of old varieties and poor management practices	Seed replacement through HYV and diversification through vegetables
8	Dugadda	Sigaddi, Jua, Umrella, Billingi	Soybean, Rice, Finger millet, lentil	Low productivity due to use of old varieties and poor management practices	Seed replacement through HYV
9	Kaljikhhal	Tangroli, Aasui, Naugaon, Gahad	Rice, wheat	Low productivity due to use of old varieties and poor management practices	Seed replacement through HYV
10	Khirsu	Farasu	Wheat	Low productivity due to use of old varieties and poor management practices	Seed replacement through HYV

8. Priority thrust areas

Sl. No.	Thrust Area
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1	Seed replacement of cereal crops through high yielding varieties.
2	Diversification in agriculture through off-seasonal cultivation of vegetables.
3	Protected cultivation of vegetables including mulch.
4	Scientific methods of composting.
5	Dissemination of Integrated Pest Management technology.
6	Demonstrations on improved agriculture implements.

Rudraprayag

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No.	Farming systems/ enterprise
1.	Mixed hill farming is a common practice
2.	Agri- horti-livestock
3.	Agri- silvi-pastoral system

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No.	Agro-climatic Zone	Characteristics
1.	Zone -I	Hills and mountain, Fragmented, small terraces on sloping land, terrace farming
S. No.	Agro ecological situation	Characteristics
1.	14 North Western Himalaya	Western Himalayas , sub -tropical, Sub humid, temperate region

3. Soil types

S. No.	Soil type	Characteristics	Area in ha
1.	Brown forest soil and residual sandy loam	Acidic, rocky, stone and gravel and poor moisture regime	-

4. Area, Production and Productivity of major crops cultivated in the district

S. No.	Crop	Area (ha)	Production (Qtl)
1.	Veg. pea	79.00	385.00
2.	Raddish	48.25	7.50
3.	French bean	53.50	472.00
4.	Cabbage	64.25	910.00
5.	Cauli flower	10.20	106.00
6.	Capsicum	8.15	39.00
7.	Okra	44.30	243.00
8.	Onion	42.90	496.00
9.	Tomato	76.00	759.00
10.	Brinjal	28.70	300.00
11.	Cucumber	124.70	1073.00
12.	Chillis	85.00	279.00
13.	Other veg.	84.00	438.00
14.	Rice	9537.00	124934.70
15.	Maize	190.00	2422.50
16.	Mandua	5211.00	76469.10
17.	Jhingora	3359.00	40818.50
18.	Gahat	191.00	1317.90
19.	Urd	361.00	819.47
20.	Rajma	84.00	767.76
21.	Soybean	66.00	1306.14
22.	Wheat	11826.00	142503.30

23.	Lentil	76.00	1102.00
24.	Mustard	302.00	1742.50
25.	Til	42.00	68.46

5. Weather data – Not available

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	102428	1400 lit/lact.	4.6 lit/day
Crossbred	2262	600 lit/lact.	2.0 lit/day
Indigenous	100166	1800 lit/lact.	6.0 lit/day
Buffalo	37222	-	-
Sheep	15636	-	-
Crossbred	675	-	-
Indigenous	14961	-	-
Goats	39949	-	-
Pigs	130	-	-
Indigenous	130	-	-
Poultry	5606	-	-
Horse/Mule	3054	-	-

7. Details of Operational area / Villages

Name of the block	Name of the village	Major crops	Major problem identified
Ukhimath	Bansu, Devshal, Sansari, Narayankoti/ Kuthera, Bhatwari, Dewar	Agriculture Finger millet , Jhingora , Rice, Wheat, Soybean, Amaranths, citrus, peach, plum, Tomato, peas, Cole crops Brinjal etc. Animal Husbandry Poultry, Cattle, Mules etc.	<ul style="list-style-type: none"> • Fragmented & marginal land holdings • Rain fed farming • Low productivity • Unpredictable climate • Lack of technical awareness • Coccidiosis in poultry • Mineral deficiency in Cattle • Respiratory problem
Augustyamuni	Chandrapuri		
Jakholi	Satanakheel Tuneta		

8. Priority thrust areas

Crop/Enterprise	Thrust area
Crop production	Increasing crop productivity by adopting improved production technologies i.e. use of high yielding varieties, use of balance dose of fertilizers including compost and bio-fertilizer application, adopting timely and appropriate measures of plant protection, etc.
Vegetable science	Production of off season vegetables/ Protected Cultivation
Diversification of agriculture	Diversification of agriculture to make small and marginal holdings more profitable.
Livestock production and Management	Improvement in economic status of the farming community through enhancement in livestock productivity by improvement in breeds of cattle and buffaloes, increasing green fodder availability and improving nutritional status.
Vocational training	Generating self employment opportunities among unemployed rural youth through backyard poultry farming.

Udham Singh Nagar

1. Major farming systems/enterprises (based on the analysis made by the KVK)

Sl. No.	Farming system/enterprise
1	Agriculture and animal husbandry

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No.	Agro-Climatic Zone	Characteristics
1	Tarai and Bhabar	Total geographical area of 3055 sq. km., soil alluvial in nature, low to medium in phosphorus, medium to high in potassium and high in organic matter. Main crops grown- Rice, wheat, sugarcane and pulses. Average annual rainfall-1433.4mm, Minimum temp. 3-5 ⁰ C, Maximum temp. 39-41 ⁰ C. Irrigated area-80%, Agri-export zone of basmati rice, litchi, floriculture and medicinal and aromatic plants. As per the recent report of NBSS and LUP, average pH of the soils is increased up to 8.2
S. No.	Agro-ecological situation	Characteristics
1	AES –I (Blocks covered- Khatima and Sitarganj)	Soil loam and sandy loam, water logged condition, prone to flood, soil fertility medium, medium to deep soil, irrigated situation, Paddy-Wheat and Paddy-Sugarcane crops grown.
2	AES-II (Blocks covered- Bazpur, Gadarpur and Rudrapur)	Soil loam to clay loam, poor drainage, soil fertility medium to low, deep soil, irrigated situation, Paddy-Sugarcane, Paddy-Wheat, Paddy-Pea/Paddy-Potato, Paddy-Barseem crops grown.
3	AES-II (Blocks covered- Jaspur and Kashipur)	Soil sandy loam to clay loam, drainage problem, soil fertility low, medium to deep soil irrigated situation, Paddy-Wheat, Paddy-Sugarcane-Lahi-Wheat, Paddy-Sugarcane – lahi crops grown.

3. Soil types

S.N.	Soil type	Characteristics	Area in ha.
1	Loam, sandy loam and clay loam	Soils of district U. S. Nagar is alluvial in nature, low to medium in phosphorus, medium to high in potassium and high in organic matter. Deficient in zinc, rich in calcium carbonate. Drainage of soil is imperfect and water logging is great threats to the field crops.	Not quantified

4. Area, Production and Productivity of major crops cultivated in the district

Sl No.	Crop	Area (ha)	Production (MT)	Productivity (Qt./ha)
1	Paddy	69500	2760.00	38.83
2	Wheat	64920	2522.36	37.67

3	Sugarcane	29800	16860.00	566.67
4	Lentil	1375	8.47	6.17
5	Mustard	1100	6.72	6.20
6	Potato	3650	538.25	141.67
7	Pea	2950	145.20	47.67
8	Other vegetables (Ginger & tomato)	800	76.00	96.67
9	Mango	1050	54.00	53.33
10	Litchi	150	3.50	23.33

5. Weather data

Month	Rainfall (mm)	Temperature °C	
		Maximum	Minimum
Oct 08	0.0	29.8	20.2
Nov 08	4.0	28.1	14.3
Dec 08	0.0	23.9	11.0
Jan 09	0.0	18.0	6.1
Feb 09	21.5	22.3	8.8
Mar 09	0.0	29.8	11.8
April 09	3.0	32.95	15.23
May 09	10.0	37.05	20.90
June 09	56.0	37.40	20.60

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

7. Details of Operational area / Villages

S.N.	Name of the block	Name of the village	Major crops & enterprise	Major problem identified	Identified thrust areas
1 2 3 4 5 6 7 8	Khatima Sitarganj Rudrapur Gadarpur Bazpur Kashipur Jaspur Ramnagar	Bari Anjania Karghata Baghwala Majra Hasan Pipaliya Harinagar Dharampur Udaipuri Negi	Sugarcane, paddy, wheat, pulses (urd and lentil), oilseeds (lahi, soybean and mustard)	1. Use of traditional methods for sowing of crops. 2. Non-availability of recommended varieties of crops. 3. Gap in adoption of recommended dose of fertilizers and application of micronutrients. 4. Lack of knowledge about the improved technologies. 5. Water drainage	1. Varietal replacement in sugarcane 2. Cost effective technology demonstration in sugarcane through introduction of IPM and IPNM 3. Quality seed production programme in sugarcane 4. Soil testing and site specific nutrient recommendation 5. Increasing crop production with high yielding varieties, IPM

			problem. 6. Non-availability of new & improved farm machineries. 7. Lack of awareness & knowledge about importance of green manure & organic manure. 8. Presence of plough pan 9. Increase in soil pH	and IPNM 6. Introduction of organic farming 7. Introduction of mushroom production 8. Women empowerment through household food security, value addition and processing, drudgery reduction and group (SHG) formation 9. Integrated fish farming
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8. Priority thrust areas

S. No.	Thrust area
1	Varietal replacement in sugarcane
2	Cost effective technology demonstration in sugarcane through introduction of IPM and IPNM
3	Quality seed production programme in sugarcane
4	Soil testing and site specific nutrient recommendation
5	Increasing crop production with high yielding varieties, IPM and IPNM
6	Introduction of organic farming
7	Introduction of mushroom production
8	Women empowerment through household food security, value addition and processing, drudgery reduction and group (SHG) formation
9	Integrated fish farming

Pithouragarh

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No.	Farming system/enterprise
1.	Rain fed (>90%)
2.	Irrigated (<10%)

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S.N.	Situation	Altitude m above msl	Soil type	Crops and fruits
1.	Irrigated Lower hills	600-1200	Alluvial Sand	Rice, Wheat, Onion, Potato, Chillies, Peas, Cabbage, Raddish, Cauliflower, Citrus, Mango
2.	Rainfed Lower hills	600-1200	Residual Sandy Loam	Finger millet, Rice, Wheat, Citrus, Mango
3.	Mid hills south aspect	1200-1700	Sandy Loam	Finger millet, Rice, Wheat, Tomato, Peach, Plum
4.	Mid hills North aspect	1200-1700	Brown forest soil	Finger millet, Rice, Wheat, Tomato, Peas, Cole- crops, Peach, Plum, Apricot, Apple
5.	High Hill	1700-2500	Red to dark black Loam	Amaranthus, Buck wheat, Rice, Finger millet, Frechbean, Peas, Apricot, Apple potato, Pear, Walnut
6.	Very High Hill	2500-3500	Red to dark clay Loam black meadow soil type	Amaranthus, Buck Wheat, Cole- crops, potato, Apricot, Apple, Almond
7.	Alpine Pastures	>3500	Very heavy textured meadow coarse textured	

2.3 Soil Fertility under different Eco-Systems

S.N.	Region	OC (%)	N (%)
1.	Alpine Region Agriculture	4.55	0.455
2.	Temperate Hills Agriculture	1.86	0.192
3.	Sub-Temperate Region Forest	0.96	--
	Agriculture	0.80	--
4.	Sub-humid Forest	3.02	0.294
	Agriculture	0.50	0.073

4. Area, Production and Productivity of major crops cultivated in the district

S.No	Crop	Area (ha)	Production (Q)	Productivity (Q/ha)
1.	Rice	29420	38743	10.54
2.	Wheat	31448	66627	13.92
3.	Madua	7731	11388	14.82
4.	Soybean	1325	1988	7.65
5.	Mustard	779	798	10.23
6.	Gram	36	31	9.72
7.	Pea	79	99	13.84
8.	Lentil	6315	6637	8.18
9.	Maize-Kharif	3006	3885	12.80
10.	Sawa	1279	1841	15.42
11.	Urd	804	314	4.15

12.	Gahat	1005	864	8.60
13.	Til	60	7.2	1.83
14.	Barley	3302	4292	10.50

5. Weather data

Relative humidity (%)

Summer (March to May) : 30 – 50

Monsoon (June to September) : 70 – 99

Average Rainfall (mm)	Temperature °C		Relative Humidity (%)
	Maximum	Minimum	
1200	38	-4 to -5	30-99

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Category	Population
Cattle	--	Sheep	--
Crossbred	17299	Crossbred	7378
Indigenous	2,23,448	Indigenous	25426
Buffalo	86,877	Poultry	--
Goats	1,45,173	Hens	--
Pigs	--	Desi	15024
Crossbred	13	Improved	35454
Indigenous	138	Ducks	21
Rabbits	1289	Turkey and others	7

Total milk production	419750 kg
Average milk yield:	
Cattle	1-1.5 litre/day
Buffalo	2-3 litre/day

7. Details of Operational area / Villages (2008-09)

S. No	Name of the block	Name of the village	Major enterprises
1.	Bin	Digtoli	Horticulture+crop
2.	Bin	Gaina	Horticulture+crop+livestock
3.	Munakote	Kill Deopa	Horticulture+crop+livestock
4.	Kanalichina	Suni	Crop+livestock
5.	Kanalichina	Dungri	Crops+Horticulture+livestock
6.	Kanalichina	Muneri	Crop+livestock
7.	Gangolihat	Kimta	Crop+ Livestock
8.	Munshyari	Quetty	Horticulture + Crop+ Livestock
9.	Berinag	Boraagar	Crop + livestock
10	Munakot	Nakhet	Crop+ livestock + horticulture
11.	Bin	Kiri	Crop+ livestock + horticulture

8. Priority thrust areas

S. No	Thrust area
1	Increasing crop productivity by adopting improved production technology and seed quality improvement.
2	Production of off season vegetables, spices, medicinal and aromatic plants.
3	Diversification of agriculture to make small and marginal holdings more profitable.
4	Increasing livestock productivity.
5	Empowerment of women through their participation in the income generation activities.

Dehradun

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No.	Farming system/enterprise
1	Sugarcane - Ratoon - wheat
2	Rice-wheat
3	Maize –vegetable pea-wheat
4	Crop Live stock production/cow, buffalo, goat, poultry, fish farming
5	Agroforestry, silviculture

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No.	Agro ecological situation	Characteristics	Block covered	Altitude (m) msl	Rainfall (mm)
1.	Doon valley	Deep soil, Tarai soil, Irrigated, Fertile, Clay soil	Doiwala, Vikasnagar	250-400	2000
2.	Foot hills/ Semi hills	Sandy to Sandy loam soil	Vikasnagar, Sahaspur	400-600	1900
3.	Mid hills	Dry soil, rainfed, rocky soil	Raipur, Kalsi	600-800	1800
5.	High hills	Dry soil, rainfed, rocky soil, snow fall	Chakrata	1200-2300	2100

3. Soil types

S.No.	Soil type	Soil order	Characteristics	Area (ha)
1.	Sandy soil		Loose soil, high infiltration rate	
2.	Clay soil		Deep soil, high cohesion	
3.	Rocky soil		Stone, marvells and rock phosphate	

4. Area, Production and Productivity of major crops cultivated in the district

S.No	Crop	Area(ha)	Productivity (Qtl/ha)
A. Crops			
Pulses	Urd	53.0	4.5
	Moong	4.0	4.1
	Pigeonpea	96	7.48
	Gram	145	15.17
	Pea	130	13.85
	Lentil	770	8.44
Oilseed	Sesamum	500	2.30
	Groundnut	300	9.60
	Toria	4000	11.00
	Mustard/Rye	3500	12.50
	Soybean	300	9.75
Others	Sugarcane	7244	572.08
	Wheat	21321	21.81
	Paddy	14400	21.42
	Maize	14420	18.75

	Barley	1425	18.55
D. Fruits			
G. Vegetables			

5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
October 07	32.0	28.5	13.3	74
November 07	10.9	24.8	7.6	82
December 07	2.8	21.9	4.0	89

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Productivity
Cattle	415985	2.63Kg
Crossbred	33714	
Indigenous	82271	
Buffalo	64534	4.18Kg
Sheep	22176	1.27Kg
Crossbred	1339	
Indigenous	20837	
Goat	116672	14.81Kg
Pig	7273	48.33Kg
Crossbred	816	
Indigenous	6457	
Rabbits	260	
Poultry	359300	195eggs/year
Hens	163210	
Desi	22261	
Improved	140949	
Ducks	84	
Improved	39	
Indigenous	45	
Trukey and others	155	

7. Details of Operational area / Villages

S.No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust areas
1	Vikasnagar	Vikasnagar	Jassowala, Jamnipur, Lakhanwala, Prateetpur Dharmawala Lambarpur Dhokrani	Sugarcane, rice, wheat, Maize Animal production,	Low productivity Traditional varieties	Crop management weed management seed replacement in farming system approach

			Ambari, Prateetpur Dhramawala Kunja Tiparpur Anfield Haripur Fatehpur Atenbag Jamnipur Sahpur Mehuwala	1. Cattle and buffalo	Parasitic problem and poor nutritional status	Endo and ectoparasites ie tapeworm, roundworm and liverfluke and poor nutritional status in green fodder and crop residues Land
			Ambari, Bheemawala, Ajeetpur, Enfield, Ambari Enfield Babugarh Goodrich Numberpur	1. Agroforestry 2. Home Science NutritionGarden 3. Extension	Scarcity of green fodder, fuel wood Unawareness of health hazards due to nutritional deficiency Lack of knowledge regarding Govt and Non Govt schemes among the women Lack of knowledge for micro financing and establishment of kuteer udyog	Adaptation of agrisilvicultural Practices and utilization of waste land Practising development of Good nutritional gardening Dissemination of information related to developmental schemes and formation of SHGs Lessoning with banks for micro financing and efforts are in progress for establishment of self employment
			Lumbarpur	Medicinal and aromatic plants	Lack of new agro enterprises	Intercropping of fruit orchards with medicinal and aromatic plants
		Shaspur	Raidapur, Dhaki,	Buffalo and Polutry farming	Parasitic problem and poor nutritional status	Endo and ectoparasites ie tapeworm, and liverfluke and poor nutritional status in green fodder, crop residues and

			Shunkarpur, Horawala, Haripur	Irrigation management, Use of farm machinery	Lack of water harvesting techniques	grains Water Conservation
2	Rishikesh	Doiwala	Gorimafi, Nepalifarm, Missarwala Reshammajri Shergarh Dudhli	Sugarcane, rice, wheat, maize Animal production,	Low productivity Traditional varieties	Crop management weed management seed replacement in farming system approach
		Doiwala	Nakrounda, Dudhali,	Medicinal and aromatic plants 3. Extension	Lack of new agro enterprises Lack of knowledge regarding Govt and Non Govt schemes among the women	Intercropping of fruit orchards with medicinal and aromatic plants Dissemination of information related to developmental schemes and formation of SHGs
3	Vikasnagar	Kalsi	Haripur Dhanpau Jhoosobhakro, Samalta. Dudholi	Mandua Ramdana Sawan,Rice , wheat, Maize Animal production, Spices and condiments	Low productivity Traditional varieties Lack of knowledge about agro enterprises working in spices and condiments	Crop management weed management seed replacement in farming system approach Efforts are made to establish liasioning between the farmers and companies for assured raw material and buy back of crop

4.	Dehradun	Raipur	Rainiwala Khairi Man Singh	1. Agroforestry 2. Nutritional Gardening	Scarcity of green fodder, fuel wood and soil erosion Unawareness of health hazards due to nutritional deficiency	Adoptation of agrisilvicultural Practices and utilization of waste land Practising development of Good nutritional gardening
6	Vikasnagar	Kalsi	Dhanpau,	Agroforestry Medicinal plants Organic farming	Soil erosion, low fertility., lack of awareness about smallscale industries	Introduction of agroforestry, water harvesting techniques, self help group formation

8. Priority thrust areas

Thrust area
<ul style="list-style-type: none"> • Increasing crop productivity by adopting improved production technology i.e. use of high yielding varieties, use of balance dose of fertilizers including compost and bio – fertilizer application, adopting timely plant protection, measures. • Production of crops, vegetables, fruits and medicinal plants with improved technology. • Diversification of agriculture to make small and marginal holdings more profitable. • Increasing livestock productivity through improvement in breeds of cattle and buffaloes, increasing green fodder availability and improving nutritional status. • Cultivation of spices, medicinal and aromatic plants. • To generate awareness regarding tangible and non tangible benefits of forests and motivating farmers for wastelands management by developing protein banks or through energy plantations • Motivation of farmers towards conservation of natural resources and their management. • To generate concern of the farmers towards environment amelioration • Empowerment of women through their training and participation in the income generating activities. • Imparting vocational training in open distance learning mode for self – employment of rural youths. • Establishing linkage with NGOs, Govt. departments and private agencies.

Uttarkashi

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Agriculture + Animal husbandry
2.	Agriculture + Horticulture
3.	Agriculture + Horticulture + Animal husbandry

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics	Agro ecological situation	Characteristics
1.	Western Himalayan region		AES-I	800 – 1500 MSL (Fertility Status : Moderate)
			AES-II	1500-2200 MSL (Fertility Status : Normal)
			AES-III	>2200 MSL (Fertility Status : Poor)

3. Soil types

S. No	Soil type	Characteristics	Area in ha
1.	Sandy loam	Shallow & Moderately shallow, 4.5 – 5.5 pH ⁺	
2.	Sandy loam	Deep and Shallow, 5.5 – 6.5 pH ⁺	
3.	Sandy loam	Rock outcrops & Glacier, > 6.5 pH ⁺	

4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
A. FIELD CROPS INCLUDING OIL SEEDS AND PULSES				
1.	Rice	1005.25	15963.00	15.88
2.	Wheat	108.13	15963.00	14.76
3.	Barley	21.20	236.00	11.13
4.	Maize	54.78	590.00	10.77
5.	Mandua	549.02	8658.00	15.77
6.	Madira	232.34	3204.00	13.79
7.	Urad	70.36	292.00	4.15
8.	Masoor	30.30	303.00	10.00

9.	Field pea	16.10	223.00	13.85
10.	Gahat	NA	NA	NA
11.	Rajmash	NA	NA	NA
12.	Bhatt	NA	NA	NA
13.	Rap seed & Mustered	986.31	1009.00	10.23
14.	Seasmum	NA	NA	NA
15.	Groundnut	NA	NA	NA
16.	Soybean	10.0	77.00	7.70
B. VEGETABLES				
1.	Pea	113	786	69.6
2.	Radish	664	6644	100.1
3.	French bean	294	2789	94.6
4.	Tomato	65	650	100.0
5.	Brinjal	47	905	192.6
6.	Capsicum	38	381	100.3
7.	Okra	45	1134	252.0
8.	Onion	26	356	136.9
9.	Cabbage	41	734	179.0
10.	Cauliflower	NA	NA	NA
11.	Potato	217	48905	2253.7

5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
October, 08	17.0	32.0	10.0	82.12
November, 08	5.0	28.0	5.8	76.63
December, 08	1.0	24.0	2.4	73.45
January, 09	3.0	26.0	2.0	79.29
February 09	37.0	28.0	4.0	79.61
March, 09	21.0	31.0	5.0	68.1
April, 09	32.0	32.2	10.2	78
May, 09	17.0	39.6	11.1	72
June, 09	24.0	41.0	14.0	62
July, 09	43.0	39.2	21.5	89.0
August, 09	32.0	38.0	19.6	84.0
September, 09	205.0	33.0	18.0	93.0
Total	437.0			

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	11119	-	-
<i>Indigenous</i>	95708	-	-
Buffalo	38690	-	-
Sheep			
<i>Crossbred</i>	53131	-	-
<i>Indigenous</i>	101268	-	-
Goats	61970	-	-
Pigs			
<i>Crossbred</i>	155	-	-
<i>Indigenous</i>	325	-	-
Rabbits	50	-	-
Poultry			
Hens	6762	-	-
<i>Desi</i>	14234	-	-
<i>Improved</i>	3133	-	-
Ducks	-	-	-
Turkey and others	-	-	-
Horse	1489	-	-
Mule	4655	-	-
Ass	59	-	-

Category	Area	Production	Productivity
Fish			
River	244 Km.	32.184 Mt.	-
Lakes	8.0 ha		-
Ponds	2056 ha		-
<i>Marine</i>	-	-	-
<i>Inland</i>	-	-	-
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

7. Details of Operational area / Villages (2007-08)

Sl.N o.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
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1.	Chinyalisaur	Chinyalisaur	Mahergaon, Barethi Tuliya, Chinyali Shympur, Nagni, kansi, Kumrara, Srikot, Dharkot, Jestwari, Kotdhar	Rice, Wheat, Vegetables & livestock	<ul style="list-style-type: none"> Ø Non availability of seeds and other inputs in time Ø Insect pest infestation Ø Shortage of feed and fodder Ø Occurrence of more diseases 	<ul style="list-style-type: none"> Ø Introduction of HYV through FLD Ø Diagnosis of Pests and Diseases Ø Feed management Ø Disease management
2.	Dunda	Dunda	Ginoti, Jaspur, Bhatwari, Manjkot, Boun, Jakhari, Matti, Barethi, Gewnla	Rice, Wheat, Vegetables & livestock	<ul style="list-style-type: none"> Ø Insect pest infestation Ø Shortage of feed and fodder Ø Occurrence of more diseases 	<ul style="list-style-type: none"> Ø Diagnosis of Pests and Diseases Ø Feed management Ø Disease management
3.	Bhatwari	Bhatwari	Ganeshpur, Bhatwari, Gangori, Siror, Gorshali, harsil, Jhala, Barsu, Dwari	Rice, Wheat, Soybean, vegetables & livestock	<ul style="list-style-type: none"> Ø Marketing of perishable vegetables, Ø Preservation of fruits and vegetables Ø Insect pest infestation Ø Lack of knowledge about fodder production Ø Complete grazing system 	<ul style="list-style-type: none"> Ø Linkage with Mandi Ø Use of preservatives to increase the shelf life of veg. and fruits Ø Diagnosis of Pests and Diseases Ø Feed management Ø Disease management
4.	Barkote	Naugaon	Dhari – khalogi Barkote, Naugaon Tunalka,	Rice, Wheat, Vegetables & livestock	<ul style="list-style-type: none"> Ø Preservation of fruits and vegetables Ø Insect pest infestation Ø Lack of knowledge about fodder production 	<ul style="list-style-type: none"> Ø Use of preservatives to increase the shelf life of veg. and fruits Ø Diagnosis of Pests and Diseases Ø Feed management Ø Disease management

5.	Purola	Purola	Purola, Khalari, Kurada, Chandeli	Rice, Wheat & Vegetables	<ul style="list-style-type: none"> Ø Preservation of fruits and vegetables Ø Insect pest infestation Ø Lack of knowledge about fodder production Ø Complete grazing system 	<ul style="list-style-type: none"> Ø Use of preservatives to increase the shelf life of veg. and fruits Ø Diagnosis of Pests and Diseases Ø Feed management Ø Disease management
6.	Mori	Mori	Mori, Sankari, Dhobal goan, Naitwar, Dhaura	Rice, Wheat & Vegetables	<ul style="list-style-type: none"> Ø Non availability of seeds and other inputs in time Ø Insect pest infestation 	<ul style="list-style-type: none"> Ø Introduction of HYV through FLD Ø Diagnosis of Pests and Diseases

8. Priority thrust areas

S.N.	Thrust area
1.	Introduction of improved and high yielding crop varieties
2.	Cultivation of off season vegetables under protected conditions
3.	Identification of plant diseases, pest incidence & it's control measures
4.	Use of cover crops for soil conservation
5.	Water harvesting through low cost methods
6.	Weed control in upland rice
7.	Production of organic products
8.	Use & maintenance of farm implements
9.	Marketing of perishable vegetables
10.	Use of preservatives to increase the shelf life of vegetable & fruits
11.	Drudgery Reduction
12.	Cultivation of fodder crops
13.	Increase the milk yield through mineral mixture and balance feed
14.	Vaccination programme for all kind of livestock
15.	Deworming programme for livestock
16.	Feed and fodder conservation

Bageshwar

1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Agriculture+Animal Husbandry
2	Agriculture+Horticulture
3	Agriculture+Horticulture+Animal Husbandry

2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	Western Himalayan region	

S. No	Agro ecological situation	Characteristics
1	AES-I	800-1500 (Fertility status: Moderate)
2	AES-II	1500-2200 MSL (Fertility status: Normal)
3	AES-III	> 2200 MSL (Fertility status: Poor)

3. Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Sandy loam	Shallow & moderately Shallow, 4.5-5.5 pH ⁺	
2	Sandy loam	Deep & Shallow, 5.5 – 6.5 pH ⁺	
3	Sandy loam	Rock out crops & glacier, > 6.5 pH ⁺	

4. Area, Production and Productivity of major crops cultivated in the district

Sl. No.	Major crops	District		
		Area (ha.)	Production (mt)	Productivity qt/ha.
A.	Field crops including and oil seed & pulses			
1.	Rice	15439	18859	12.21
2.	Wheat	14,570	-	11.42
3.	Barley	1,270	-	12.00
4.	Maize	384	365	9.5
5.	Mandua	5382	5897	10.95
6.	Madira	466	463	9.93
7.	Urad	69	49	7.10
8.	Masoor	895	-	6.00
9.	Field pea	8	-	-
10.	Gahat	333	265	7.97
11.	Rajmash	12	8	6.50
12.	Bhatt	694	434	6.25
13.	Rap seed & Mustard	230	-	3.00

14.	Seasmum	11	2	2.2
15.	Groundnut	0	0	0
16.	Soybean	200	245	12.25
B.	Vegetables			
1.	Pea	180	615	34.0
2.	Radish	230	2,530	110.0
3.	French bean	54	380	70.3
4.	Tomato	140	1,120	80.0
5.	Brinjal	41	585	136.0
6.	Capsicum	38	190	50.0
7.	Okra	30	210	70.0
8.	Onion	86	946	110.0
9.	Cabbage	60	695	115.8
10.	Cauliflower	30	290	96.6
11.	Potato	543	10,767	198.2

5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
Annual	1383	29.4	-3.2	60-85

6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	2666	-	-
<i>Indigenous</i>	1,19893	-	-
Buffalo	43024	-	-
Sheep			
<i>Crossbred</i>	9294	-	-
<i>Indigenous</i>	10689	-	-
Goats	81105	-	-
Pigs			
<i>Crossbred</i>	0	-	-
<i>Indigenous</i>	58	-	-
Rabbits	97	-	-
Poultry			
Hens	6467	-	-
<i>Desi</i>	6236	-	-
<i>Improved</i>	3122	-	-
Ducks	13	-	-
Turkey and others	0	-	-
Category	Area	Production	Productivity
Fish	-	-	-
<i>Marine</i>	-	-	-
<i>Inland</i>	-	-	-

Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

7. Details of Operational area / Villages (2008-09) -

SI.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Bageshwar	Bageshwar	Garigad, Matela, Karasibunga, Karasghat, Karalagaon, Sanj, Badibegar, Kholseer, Tana, Panch dev, Oklisiraut, Begar, Kaligad, Billori, Harkhola, Kangad, Chauna, Kafligair, Bhatkhola	Rice, Wheat, Soybean, Gahat, Mandua, Madira, pigeon pea, French bean and Vegetables	<ul style="list-style-type: none"> • Non availability of seeds & other inputs in time • Insect pest infestation • Marketing & storage of perishable vegetables • Low productivity • Small land holdings • Poor irrigation system 	<ul style="list-style-type: none"> • Introduction of HYV • Diagnosis of pests and diseases their management • Water harvesting techniques • Use of preservatives to increase shelf life of fruits and vegetables • Construction of zero energy cool chambers at on farm
2	Garur	Garur	Bund, Galai, Gagrigol, Jiyoli, Jakhera, Rampura malla			
3	Kapkot	Kapkot	Bini, Baishani, Gunthi, Fulai, Gighartola, Pothing, Vijaypur, Baskhuna, Singari			

8. Priority thrust areas

- Ø Increasing crop productivity by adopting the new technologies viz. Introduction of high yielding varieties, use of quality seeds, enriching soil through compost and bio-fertilizers, balanced fertilizer application, application of IPM & INM practices etc.
- Ø Diagnosis of plant diseases, pest incidence & its preventive measures.
- Ø Marketing of perishable vegetables.
- Ø Diversification of agriculture & use of cover crops for soil conservation.

- Ø Increasing the source of supplementary income in house holds by promoting the live stock productivity through dairy demonstration.
- Ø Drudgery reduction & Empowerment of women through skill and income generating training to become self-dependant.
- Ø Training on use & maintenance of farm implements.
- Ø Water harvesting through low cost methods.
- Ø Use of preservatives to increase the shelf life of vegetable and fruits.
- Ø Cultivation of off-season vegetables under protected condition.
- Ø Establishing linkages with all the line departments of the state government, Non-Governmental Organizations, Voluntary organizations and private agencies for better out put.