**KVK Bankura**

District level data on agriculture, livestock and farming situation (2015-16)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Sl. No.*** | ***Item*** | | ***Information*** | | | | | | | |
| 1 | Major Farming system/enterprise | | Resource rich farmers:  a) Crop based backyard poultry – Goat rearing/ seasonal fish farming.  b) Crop based – Dairy husbandry – Goat rearing.  c) Crop based backyard pig rearing and backyard poultry rearing / Goat rearing.  d) Crop based backyard poultry rearing and goat rearing.  Resource poor farmers:  a) land based backyard pig rearing and backyard poultry rearing / Goat rearing.  b) Land based backyard poultry rearing and goat rearing | | | | | | | |
| 2 | Agro-climatic Zone | | The average rainfall of the zone is 1216 mm of which about 80 per cent is received during four monsoon months. Two major groups of soil viz., red and lateritic are found in this agro-climatic zone. The soils vary in depth and in many cases shallow in nature. Due to undulating terrain the soils are highly eroded. Soil fertility level is very poor with low N and P. The soils are coarse in texture, highly drained, erosion prone and pH varies from 5.5 to 6.6. | | | | | | | |
| 3 | Agro ecological situation | | Situation | | | Characteristics | | | | |
| Uplalnd, undulated with steep to moderate slope. | | | Soil is sandy to sandy loam with shallow depth of soil, High erosion prone, High run – off, Low water retention capacity, Low fertility status, Negligible irrigation facilities. Partially covered with forest plants. Major area remains fallow. | | | | |
| Medium land with moderate slope. | | | Soil is sandy loam to loamy with moderate soil depth, Moderate erosion, Moderate run – off with comparatively higher water retention capacity, Medium fertility status,Moderate irrigation facilities  Major area under field crops and fruit crops. | | | | |
| Low land with minimum slope. | | | Soil is loamy to clay soil with higher soil depth, Negligible run – off, optional irrigation facilities and major area under field crops.. | | | | |
| 4 | Soil type | | Characteristics | | | | | | Area(ha) | |
| Sandy | | Lions’ share of soil of this district is represented by coarse to coarse loam along with fine loamy textural class. Though fine textured/clayey soil counts for more or less 16% of the cultivable area. In brief, mostly the soils are high in texture, porous and acidic in nature. Fertility status is also very low. The soils are low in organic matter and having low water holding capacity. In general, most of the soil area ranges from well ranged to moderately drained condition though imperfectly drained situation prevails in low lying belts/ valleys. In respect of moisture regime, mostly the soil belong to ustic moisture regime class. Profile study says that soils of udic moisture regime counts for a little part. However, eastern and southern part of this district is more productive than western part. | | | | | | 50886 | |
| Sandy loam | | 129397 | |
| Loamy | | 43162 | |
| Sandy clay loam | | 18864 | |
| Clay loam | | 81944 | |
| Clay (including sandy  clay & silty clay | | 60207 | |
| 5. Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others | | | | | | | | | | |
| SL.No. | Crops | | | | Area(ha) | | Production(MT) | | | Productivity  (qt/ha) |
| i. | Paddy | | | | 3,86,267 | | 1654205 | | | 42.8 |
| ii. | Potato | | | | 52,217 | | 2043094 | | | 391.2 |
| iii. | Wheat | | | | 81,868 | | 207126 | | | 25.30 |
| iv. | Sesamum | | | | 24,350 | | 18,506 | | | 7.60 |
| v. | Mustard | | | | 1283 | | 1367 | | | 10.66 |
| vi. | Arhar | | | | 1236 | | 904 | | | 7.60 |
| vii. | Blackgram | | | | 855 | | 493 | | | 5.77 |
| viii | Vegetables | | | | 34,742 | | 5,24,925 | | | 151.09 |
| 6. Mean yearly temperature, rainfall, humidity of the district | | | | | | | | | | |
| Months | | | Rainfall (mm) | | Temperature 0 C | | | | | Relative Humidity (%) |
| Maximum | | Minimum | | |
| April’2015 | | | 75.2 | | 37.2 | | 18.6 | | | 70.5 |
| May,15 | | | 54.2 | | 42.6 | | 19.6 | | | 72.0 |
| June,15 | | | 203.6 | | 41.6 | | 22.2 | | | 80.5 |
| July’15 | | | 494.0 | | 35.8 | | 23.4 | | | 87.0 |
| Aug’15 | | | 297.4 | | 34.2 | | 23.4 | | | 84.0 |
| Sept’15 | | | 157.8 | | 36.2 | | 23.0 | | | 80.5 |
| Oct’15 | | | 7.8 | | 35.6 | | 16.0 | | | 80.0 |
| Nov’15 | | | 0.0 | | 33.0 | | 14.0 | | | 71.0 |
| Dec’15 | | | 0.0 | | 32.2 | | 19.0 | | | 73.5 |
| Jan’16 | | | 5.6 | | 30.2 | | 7.2 | | | 70.0 |
| Feb’16 | | | 30.0 | | 36.6 | | 11.6 | | | 70.0 |
| March’2016 | | | 46.6 | | 37.4 | | 17.2 | | | 63.0 |
| 7. Production of major livestock products like milk, egg, meat etc. | | | | | | | | | | |
| *Category* | | *Population* | | *Production* | | | | *Productivity* | | |
| A.Cattle | |  | |  | | | |  | | |
| i. Cross breed | | 69,310 | | Milk:1,65,000 MT | | | | 107kg/year | | |
| ii.Indegeneous | | 13,66,631 | |
| B. Buffalow | | 1,06,042 | |
| C.Sheep | | 1,14,529 | | Meat:16,193 MT | | | |  | | |
| D.Goat | | 7,40,830 | |  | | |
| E.Pigs | | 80,587 | |  | | |
| F. Birds | |  | |  | | | |  | | |
| i.Desi | | 14,78,862 | | 1024,00,000 eggs | | | |  | | |
| ii. Improved | | 6,78,353 | |  | | |
| iii. Duck | | 7,68,078 | |  | | |
| iv.Others | | 39,543 | |  | | |
| G. Fish(Inland) | | 12,655 ha | | 25,310 MT | | | | 2000kg/ha | | |

**KVK Birbhum**

District level data on agriculture, livestock and farming situation (2015-16)

1. Major Farming system/enterprise

|  |  |
| --- | --- |
| ***Sl. No.*** | ***Farming System/Enterprise*** |
| 1. | Upland- Paddy, red gram, fruit crops |
| 2. | Medium land- Paddy, mustard, potato, sugarcane, sesame, black gram, vegetables, fruit crops, cow, goat, backyard poultry, fishery |
| 3. | Lowland- Paddy, sugarcane, wheat, potato, vegetables, duckery, fishery |

2. Agro-climatic Zone

Agro Ecological Sub Region (ICAR):- Assam and Bengal Plain, Hot Sub-humid to Humid (Inclusion of Per-humid) Eco-Region. (15.1)

Eastern plateau (Chotanagpur) And Eastern Ghats, Hot Sub-humid Eco-Region (12.3)

Agro-Climatic Zone (Planning Commission):- Lower Gangetic Plain Region (III)

Agro Climatic Zone (NARP):- Red and lateritic Zone (WB-5)

3. Agro-ecological situation

The Birbhum District is divided into three Agro-Ecological Situation viz. AES – I, AES – II and AES – III. The Rathindra KVK is situated in the AES – I. The Map and detailed features of the Ago-ecological Situations of the District of Birbhum are given here under.

Different agro-ecological Situations of Birbhum district

|  |  |  |  |
| --- | --- | --- | --- |
| ***Characteristics*** | ***AES - I*** | ***AES – II*** | ***AES – III*** |
| Blocks covered | Blocks under this AES are Bolpur-Sriniketan, Nanoor, Sainthia, parts of Mayureswar – I and Mayureswar – II. parts of Labhpur, Illambazar | Blocks under this AES are Rajnagar, Dubrajpur, Khyrasole, parts of Nalhati – I, Rampurhat – I, Murarai – I, Mayureswar – I, Illambazar, Labhpur, Suri – I and Md. Bazar. | Blocks under this AES are Rampurhat – II, parts of Murarai – I, Murarai – II, Nalhati I, Nalhati – II, Md. Bazar, Suri – I and Suri – II. |
| Soil Type | Fertile loamy clay soil, 60 percent of cultivable area under loam – clay loam soil.  pH – 4.5 – 6.5 | Sandy to sandy clay soil. 80 percent of cultivable area under clay soil and slightly acidity problem soil.  pH – 5.2 – 6.5 | Clay to clay loam soil. 70 percent clay soil with 30 percent loam to clay loam soil.  pH – 4.8 – 6.5 |
| Irrigation | 75 percent of the total cultivable area is under irrigation out of which 51 percent of area is under surface irrigation. | 30 percent of the total cultivable area is under irrigation out of which 20 percent of the area is irrigated from surface water and the rest area is irrigated from minor irrigation sources. Ground water is not easily available. | 70 percent of the total cultivable area is under irrigation out of which 60 percent of the area is irrigated from available groundwater. Surface irrigation area is only 10 percent. Ground water is easily available for irrigation purpose. |
| Important River | Ajoy, Mayurakshi, Dwaraka, Kopai | Hinglow, Bakreswar, Shaal, Ajoy, Chandrabhaga | Dwaraka, Brahmani, Mayurakshi, Pagla, Bansloi |
| Flood / Draught Proneness | Moderate flood prone area | Moderate draught prone area | Flood prone area |
| Available Water Area for Fish Cultivation | 30 percent of ponds of the district of Birbhum are situated. Sweet water is available for fisheries. | 20 percent of ponds of the District of Birbhum are under this AES. A vast sweet water resource is available for fish cultivation. | 50 percent of the ponds of the District of Birbhum are under this AES. Sweet water area is available for fish cultivation. |
| Animal Resources | 20 percent of the total Milch Cows of the District of Birbhum is available under this AES out of which upgraded Breed percentage is only 5 percent. Only 15 percent of the total Goat population of the District of Birbhum and 30 percent of the Poultry Population of the District of Birbhum are available in this AES. | 50 percent of the total Milch Cows of the District of Birbhum is available under this AES out of which upgraded Breed percentage is only 5 percent. 60 percent of the total Goat population of the District of Birbhum and 40 percent of the Poultry Population of the District of Birbhum are available in this AES. | 30 percent of the total Milch Cows of the District of Birbhum is available under this AES out of which upgraded Breed percentage is only 5 percent. Only 25 percent of the total Goat population of the District of Birbhum and 30 percent of the Poultry Population of the District of Birbhum are available in this AES. |
| Major Crops:  Paddy -  Oil Seeds –  Pulses –  Vegetables –  Fruits - | Pre-Kharif, Kharif and Boro Paddy  Mustard, Groundnut and Sesame  Black and Green Gram, Lentil, Bengal Gram, Kulthi  Seasonal vegetable round the year  Mango, Guava, Citrus, Banana, Coconut | Pre-Kharif, Kharif and Boro Paddy  Mustard and Groundnut and Sesame in limited areas.  Khesari, Black and Green Gram, Lentil, Bengal Gram, Kulthi  Seasonal vegetables round the year  Mango, Guava, Citrus, Banana, Coconut | Pre-Kharif, Kharif and Boro Paddy  Mustard, Groundnut and Sesame  Black and Green Gram  Seasonal vegetables round the year  Mango, Guava, Citrus, Banana, Coconut. |

*Source: - SREP, Birbhum – 2009.*

4. Soil Type

The predominant soil types are old alluvial and red lateritic with low to medium in organic carbon and phosphate content and medium to high in potash. The soil is acidic in nature with pH. range of 5.0 to 6.5. This district (Birbhum) is enriched by various types of soil namely, Metal (Clay soil retentive of moisture which is best suited for growing winter paddy, sugarcane, wheat, gram and kalai ); Ental (a sticky brownish clay, it is poor soil and is capable of producing paddy only if manured); Bagha Ental (ental having colour or tiger, it is poor soil capable of producing paddy only if manured); Beley (is a whitish loose and poor soil , capable of growing paddy and vegetable); Kankure ((it is a redish, loose laterite soil capable of growing bajra, maize, kurthi, bean and marual); Bastu (it is a blackish friable rich soil and is largely used for rabi crops); Bindi (it is a poor sandy soil which improves with continued cultivation, capable of producing paddy but can also grow rabi crops if irrigated); Reti Rfi (is lighter variant of Pali, it does not grow paddy it is best suited for vegetables, wheat, barley etc.) Pali(deposit of soil is bed of river or in areas subject to riverine inundation; it is very rich soil and is well suited for sugarcane, wheat, gram, potato and other vegetables. It is generally reserved for more valuable crops rather than paddy).

5. Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Sl. No.*** | ***Year*** | ***Crops*** | ***Area (‘000 ha)*** | ***Production (‘000 tonnes)*** | ***Yield rate (kg.s / ha)*** |
| 01. | 1980-81 | Total Cereals | 378.8 | 620.5 | 1638 |
| 02. | 1990-91 | 391.9 | 838.7 | 2140 |
| 03. | 2000-01 | 345.7 | 875.3 | 2532 |
| 04. | 2008-09 | 429.4 | 1311.6 | 3055 |
| 05. | 2009-10 | 392.0 | 1050.7 | 2681 |
| 06. | 2010-11 | 282.2 | 836.4 | 2964 |
| 07. | 1980-81 | Total Pulses | 28.9 | 14.4 | 498 |
| 08. | 1990-91 | 08.6 | 05.4 | 626 |
| 09. | 2000-01 | 20.2 | 16.8 | 832 |
| 10. | 2008-09 | 16.3 | 15.3 | 937 |
| 11. | 2009-10 | 15.8 | 14.1 | 891 |
| 12. | 2010-11 | 17.0 | 17.1 | 1004 |
| 13. | 1980-81 | Total Food-Grains | 407.7 | 634.9 | 1557 |
| 14. | 1990-91 | 400.5 | 844.1 | 2108 |
| 15. | 2000-01 | 365.9 | 892.1 | 2438 |
| 16. | 2008-09 | 445.7 | 1326.9 | 2977 |
| 17. | 2009-10 | 407.8 | 1064.8 | 2611 |
| 18. | 2010-11 | 299.2 | 853.5 | 2852 |

*Source: Economic Review 2011-2012, Govt. of West Bengal*

6. Mean yearly temperature, rainfall, humidity of the district

The climate of the district is generally dry, mild and healthy. The hot weather usually last from the middle of March to the middle of the June, the rainy season from the middle of June to the middle of October, and the cold weather from middle of October to the middle of March. They do not always correspond to this limit.  As a rule, the wind is from south-east in summer and from the north-west in winter.

Summer Temperature: Max: 400 C

Winter Temperature: Min: 100 C

Rain Fall (RF) (Ten Years Average 1998-2007):-

SW Monsoon (June - September): 1196.1 Normal RF (mm)

NE Monsoon (October - December): 152.3 Normal RF (mm)

Winter (January - March): 67.1 Normal RF (mm)

Summer (April - May): 157.4 Normal RF (mm)

Annual: 1572.9 Normal RF (mm)

Normal Onset of Monsoon: 1st. week of June

Normal Cessation of Monsoon: 4th. week of September

7. Production of major livestock products like milk, egg, meat etc.

Live-Stock and Poultry in the District of Birbhum **(Number)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***Category*** | ***Year - 1989*** | ***Year - 1994*** | ***Year - 1997*** | ***Year - 2003*** | ***Year - 2007*** | ***Year 09-10*** | ***Year 10-11*** | ***Year 11-12*** |
|  | ***(1 )*** | ***(2)*** | ***(3)*** | ***(4)*** | ***(5)*** | ***(6)*** | ***(7)*** | ***(8)*** | ***(9)*** |
| 1 | Cattle: |  |  |  |  |  |  |  |  |
|  | Cows | 255381 | 266217 | 274094 | 282145 | 372662 |  |  |  |
|  | Bulls and Bullocks | 307844 | 347593 | 357919 | 294845 | 308308 |  |  |  |
|  | Young Stock | 328898 | 381066 | 392321 | 421336 | 452384 |  |  |  |
|  | Total Cattle | 892123 | 994876 | 1024334 | 998326 | 1133354 | 1163975 | 1180031 | 1196623 |
| 2 | Buffaloes: |  |  |  |  |  |  |  |  |
|  | Cows | 7627 | 7043 | 7132 | 8688 | 23492 |  |  |  |
|  | Bulls and Bullocks | 37258 | 45182 | 45753 | 47100 | 44088 |  |  |  |
|  | Young Stock | 6685 | 8076 | 8178 | 11075 | .. |  |  |  |
|  | Total Buffaloes | 51570 | 60301 | 61063 | 66863 | 67580 | 63120 | 61002 | 58955 |
| 3 | Sheep | 163854 | 189122 | 189214 | 186280 | 216888 | 229300 | 235770 | 242422 |
| 4 | Goats | 598010 | 736251 | 816123 | 728113 | 941989 | 1066464 | 1134740 | 1207387 |
| 5 | Horses and ponies | 366 | 96 | 96 | 59 | 39 | 30 | 26 | 23 |
| 6 | Pigs | 77437 | 77572 | 83653 | 57680 | 49177 | 46814 | 45676 | 44565 |
| 7 | Other Live-stock | .. | .. | . . | 87735 | 93849 | 98391 | 100786 | 103280 |
|  | Total Live-stock | 1783360 | 2058218 | 2174483 | 2125056 | 2502876 | 2668094 | 2758031 | 2853255 |
| 8 | Poultry : |  |  |  |  |  |  |  |  |
|  | Fowls | 1489187 | 1506982 | 1659044 | 2303418 | 3071493 | 3753562 | 4222424 | 4805424 |
|  | Ducks | 828231 | 1076333 | 1218849 | 1274104 | 1150029 | 1165248 | 1097777 | 1086352 |
|  | Others | 11275 | 20416 | 10514 | 3135 | 1609 | 1591 | 1582 | 1573 |
|  | Total Poultry | 2328693 | 2603731 | 2888407 | 3580657 | 4223131 | 4920401 | 5321783 | 5893349 |

*Source: Live-Stock Census Report, Govt. of W. B. and Annual Administrative Reports of Aminal Resources Development Department, Govt. of West Bengal.*

Estimated Production of Milk (Cow, Buffalo & Goat) and Egg (Hen & Duck) in Birbhum

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |
| ***Year*** |  | ***Milk (thousand tonnes)*** | | |  | ***Egg (number in thousands)*** | |
|  |  | ***District*** |  | ***West Bengal*** | | ***District*** | ***West Bengal*** |
| *(1 )* |  | *(2)* |  | *(3)* |  | *(4)* | *(5)* |
| 2003-04 |  | 97 |  | 3686 |  | 169883 | 2820317 |
| 2004-05 |  | 99 |  | 3790 |  | 175916 | 2887649 |
| 2005-06 |  | 100 |  | 3892 |  | 182064 | 2963720 |
| 2006-07 |  | 119 |  | 3984 |  | 233971 | 3038645 |
| 2007-08 |  | 119 |  | 4077 |  | 238117 | 3057342 |
| 2009-10 |  | 121.785 |  | 4300.17 |  | 290847 | 3697840 |
| 2010-11 |  | 123.605 |  | 4472.20 |  | 320083 | 4001062 |
| 2011-12 |  | 126.139 |  | 4660.23 |  | 347536 | 4337272 |
| 2012-13 |  | 128.518 |  | 4860.02 |  | 379785 | 4707268 |
| 2013-14 |  | 126.500 |  | 4906.21 |  | 386015 | 4746013 |

*Source: Live-Stock Census Report, Govt. of W.B. and Annual Administrative Reports of Animal Resources Development Department, Govt. of West Bengal.*

Production of Meat and Wool in the District of Birbhum

|  |  |  |  |
| --- | --- | --- | --- |
| ***Sl. No.*** | ***Year*** | ***Meat Production (Metric Ton)*** | ***Wool Production (Metric Ton)*** |
| 1 | 2009-10 | 22177 | 108.373 |
| 2 | 2010-11 | 23464.05 | 109.586 |
| 3 | 2011-12 | 24775.00 | 110.846 |
| 4 | 2012-13 | 26000.00 | 112.345 |
| 5 | 2013-14 | 26408.00 | 112.731 |

*Source: Live-Stock Census Report, Govt. of W.B. and Annual Administrative Reports of Aminal Resources Development Department, Govt. of West Bengal.*

**KVK Burdwan**

District level data on agriculture, livestock and farming situation (2015-16)

|  |  |  |
| --- | --- | --- |
| ***Sl. No.*** | ***Item*** | ***Information*** |
| 1 | Major Farming system/enterprise | Rice production system  Dairy –poultry production system  Poultry  Goatery  Duckery  Fishery  Rice – potato-fodder- livestock production system  Rice –vegetable-Rice production system  Jute-rice production system  Fish-duck-banana production system |
| 2 | Agro-climatic Zone | 1. New Alluvium   Average annual rainfall 1300-1600 mm,  Soil type- sandy loam, clay and clay loam,  Soil depth 4-6 ft with medium to good water holding capacity,  Neutral to acidic soil with good fertility.  2. Old Alluvium  Average annual rainfall 1300-1500 mm,  Soil type- sandy loam and clay loam  Soil depth 4-6 ft with medium to good water holding capacity  Neutral to acidic soil with good fertility  3. Red and Lateritic  Average annual rainfall 1100-1400 mm,  Soil type- sandy loam, coarse in texture  Undulating land with low soil depth, sometimes hard layer present in sub surface  Medium to highly acidic soil |
| 3 | Agro ecological situation | Agro ecological sub region 12.3 under the AES 12.0 (Eastern Plateau)  I Chhotonagpur Plateau and Garhjat hills, hot dry sub humid ecosystem with red & laterite soils and LGP 150-180 days covering the blocks of Durgapur & Asansol. Main crops are, paddy, mustard, vegetables, pulse etc. The area covers  186154 ha  II. Moist and sub humid ecosystem with alluvial soil with LGP of 180-200 days covering the blocks of Burdwan (N), Burdwan (S), Kalna & Katwa, Main crops paddy, mustard, sesame, potato, jute, vegetables etc. The area covers 517532 ha |
| 4 | Soil type | 1.Gangetic alluvial – 206423 ha  Soil order is entisols. Sandy loam to clay loam, fine in texture, slightly acidic to neutral in reaction. Rich in potash and medium to rich in available plant nutrients.  2. Vindhya alluvial – 311000 ha  Soil order is entisol Sandy loam to clay loam, fine to moderate coarse in texture, acidic to neutral in reaction.  3. Red and Lateritic – 186054 ha  Soil orders are mainly alfisol and ultisol. Coarse gritty soil blended with rock fragment, mainly acidic in nature, reddish in color due to high level of iron, low in nitrogen, calcium, phosphate and other plant nutrient. |
| 5 | Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others | Aman paddy – 32.73  Boro paddy – 26.95  Wheat – 21.99  Pulses – 8.80  Oilseeds – 10.01  Jute & other fibres \*\* - 18.7 lakh bales  Potato – 212.49 |
| 6 | Mean yearly temperature, rainfall, humidity of the district | Mean yearly temperature: Max – 31, Min – 18  Relative humidity : 76  Total rainfall: 1136 mm |
| 7 | Production of major livestock products like milk, egg, meat etc. | Milk : 464080 tonnes, 280 kg/year  Egg: 2672.40 lakh egg, 85 no. eggs/year  Meat : 4000 MT |

**KVK Coochbehar**

District level data on agriculture, livestock and farming situation (2015-16)

|  |  |  |
| --- | --- | --- |
| ***Sl. No.*** | ***Item*** | ***Information*** |
| 1 | Agro-climatic Zone | Terai-Zone |
| 2 | Agro ecological situation | Teesta Basin, Mansai Basin, Torsa Kaljani Basin |
| 3 | Soil type | Slightly acidic (the pH varies from 4.1 to 5.6 |
| 4 | Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others | Aman paddy-2057 kg/ha, Boro paddy-2873 kg/ha, Rice-2198 kg/ha, Wheat-2214 kg/ha, Rapeseed Mustard-445 kg/ha, Pulses – 625 kg/ha and Jute – 12.96 bales / ha, Potato – 25508 kg/ha, Tobacco – 1543 kg/ha |
| 5 | Mean yearly temperature, rainfall, humidity of the district | 20 – 300 C, 2500-3000 mm / year 95-100% maximum RH, |

**KVK Dakshin Dinajpur**

District level data on agriculture, livestock & fishery farming situation (2015-16)

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

|  |  |  |
| --- | --- | --- |
| ***Sl. No.*** | ***Land situation*** | ***Farming system/enterprise*** |
| 1. | Medium to Up land | Jute / Mesta – Rice – Mustard/Wheat, Fishery, Livestock, Poultry |
| 2. | Medium to Low land | Fallow – Rice – Rice, Fishery |
| 3. | Medium land | Jute – Rice – Vegetable / Potato, Fishery |
| 4. | Upland | Vegetable – Vegetable – Vegetable, Fishery, Livestock, Poultry |
| 5. | Lowland | Fallow – Rice – Fallow, Fishery |
| 6. | River bed | Cucurbits (Rabi-Pre-kharif) |

1. Description of Agro-climatic Zone

|  |  |  |
| --- | --- | --- |
| ***Sl. No.*** | ***Agro-climatic Zone*** | ***Characteristics*** |
| 1. | Old Alluvial Zone | Avg. annual rainfall – 1690 mm  Light, medium and heavy textured soil  Inundation caused by sudden heavy rainfall  Major crop: Rice, Jute, Mustard  Soils are low in organic matter, N, P, K & micronutrient |

1. Agro ecological situations (based on soil and topography)

| ***Sl. No.*** | ***Agro-ecological situations*** | ***Characteristics*** |
| --- | --- | --- |
| 1. | Assam & Bengal plains, hot humid eco-region with alluvium derived soils | It covers West Bengal and Assam representing the Ganga-Brahmaputra alluvial plain. It is characterized by semi-stabilized sand dunes on alluvial terraces, lateritic remnants in the West, and numerous creeks and swamps in the deltaic tract. It experiences hot humid monsoonal climate, and the rainfall ranges from 220 to 400 cm. The predominant soil groups are alluvial, red and brown hill. Rich forests in Assam and fertile deltas in West Bengal are the assets. Frequent floods in Assam and extensive occurrence of saline patches in the deltaic tracts are the major constraints. |

4. Soil type

Block-Wise soil types of Dakshin Dinajpur

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Name of Block*** | ***Sandy (ha)*** | ***Sandy loam (ha)*** | ***Loam (ha)*** | ***Clay  loam (ha)*** | ***Clay (ha)*** |
| Kushmandi | - | 540 | 2060 | 14190 | 7840 |
| Harirampur & Banshihari | - | 550 | 550 | 22590 | 5820 |
| Gangarampur | 1570 | 3040 | 3040 | 3040 | 14550 |
| Kumarganj | 1270 | 3870 | 3860 | 3860 | 10490 |
| Tapan | 21940 | 4950 | 1100 | 4300 | 3000 |
| Balurghat | 1610 | 4440 | 18250 | 5280 | 520 |
| Hili | 380 | 4285 | 1060 | 1075 | 700 |
| Total District | 26770 | 21675 | 29920 | 54335 | 42920 |

*Source:* [*www.d.dinajpur.nic.in*](http://www.d.dinajpur.nic.in)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Name of Block*** | ***Area (ha) available for cultivation*** | ***Characteristics*** | ***% of total  area*** | ***Other groups*** | ***% of total area*** |
| Kushmandi | 24630 | Old Alluvium | 70 | Old Alluvium | 30 |
| Harirampur | 29510 | -do- | 75 | -do- | 25 |
| Gangarampur | 25240 | -do- | 80 | -do- | 20 |
| Kumarganj | 23350 | -do- | 80 | -do- | 20 |
| Tapan | 35290 | Laterite | 75 | -do- | 25 |
| Balurghat | 30100 | Old Alluvium | 75 | -do- | 25 |
| Hili | 7500 | -do- | 60 | -do- | 40 |
| Total District | 175620 | - | - | - | - |

*Source: www.d.dinajpur.nic.in*

5. Area, Production and Productivity of major crops cultivated in the district 2014-15

|  |  |  |  |
| --- | --- | --- | --- |
| ***Crops*** | ***Area ( ha)*** | ***Production (ton)*** | ***Productivity (kg/ha)*** |
| Kharif paddy | 165825 | 680002.5 | 4094 |
| Boro paddy | 37450 | 187457.5 | 4996.25 |
| Autumn paddy(Aus) | 7225 | 17394.4 | 601.8 |
| Wheat | 32300 | 90178 | 2725 |
| sugarcane | 145 | 9183 | 62516.25 |
| Potato | 11815 | 313564 | 27171 |
| Pea | 133 | 101.35 | 794 |
| Blackgram | 652 | 4299 | 742.5 |
| Mustard | 27900 | 24883 | 888 |
| Linseed | 316 | 176 | 568.75 |
| Jute | 14085 | 181.3bale | 13bale/ha |
| Mesta | 7045 | 80.19bale | 11bale/ha |

6. Mean Annual Temperature, Rainfall & Humidity of the District (Average)

| ***Month*** | ***Rainfall (mm)\**** | ***Temperature 0 C (2015-16)\*\**** | | ***Relative Humidity (%) (2015-16)\*\**** |
| --- | --- | --- | --- | --- |
| ***Minimum*** | ***Maximum*** |
| April, 2015 | 84 | 34.7 | 19.8 | 56.80 |

**KVK Darjeeling**

District level data on agriculture, livestock and farming situation (2015-16)

|  |  |  |  |
| --- | --- | --- | --- |
| ***Sl. No.*** | ***Item*** | ***Information*** | |
| 1 | Major Farming system/enterprise | Hill and mountain farming system with horticulture base crop enterprise | |
| 2 | Agro-climatic Zone | | |
|  | Hill Zone | 1. Sloppy land – high soil erosion, shallow depth 2. Acidity problem 3. Low soil fertility – due to NPK and micro nutrient 4. Low Nitrogen release from organic matter due to soil acidity and low temperature | |
|  | Tarai Zone | 1. High leaching loss of nutrient due to light texture soil 2. Low availability of P due to soil acidity 3. Bo and Mo deficiency | |
| 3 | Agro ecological situation | 1. Due to sub-humid climate organic matter content moderate to high (2%) but decrease with depth 2. The eastern Himalayan region acidic to neutral range pH found | |
| 4 | Soil type | Brown forest soil   1. Slow release nutrients from organic matter due to acidity and low temperature 2. Micro nutrient deficiency 3. Leaching loss of nutrients due to high rainfall | |
| 5 | Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others | Crop | Productivity (q/ha) |
| Rice | 16.98 |
| Wheat | 13.18 |
| Maize | 20.42 |
| Gram | 10.65 |
| Other Pulses | 6.19 |
| Mustard | 3.01 |
| Linseed | 2.05 |
| Potato | 164.40 |
| Tea | 18.89 |
| Chilli (dry) | 7.5 |
| Ginger | 35 |
| Mandarin Orange | 92 |
| Tomato | 160.79 |
| Cabbage | 340.21 |
| Cauliflower | 343.55 |
| Radish | 135.04 |
| Gladiolus | 146733 spikes |
| 6 | Mean yearly temperature, rainfall, humidity of the district | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Month | Rainfall (mm) | Temperature 0 C | | Relative Humidity (%) | | Maximum | Minimum | | April 15 | 12.1 | 22.3 | 22.2 | 89 | | May 15 | 20.1 | 24.3 | 22.7 | 92 | | June 15 | 312.4 | 22.2 | 18.7 | 95 | | July 15 | 416.5 | 23.6 | 21.4 | 97 | | Aug 15 | 335.0 | 21.7 | 20.1 | 96 | | Sept 15 | 231.0 | 20.5 | 19.2 | 92 | | Oct 15 | 37.0 | 17.4 | 16.3 | 87 | | Nov 15 | 7.5 | 15.3 | 15.3 | 78 | | Dec 15 | 0 | 12.6 | 7.1 | 64 | | Jan 16 | 0 | 11.5 | 7.4 | 67 | | Feb 16 | 8.0 | 12.8 | 9.7 | 73 | | Mar 16 | 15.8 | 17.6 | 14.8 | 64 | | |
| 7 | Production of major livestock products like milk, egg, meat etc. | *Category* | *Population* |
| Cattle |  |
| *Crossbred* | 277057 |
| Buffalo | 5520 |
| Crossbred | 2649 |
| Goats | 187975 |
| Pigs | 53875 |
| Poultry | 673026 |
| others | **71593** |

**KVK Hooghly**

District level data on agriculture, livestock and farming situation (2015-16)

|  |  |  |
| --- | --- | --- |
| ***Sl. No.*** | ***Item*** | ***Information*** |
| 1 | Major Farming system/enterprise | * Rice-Rice-Jute * Rice-Potato-Sesame * Rice-Vegetables – Rice * Rice-Potato-Rice |
| 2 | Agro-climatic Zone | New Alluvial Zone |
| 3 | Agro ecological situation | Agro-Ecological Zone 15.1 described as "Bengal Basin", hot moist, sub-humid Agro-Ecological Sub-region. |
| 4 | Soil type | * Gangetic Alluvial Soil * Vindhya Alluvial Soil |
| 5 | Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others | * Aman Rice – 4.2 MT ha-1 * Pulse – 0.85 MT ha-1 * Mustard – 0.98 MT ha-1 * Potato – 22.0 MT ha-1 * Jute – 15.8 bales/ha * Sesame – 0.9 MT ha-1 |
| 6 | Mean yearly temperature, rainfall, humidity of the district | * Tempreture **–** 34.55oC (Max.)   16.3oC (Min.)   * Rainfall **–** 1208.6 mm. * RH **–** 98.75 % (Max.)   45.16%(Min.) |
| 7 | Production of major livestock products like milk, egg, meat etc. | * Milk – 376.18 thousand tones * Egg – 1979.57 lakh nos. * Meat – 25402 thousand tones * Fodder – 3315 MT * Table Fish – 41,400 MT |

**KVK Howrah**

District level data on agriculture, livestock and farming situation (2015-16)

|  |  |  |
| --- | --- | --- |
| ***Sl. No.*** | ***Item*** | ***Information*** |
| 1 | Major Farming system/enterprise | Rice based farming system  Wet land farming system  Vegetables  Pulses  Oilseeds  Betel vine  Jute  Flowers  Orchards  Sweet water fishes  Large ruminants  Small livestocks  Poultry |
| 2 | Agro-climatic Zone | Gangetic Alluvial Region   * Covers 5 Blocks viz. Domjur, Jagatballavpur, Panchla, Sankrail and Bally-Jagachha * Soil type Loamy & clay loam * pH: 6-7.2 * Water stagnation & inundation during rainy season * Rainfall: 1300-1600 mm * Major crops: Paddy, sesame, ground nut, green gram, vegetables mustard etc. * Cropping intensity: 191%   Vindhya Alluvial Region   * Covers 3 Blocks viz. Amta-I & II and Udaynarayanpur * Soil type Loamy & sandy loam * pH: 5.5-7.0 * Flood prone as well as drought prone area * Rainfall: 1500-2000 mm * Major crops: Paddy, mustard, sesame, ground nut, green gram, vegetables, khesari etc. * Cropping intensity: 250%   Vindhya Alluvial & Coastal Saline Region   * Covers 6 Blocks viz. Uluberia I&II, Bagnan I&II and Shyampur I&II * Soil type clay & Loamy * pH: 5.5-7.5 * Water stagnation & inundation during rainy season, salinity problem in pockets * Rainfall: 1600-1800 mm * Major crops: Paddy, sesame, ground nut, green gram, vegetables sunflowers, betel vine, flowers etc. * Cropping intensity: 173% |
| 3 | Agro ecological situation | *Gangetic Alluvial Soil:* Highly productive region, though mainly industrial area  *Vindhya Alluvial Soil:* Highly productive region, mainly low to medium low land situation, prevailing by rice crop, in high lands vegetables and flowers are grown, some areas are prone to flood  *Coastal Saline Soil:* Having salinity problem in some pockets, partially flood prone |
| 4 | Soil type | Sandy loam to Silty clay loam  (a) Up land  (b) Medium land  Silty clay to clay  (a) Low land  Soilshere are moderately well drained to imperfectly to somewhat poorly drained, deep and medium to heavy textured. Particularly, in most of the paddy fields soils have argillic horizon. The drained uplands have pH around 5.5 to 6.0, and the medium land 6.0 to 7.0 and the low lands 7.0 to 7.5. These soils have a moderate to good base saturation percentage and they are poor to moderate in total N (0.02 to 0.08 %), total P (0.01 to 0.05%) and total K2O from 0.1 to 0.5 %.  Sandy loam to Silty clay loam  Sand: 10 – 65%  Silt: 10 – 50 %  Clay: 20 – 40%  Pore space: 45.66 to 35.55%  BD: 1.4 g/cm3  Soil texture: Moderately coarse to moderately fine  Silty Clay to clay  Sand: 0 – 20%  Silt: 30 – 50 %  Clay: 30 – 60%  Pore space: 30.45 to 28.41%  BD: 1.6 g/cm3  Soil texture: Fine to very fine |
| 5 | Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others | |  |  |  |  | | --- | --- | --- | --- | | *Sl. No.* | *Name of Crop* | *Area (ha)* | *Yield rate*  *(kg/ha)* | | 1 | Rice   1. Autumn | 1,185 | 1280 (Cleaned rice) | | 1. winter | 63,937 | 2630 (Cleaned rice) | | 1. Summer (Boro) | 34,975 | 3,464 (Cleaned rice) | | Total Rice | 1,00,097 | - | | 2 | Wheat | 1344 | 1870 | | 3 | Maize(Summer) | 77 | 1,015 | | 4 | Gram | 17 | 620 | | 5 | Moong (Summer) | 90 | 920 | | 6 | Lentil | 123 | 660 | | 7 | Field Pea (green) | 81 | 1500 | | 8 | Khesari | 1844 | 850 | | 9 | Sesame (Summer) | 2,509 | 900 | | 10 | Rape& Mustard | 2452 | 1050 | | 11 | Ground Nut (Summer) | 2,311 | 1,800 | | 12 | Sunflower | 53 | 820 | | 13 | Jute | 2,230 | 14.7 (Bales) | | 14 | Sugarcane | 272 | 60,966 | | 15 | Potato | 5307 | 26.6 | | 16 | Ginger | 32 | 6,875 | | 17 | Chilli (Bhadoi) | 146 | #890 | | 18 | Chilli(Rabi) | 204 | #995 | | 19 | Coconut | 2,865 | 9,966 | | 20 | Areca nut | 501 | 2,088 | | 21 | Turmeric | 118 | 2,992 | | 22 | Vegetable (summer) | 4685 | 11.90MT | | 23 | Vegetable (rainy) | 4080 | 12.2MT | | 24 | Vegetable (winter) | 6915 | 12.69 MT | | 25 | Flower (All types) | 1425 | 10 MT | | 26 | Betelvine | 3392 | 1277000lakh mot | | 27 | Fruits (Total) | 2287 | 9.94MT | |
| 6 | Mean yearly temperature, rainfall, humidity of the district | |  |  |  |  |  | | --- | --- | --- | --- | --- | | *Month* | *Rainfall (mm)* | *Temperature 0 C* | | *Relative Humidity (%)* | |  |  | Maximum | Minimum |  | | April | 52 | 33 | 24 | 79.3 | | May | 101 | 38 | 26 | 73.7 | | June | 381 | 33 | 26 | 81.9 | | July | 248 | 32 | 26 | 86.5 | | August | 409 | 32 | 26 | 86.2 | | September | 139 | 30 | 26 | 88.9 | | October | 400 | 29 | 24 | 88.5 | | November | 0 | 27 | 18 | 80.1 | | December | 0 | 23 | 13 | 73.3 | | January | 0 | 22 | 10 | 70.6 | | February | 34 | 26 | 15 | 74.0 | | March | 26 | 39 | 18 | 60.8 | |
| 7 | Production of major livestock products like milk, egg, meat etc. | |  |  |  |  | | --- | --- | --- | --- | | *Category* | *Population* | *Production* | *Productivity* | | Cattle | | | | | *Crossbred* | 32663 |  |  | | *Indigenous* | 254696 |  |  | | Buffalo | 8895 |  |  | | Sheep | | | | | Crossbred |  |  |  | | *Indigenous* | 370 |  |  | | Goats | 189344 |  |  | | Pigs |  |  |  | | *Crossbred* | 415 |  |  | | *Indigenous* | 735 |  |  | | Rabbits |  |  |  | | Poultry | | | | | Hen | 788225 |  |  | | *Desi* | 443469 |  |  | | *Improved* | 344756 |  |  | | Duck | 257871 |  |  | | Turkey and others | 41 |  |  | |

**KVK Jalpaiguri**

District level data on agriculture, livestock and farming situation (2015-16)

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

|  |  |
| --- | --- |
| *Sl. No.* | *Farming system/enterprise* |
| 1. | Agriculture- Livestock |
| 2. | Agriculture – Livestock – Fishery |
| 3. | Agriculture |

|  |  |  |  |
| --- | --- | --- | --- |
| ***Sl. No.*** | ***Farming system/enterprise*** | | |
| ***Pre-kharif*** | ***Kharif*** | ***Rabi/ winter*** |
| A. IRRIGATED CONDITION | | | |
| *(a) Upland & medium land situation* | | | |
| 1. | Jute / Mesta | Rice | Wheat / mustard |
| 2. | Ridgegourd / cucumber / Okra / Brinjal / Pumpkin | Rice | Potato / Mustard |
| 3. | Okra / Pointed gourd | Rice | Brinjal / Chilli / Tomato / Cabbage / Cauliflower |
| 4. | Greengram | Pointed gourd / Brinjal | Cabbage /Cauliflower /Tomato |
| 5. | Pointed gourd | Pointed gourd | Radish / Tomato (Late) |
| 6. | Sesame / Maize | Rice | Brinjal /Cabbage / Cucumber |
| 7. | Chilli / Maize | Rice | Potato |
| *(b) Low land situation* | | | |
| 1. | Maize | Rice | Fallow |
| 2. | Maize | Rice | Wheat |
| B. RAINFED CONDITION | | | |
| (a) Upland situation | | | |
| 1. | Maize | Rice | Fallow |
| 2. | Fallow | Rice | Mustard |
| 3. | Ginger / Turmeric | Ginger / Turmeric | Fallow |
| b. Low land situation | | | |
| 1. | Jute | Rice | Fallow |
| 2. | Sesame | Rice | Fallow |

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

|  |  |  |
| --- | --- | --- |
| ***Sl. No.*** | ***Agro-climatic Zone*** | ***Characteristics*** |
| 1. | Terai-Teesta Alluvial | Topical per humid climatic with rainfall between  2000-3500 mm, air temperature max-32.3o C and min-12.8o C (Annual Normal) |

*Source****:*** *Directorate of Agriculture, Govt. of W.B.*

1. Soil type

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No | Soil type | Characteristics | Area in ha |
| 1. | Sandy loam | Soils are deep medium textured, turned lightered with depth moderate level of organic matter without appreciable mineralization. pH ranges from highly acidic to acidic significantly low in bases, phosphate, potash and some micronutrients. | 205199.8 |
| 2. | Sandy | Soils are light textured, poor in quality, less water holding capacity. | 20475.8 |

*Source: Basic agricultural Information of Jalpaiguri District, Location and Boundaries, Deptt. of Agriculture*

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Sl. No.* | *Crop* | *Area (ha)* | *Production (q)* | *Productivity (q/ha)* |
| 1. | Rice:  Aus Rice  Local  HYV  Hybrid  Aman Rice:  Local  HYV  Hybrid  Boro Rice:  Local  HYV  Hybrid | 1155  21610  135  14744  165945  4170  1630  21930  1385 | 2017.98  61642.18  645.75  33796.52  603518.88  21117.02  5423.50  97103.56  7738.60 | 1747.16  2852.48  4783.33  2292.22  3636.86  5064.03  3327.30  4427.89  5587.44 |
| 2. | Wheat | 15097 | 51650.20 | 3421.22 |
| 3. | Maize:  Kharif  Rabi  Pre Kharif | 25  933  9139 | 64.50  2956.50  23876.71 | 2580.00  3168.81  2612.62 |
| 4. | Rape & Mustard | 12178 |  |  |
| 5. | Niger | 955 |  |  |
| 6. | Til:  Summer  Bhadoi  Winter | 634  28  60 | 485.87  0.00  37.70 | 766.36  0.00  628.33 |
| 7. | Groundnut:  Summer  Rabi  Kharif | 2575  434  0 | 5096.38  743.19  0.00 | 1979.17  1712.42  0.00 |
| 8. | Potato | 35474 | 1016441.53 | 28653.14 |
| 9. | Jute | 32114 | 374429.84 | 11.66 |
| 10. | Vegetables:  Kharif  Winter  Bhadoi | 7672  24640  7745 | 0.00  0.00  0.00 | 0.00  0.00  0.00 |
| 11. | Fruits | 1547.25 | 2007.56 | 1297.50 |
| 12. | Chilli:  Rabi  Bhadoi | 3478  1467 | 22414.48  12063.82 | 6444.65  8223.46 |
| 13. | Ginger | 1145 | 9479.70 | 8279.21 |
| 14. | Turmeric | 1188 | 6990.37 | 5884.15 |
| 15 | Betal Leaves | 171 | 33.61 | 196.53 |

1. Weather data

|  |  |
| --- | --- |
| *Month* | *Rainfall (mm)* |
|
| April, 2015 | 6.2 |
| May, 2015 | 500.7 |
| June, 2015 | 682.0 |
| July, 2015 | 468.7 |
| August, 2015 | 891.0 |
| Sept., 2015 | 378.8 |
| Oct., 2015 | 19.3 |
| Nov., 2015 | 28.7 |
| Dec., 2015 | 0.0 |
| Jan., 2016 | 7.9 |
| Feb., 2016 | 1.2 |
| March, 2016 | 30.4 |
| Total: | 3014.9 |

*Source: Additional Directorate of Agriculture, North Bengal Region,*

*Govt. of W.B., Jalpaiguri*

**KVK Murshidabad**

District level data on agriculture, livestock and farming situation (2015-16)

|  |  |  |  |
| --- | --- | --- | --- |
| *Sl. No.* | *Farming system/enterprise* | | |
| ***Pre-kharif*** | ***Kharif*** | ***Rabi/ winter*** |
| A. IRRIGATED CONDITION | | | |
| *(a) Upland & medium land situation* | | | |
| 1. | Jute | Rice | Wheat / Lentil |
| 2. | Brinjal | Okra/Cowpea/bitter gourd/ Ridgegourd | Potato / Mustard |
| 3. | Sesame | Rice | Brinjal / Chilli / Tomato / Cabbage / Cauliflower |
| 4. | Green gram | Pointed gourd / Brinjal | Cabbage /Cauliflower /Tomato |
| 5. | Groundnut | Pointed gourd | Radish / Tomato (Late) |
| 6. | Maize | Rice | Brinjal /Cabbage / Cucumber |
| 7. | Chilli / Maize | Kalai | Potato |
| *(b) Low land situation* | | | |
| 1. | Jute | Rice | Rice |
| 2. | Rice | Rice | Rice |
| 3. | Rice | Rice | Wheat / Maize |
| B. RAINFED CONDITION | | | |
| *(a) Upland and medium land situation* | | | |
| 1. | Jute | Rice | Mustard |
| 2. | Sesame | Kalai | Mustard |
| 3. | Green gram /Sesame | Turmeric | Fallow |
| 4 | Elephant foot yam | Leafy vegetable |  |
| *b. Low land situation* | | | |
| 1. | Jute | Rice | Fallow |
| 2. | Sesame | Rice | Fallow |

|  |  |  |
| --- | --- | --- |
| ***Sl. No.*** | ***Item*** | ***Information*** |
| 2 | Agro-climatic Zone | Old Alluvium  Lateriate light  New Alluvium |
| 3 | Agro ecological situation | 1. Agro ecological situation-I: Old Alluvial Soil 2. Agro ecological situation-II: Lateriate light Soil 3. Agro ecological situation-III: New Alluvium Soil |
| 4 | Soil type | 1. Old Alluvial: Moderate fertile (76032) 2. Lateriate light: Less fertile. Reddish colour undulating topography known as *RARH*(200898) 3. New Alluvial: Highly fertile, known as *BAGRI*(254681) |

Productivity of major 2-3 crops under sereals, pulses, oilseed, vegetables, fruits and others

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Sl. No.* | *Crop* | *Area (ha)* | *Production (q)* | *Productivity (q/ha)* |
| 1 | Aus paddy | | | |
| HYV | 25,527 | 99,3657.1 | 38.92 |
| Local | 2,771 | 6,4254.1 | 23.18 |
| 2 | Aman Paddy | | | |
| HYV | 1,99,225 | 8031686.1 | 40.31 |
| Local | 5832 | 131783.85 | 22.59 |
| 3 | Boro paddy | 112306 | 6782955.62 | 60.397 |
| 4 | Wheat | 95885 | 2534858.3 | 26.51 |
| 5 | Jute | 101555 | 1392466 Bales | 13.711bales/ha |
| 6 | Gram | 7260 | 71281.25 | 9.82 |
| 7 | Lentil | 16455 | 149909.95 | 9.11 |
| 8 | Black Kalai | 5507 | 38603.5 | 6.50 |
| 9 | Arhar | 1064 | 9990.45 | 9.39 |
| 10 | Mustard | 88305 | 784363.5 | 8.88 |
| 11 | Linseed | 1050 | 7500.05 | 7.14 |
| 12 | Sunflower | 26 | 276 | 10.61 |

Mean yearly temperature, rainfall, humidity of the district

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Month*** | ***Temperature (0C)*** | | ***Humidity (%)*** | | ***Rainfall (mm)*** | ***No. of rainy days*** |
| ***Max*** | ***Min.*** | ***Max*** | ***Min.*** |
| May, 15 | 33.6 | 24.6 | 90 | 74 | 137.0 | 9 |
| June, 15 | 33.5 | 26.4 | 90 | 71 | 145.6 | 8 |
| July, 15 | 33.0 | 26.5 | 89 | 77 | 116.4 | 8 |
| August, 15 | 31.2 | 26.4 | 92 | 79 | 298.3 | 14 |
| September, 15 | 32.3 | 26.3 | 91 | 75 | 216.7 | 11 |
| October, 15 | 31.0 | 23.6 | 93 | 77 | 214.7 | 9 |
| November, 15 | 28.5 | 16.0 | 82 | 45 | Nil | Nil |
| December, 15 | 24.3 | 13.2 | 90 | 51 | Nil | Nil |
| January,16 | 29.5 | 14.2 | 80 | 45 | Nil | Nil |
| February,16 | 34 | 27.2 | 74 | 46 | Nil | Nil |
| March,16 | 42 | 38 | 70 | 65 | Nil | Nil |

Production of major livestock products like milk, egg, meat etc. (during 2013-14):

Milk-623204 Tones, Egg-6721.34 Lakh, Meat-43685 MT

Fish production of Murshidabad District

|  |  |
| --- | --- |
| ***Category*** | ***Production*** |
| Fish production | 69613 MT |
| Fingerling | 492.30 million |
| Fry | 604.90 million |
| Spawn | 787.80 million |
| Prawn | 28.15 MT |
| Per Year Requirement | 88134MT |
| Supply | 69727 MT |
| Number of pond | 70,000 nos. |
| Fisherman Cooperative | 96 nos. |
| Ornamental Cooperative | 14 nos. |
| Self Help Group | 112 nos. |
| Fish Farmers Family | 21352 nos. |
| Total Fishermen | 298515 nos. |
| Hatchery: Government | 19 (1 in KVK) ; Non-Government-18 |
| River and cannel | 17695.77 ha |
| Pond | 15382.41 ha |
| Beel | 12699.99 ha |

Total wetland area (ha) in Murshidabad district

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Sl. No.*** | ***Name of block*** | ***River (ha)*** | ***Pond (ha)*** | ***Beel (ha)*** | ***Total area (ha)*** |
| 1 | Berhampore | 590.55 | 889.51 | 630.01 | 2110.07 |
| 2 | Beldanga-I | 302.42 | 534.08 | 1820.0 | 2656.5 |
| 3 | Beldanga-II | 563.72 | 471.97 | 240.00 | 1275.69 |
| 4 | Nowda | 133.85 | 168.17 | 1040.34 | 1342.36 |
| 5 | Hariharpara | 511.81 | 485.52 | 374.66 | 1371.99 |
| 6 | Domkol | 33.70 | 663.91 | 371.44 | 1069.05 |
| 7 | Ranonagar-I | 83.45 | 158.33 | 115.57 | 357.35 |
| 8 | Raninagar-II | 8286.62 | 64.57 | 279.72 | 8630.91 |
| 9 | Jalangi | 620.65 | 513.26 | 120.20 | 1254.11 |
| 10 | Kandi | 577.95 | 848.79 | 573.38 | 2000.12 |
| 11 | Burwan | 524.80 | 1666.43 | 224.62 | 2415.85 |
| 12 | Khorgram | 110.23 | 2462.98 | 748.43 | 3321.64 |
| 13 | Bharatpur-I | 744.65 | 712.18 | 139.32 | 1596.15 |
| 14 | Bharatpur-II | 590.55 | 758.37 | 295.73 | 1644.65 |
| 15 | Lalgola | 2776.37 | 180.17 | 691.17 | 3647.71 |
| 16 | Bhagwangola-I | 520.88 | 243.82 | 120.78 | 885.48 |
| 17 | Bhagwangola-II | 738.96 | 163.14 | 60.63 | 962.73 |
| 18 | Nabagram | 85.83 | 1020.51 | 532.37 | 1638.71 |
| 19 | Murshidabad-Jiaganj | 511.81 | 729.93 | 546.31 | 1788.05 |
| 20 | Farakkha | 1181.10 | 126.00 | 174.93 | 1482.03 |
| 21 | Samserganj | 503.93 | 86.05 | 554.23 | 1144.21 |
| 22 | Suti-I | 107.44 | 738.41 | 194.84 | 1040.69 |
| 23 | Suti-II | 181.44 | 180.62 | 842.34 | 1204.4 |
| 24 | Raghunathganj-I | 115.64 | 758.37 | 812.30 | 1686.31 |
| 25 | Raghunathganj-II | 1232.36 | 91.33 | 303.33 | 1627.02 |
| 26 | Sagardighi | 405.51 | 1247.04 | 578.38 | 2230.93 |
| *Total area* | | *17695.77* | *15382.41* | *12699.99* | *45778.17* |

*Source: Data from Murshidabad Fishery Department*

**KVK North 24 Parganas**

District level data on agriculture, livestock and farming situation (2015-16)

|  |  |  |
| --- | --- | --- |
| ***Sl. No.*** | ***Item*** | ***Information*** |
| 1 | Major Farming system/enterprise | Jute/sesame- Aman paddy -lentil/gram/Vegitables |
| 2 | Agro-climatic Zone | New Alluvial Zone (16 blocks), Coastal Zone (6 blocks**)** |
| 3 | Agro ecological situation | AES –I (Ichamati Basin), AES-II (Gangetic alluvial), AES-III (Costal Alluvial) |
| 4 | Soil type | Sandy loam, clay and clay loam, Soil depth 4-6 ft with medium to good water holding capacity, Neutral to acidic soil with good fertility |
| 5 | Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others | Rice -597.5 thuosand tons,  Total cereals- 618.3 thousand tons  Pulses- 9.4 thousand tons  Foodgrains- 627.7 thousand tons  Oilseeds- 54.9 thousand tons  Fibres- 1031.8 thousand tons  Miscellaneous crops- 253.6 thousand tons |
| 6 | Mean yearly temperature, rainfall, humidity of the district | Total rain fall-1208 mm, Mean Temp. -25 0C, Mean RH-85.34% |
| 7 | Production of major livestock products like milk, egg, meat etc. | Milk=4.81 lakh MT, Egg = 3367.21 lakhs, Meat = 0.62 lakh metric tons |

**KVK Nadia**

District level data on agriculture, livestock and farming situation (2015-16)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Sl. No.*** | ***Item*** | | | | ***Information*** | | | | | | | | |
| 1 | Major Farming system/enterprise | | | | Agriculture and Horticulture-based farming system:  Stagnation in farm income efficiency due to fast reducing profit potential, Deteriorating soil health in the face of no or extremely low rate of application of organic manure coupled with imbalanced application of chemical fertilizers. Inefficient crop husbandry restricting the scope of augmenting productivity under existing level of inputs management. Instability in yield due to increasing pest problem in the four most important vegetable enterprises. Inefficient nursery management for early vegetables in particular. Occasional glut during peak season due to extremely sluggish rate of value addition.  Fish based production system:  Mass mortality and poor growth performance leading to less profit due to lack of knowledge in maintaining appropriate stock ratios and skill in scientific pond management. Dereliction of productive area due to continuous neglect in the face of poor knowledge on fishery management in an enterprising mode.  Livestock based production system:  Poor management condition under courtyard and backyard situation leading to poor system out-turns. Poor overall system performance due to lack of awareness and motivation on timely health coverage. | | | | | | | | |
| 2 | Agro-climatic Zone | | | | | | | | | | | | |
| New Alluvial Zone | | | | Soils here are moderately well drained, deep and medium textured with pH varies from 6.5 – 7.5 with a good base saturation. Annual rainfall in the situation varies from 1,401-1,671 mm; maximum and minimum temperature ranges between 25.2 –37.9°C and 9.8 – 26.7°C respectively. So far as the physiographic and irrigation facility is concerned, this district leaves scope to grow a wide variety of agricultural and horticultural crops. | | | | | | | | |
| 3 | Agro ecological situation | | | | | | | | | | | | |
| Medium and low land situation | | | | The soils of New Alluvial Zone (NAZ) have got developed on recent alluvium of main river system of the Ganges. Soils of this flat alluvial plain vary from sandy loam to heavy clay in texture possessing high water retention capacity, good porosity and generally higher permeability for the surface soils. Depending upon their typical geomorphic situations, nature of alluvium and typical land use in cropping practices, this NAZ may further be sub-divided into four situations viz, i) Low-lying flood plain *(Tal)* including backwater swamps, ii) Recent Alluvial high flood plain *(Diara),* iii) Recent alluvial flood plain, and iv) Deltic alluvial plain. The climate of this largest agro-climatic zone in the state is sub-tropical in nature with an average annual rainfall of 1,467.5mm.The minimum and maximum temperature ranges from 9.0 – 26.8 OC and 20.4 – 39.0 OC respectively. Sunshine hours in NAZ generally vary between 8.5 –10.5 hrs. per day excepting during monsoon months when average sunshine hours come down to around 5.5 hrs. per day. Irrigation facility, one of the most critical factors for the growth of agriculture, is also in existence in an appreciable form at NAZ and covers an area of about 50 percent as against only 25.3 percent for the whole state. Endowed with congenial agro-ecological situation, the NAZ of West Bengal has established itself to be the core productive zone and granary of the state. | | | | | | | | |
| 4 | Soil type | | | | | | | | | | | | |
| Sandy loam  (a) Up land  (b) Medium land  Clay  (a) Low land | | | | Soils here are moderately well drained, deep and medium textured with pH varies from 6.5 – 7.5 with a good base saturation. | | | | | | | | |
| 5 | Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others: | | | | | | | | | | | | |
| Sl. No. | *Crop* | | | | | | *Area (ha)* | | *Production (q)* | | *Productivity (Kg /ha)* | |
| Cereals | | | | | | | | | | | | |
| 1. | Aus paddy | | | | | | 47696 | | 17179.7 | | 3602 | |
| 2. | Kharif paddy | | | | | | 97006 | | 40329.3 | | 4157 | |
| 3. | *Boro* paddy | | | | | | 94331 | | 52653.6 | | 5582 | |
| 4. | Wheat | | | | | | 44269 | | 14902.0 | | 3366 | |
| 5. | Maize | | | | | | 3150 | | 823.4 | | 2614 | |
| Oilseeds | | | | | | | | | | | | |
| 1. | Mustard | | | | | | 77153 | | 9077.1 | | 1177 | |
| 2. | Sesame | | | | | | 29184 | | 3463.7 | | 1187 | |
| 3. | Ground nut (Rabi & Summer) | | | | | | 7499 | | 1590.2 | | 2121 | |
| 4. | Linseed | | | | | | 5458.50 | | 8936.02 | | 1646.00 | |
| 5. | Sunflower | | | | | | 1295 | | 738.91 | | 570.00 | |
| Pulses | | | | | | | | | | | | |
| 1. | Gram | | | | | | 6788 | | 729.1 | | 1074 | |
| 2. | Lentil | | | | | | 25602 | | 2463.4 | | 962 | |
| 3. | Pea | | | | | | 1950.00 | | 2070.70 | | 1061.00 | |
| 4. | Lathyrus | | | | | | 2285.00 | | 1416.73 | | 620.00 | |
| 5. | Green gram | | | | | | 1654 | | 104.0 | | 629 | |
| 6. | Black gram (Kharif) | | | | | | 5815.00 | | 4316.90 | | 742.00 | |
| 7. | Black gram (Rabi) | | | | | | 1848.00 | | 1482.80 | | 802.00 | |
| 8. | Red gram | | | | | | 905.00 | | 739.60 | | 817.00 | |
| Others | | | | | | | | | | | | |
| 1. | Jute | | | | | | 83680 | | 1126051.50 bale | | 13.45 bale / ha | |
| 2. | Potato | | | | | | 5580.00 | | 144815.70 | | 25950.0 | |
| 3. | Sugarcane | | | | | | 3060.00 | | 186963.00 | | 61099.00 | |
| Vegetables | | | | | | | | | | | | |
| 1. | Tomato | | | | | | 4812.00 | | 695200.00 | | 14447.00 | |
| 2. | Cabbage | | | | | | 6972.00 | | 217300.00 | | 31167.00 | |
| 3. | Cauliflower | | | | | | 7130.00 | | 214700.00 | | 30112.00 | |
| 4. | Brinjal | | | | | | 10917.00 | | 523226.30 | | 47927.7 | |
| 5. | Onion | | | | | | 2439.00 | | 261500.00 | | 10722.00 | |
| 6. | Lady finger | | | | | | 7049.00 | | 750220.00 | | 10643.0 | |
| Fruits | | | | | | | | | | | | |
| 1. | Mango | | | | | | 3612.00 | | 282740.00 | | 7828.00 | |
| 2. | Banana | | | | | | 4069.00 | | 721690.00 | | 17736.00 | |
| 3. | Papaya | | | | | | 817.00 | | 231600.00 | | 28348.00 | |
| 4. | Guava | | | | | | 710.00 | | 128800.00 | | 18141.00 | |
| Flower | | | | | | | | | | | | |
| 1. | Rose | | | | | | 330.00 | | 38300.00 | | 11606.0 | |
| 2. | Tube rose | | | | | | 1184.00 | | 194000.00 | | 16385.00 | |
| 3. | Merigold | | | | | | 1470.00 | | 108740.00 | | 7397.00 | |
| Spices | | | | | | | | | | | | |
| 1. | Chilli | | | | | | 3905.00 | | 31260.00 | | 800.00 | |
| 2. | Turmeric | | | | | | 1580.00 | | 31250.00 | | 1978.00 | |
| 3. | Garlic | | | | | | 152.00 | | 13050.00 | | 8585.00 | |
| 4. | Coriander | | | | | | 4030.00 | | 40420.00 | | 1003.00 | |
| 6 | Mean yearly temperature, rainfall, humidity of the district | | | | | | | | | | | | |
| *Month* | | *Rainfall (mm)* | | | *Temperature 0 C* | | | | | *Relative Humidity (%)* | | |
| *Maximum* | | | *Minimum* | | *Maximum* | | *Minimum* |
| April 15 | | 102.3 | | | 35.9 | | | 24.0 | | 89.6 | | 56.7 |
| May 15 | | 33.1 | | | 37.6 | | | 27.2 | | 88.9 | | 59.0 |
| June 15 | | 344.0 | | | 34.6 | | | 26.9 | | 91.9 | | 72.0 |
| July 15 | | 464.3 | | | 32.3 | | | 25.9 | | 97.8 | | 86.1 |
| August 15 | | 193.6 | | | 33.4 | | | 26.8 | | 94.8 | | 76.8 |
| September 15 | | 227.3 | | | 33.1 | | | 26.1 | | 96.0 | | 71.0 |
| October 15 | | 42.1 | | | 33.4 | | | 23.7 | | 94.2 | | 62.5 |
| November 15 | | 0.0 | | | 31.3 | | | 18.8 | | 93.1 | | 53.3 |
| December 15 | | 6.6 | | | 26.3 | | | 15.0 | | 93.1 | | 56.3 |
| January 16 | | 3.0 | | | 25.8 | | | 11.9 | | 92.8 | | 53.3 |
| February 16 | | 31.9 | | | 30.7 | | | 18.0 | | 92.8 | | 53.9 |
| March 16 | | 35.8 | | | 34.3 | | | 21.8 | | 91.7 | | 47.5 |
| 7 | *Production of major livestock products like milk, egg, meat etc.* | | | | | | | | | | | | |
| *Category* | | | *Population* | | | *Production* | | | | | | *Productivity* |
| *Cattle* | | | | | | | | | | | | |
| *Crossbred* | | | 348760 | | | Milk-254.677 (thousand Ton) | | | | | |  |
| *Indigenous* | | | 522258 | | | Milk-173.28 (thousand Ton) | | | | | |  |
| Buffalo | | | 24075 | | | Meat-314 M.ton Milk-28.882 (thousand Ton) | | | | | |  |
| Sheep | | | 11718 | | | Meat-612 M.ton , Wool-23.364 M.ton | | | | | |  |
| Goats | | | 968707 | | | Meat-9,952 M.ton, Milk-8.047 (thousand Ton) | | | | | |  |
| Pigs | | | 12955 | | | Meat-2,483 M.ton | | | | | |  |
| Rabbits | | | 7028 | | |  | | | | | |  |
| **Poultry** | | | | | | | | | | | | |
| Hen | | | 2233853 | | |  | | | | | |  |
| *Desi* | | | 1537548 | | |  | | | | | |  |
| *Improved* | | | 696305 | | |  | | | | | |  |
| Duck | | | 595072 | | |  | | | | | |  |
| Turkey and others | | | 53 | | |  | | | | | |  |

**KVK South 24 Parganas (Nimpith)**

District level data on agriculture, livestock and farming situation (2015-16)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Sl. No.*** | ***Item*** | ***Information*** | | | | |
| 1 | Major Farming system/enterprise  ` | Agro based farming system – Paddy (monocropped) | | | | |
| Agro based farming system – Paddy-Moong/ Cotton /Sunflower | | | | |
| Agro based farming system – Paddy – Khesari (paira crop) | | | | |
| Agro-horti based farming system- Paddy- Chilli/ Tomato/ okra | | | | |
| Ail-bundh (land embankment) farming system – Okra/ Bitter Gourd- Tomato/ French bean | | | | |
| Agri-horti-fishery – Paddy- Chilli/ Tomato/ Okra-IMC | | | | |
| Agri-poultry (backyard)- Paddy- Moong/ Khesari/ Indigenous poultry | | | | |
| 2 | Agro-climatic Zone | Coastal saline zone | | | | |
| 3 | Agro ecological situation | Gangetic Alluvial | | | | |
| Coastal Alluvial | | | | |
| Coastal Saline | | | | |
| 4 | Soil type | Clay, clay loam, sandy loam | | | | |
| 5 | Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others | Crop | | Productivity (kg/ha) | | |
| Paddy (*Aus*) | | 2496.0 | | |
| Paddy (*Aman*) | | 2374.0 | | |
| Paddy (*Boro*) | | 3134.0 | | |
| Khesari | | 845.0 | | |
| Greengram | | 606.0 | | |
| Sunflower | | 1288.0 | | |
| Mustard | | 1031.0 | | |
| Cotton | | 4.65(bales) | | |
| Tomato | | 17736.18 | | |
| Brijal | | 17842.86 | | |
| cucurbits | | 9822.394 | | |
| Okra | | 10709.84 | | |
| Green chilli | | 3330.0 | | |
| Guava | | 15151.0 | | |
| Sapota | | 12812.5 | | |
| Litchi | | 10108.7 | | |
| Betelvine | | 6428310 no. leaf/ha | | |
| 6 | Mean yearly temperature, rainfall, humidity of the district | Rainfall- 1641 mm,  Temperature- Max. 39.80 C, Mini.10.00C  Humidity- Max. 99.2%, Mini.39.0% | | | | |
| 7 | Production and productivity of livestock, poultry, fisheries etc. in the district (New census report is awaiting from the State Department) | *Category* | *Population* | | *Production* | *Productivity* |
| Cattle | | | | |
| *Crossbred* | 32550 | | 2,65,8,750 lit | 1800-2100 lit/lactation |
| *Indigenous* | 968986 | | 19,37,97,200 lit | 400-500 lit/lactation |
| Buffalo | 15604 | | 56,71,300 lit | 600-700 lit/lactation |
| Sheep | | | | |
| Crossbred | - | | - | - |
| *Indigenous* | 212589 | | 22,10,925 kg | 10-12 kg/sheep/year |
| Goats | 696935 | | 78,05,672 kg | 11-13 kg/sheep/year |
| Pigs | | | | |
| *Crossbred* | - | | - | - |
| *Indigenous* | 32584 | | 12,05,608 kg | 35-40kg/pig/year |
| Rabbits | - | | - | - |
| Poultry | 2869243 | |  |  |
| Hens (improved) | 713137 | | 12,47,98,975 eggs | 170 – 180 eggs/yr/bird |
| *Desi* | 2156106 | | 19,83,61,752 eggs | 90 – 110 eggs/year/bird |
| *Improved* | - | | - | - |
| Ducks | 1058706 | | 7,67,56,185 eggs | 140 – 160 eggs/yr/bird |
| Turkey and others | 75897 | | 6,22,355 kg | 6 – 9 kg/year/bird |
| 8. | Production of fish and prawn  (Source: Hand Book of Fisheries Statistics 2014-15, Directorate of Fisheries, Govt. of West Bengal) | 1. Marine fish-1.79lakh ton (52176 ton in S.24 Pgs.) 2. Inland fish- 3. Pond/tank -11.296 lakh ton 4. Beel/baor -0.577lakh ton 5. Reservoirs -0.019 lakh ton 6. Rivers -0.052 lakh ton 7. Canals -0.021 lakh ton 14.38 lakh ton 8. Sewage fed fisheries -0.027 lakh ton (1.498 lakh ton in 9. Brackishwater fisheries -1.641 lakh ton S.24 Parganas) 10. Coldwater – 0.004 lakh ton 11. Others (Estuarine,   water logged, etc.) – 0.745 lakh ton   1. Fish seed production -16717 million (131 million in S.24 Pgs.)   C. Prawn-  i) Inland-  a) Penaeid -79803 ton  b) Non penaeid -26602 ton 106405 ton (29835 ton in S.24 Pgs.)  ii) Marine-  a) Penaeid -6767 ton  b) Non penaeid -2744 ton 9511 ton (2788 ton in S.24 Pgs.)  D. Export of fish and prawn - 85138.45ton worth Rs.3687.69crores | | | | |

*Source: Annual Action Plan on ARD(2011-12), South 24 Parganas, West Bengal*

**KVK Purulia**

District level data on agriculture, livestock and farming situation (2015-16)

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

|  |
| --- |
| *Farming system/enterprise* |
| Very high unbunded upland- Forest/ Orchard/ (Blackgram/ Red gram/ Groundnut/ Niger/ Maize/ Bajra/ Vegetables) – fallow-fallow |
| Bunded Uplands- Kharif Paddy-fallow - fallow/ Kharif Paddy- Mustard / Vegetables -Fallow |
| Bunded Medium land – Kharif Paddy- Fallow / Kharif Paddy- Wheat/ Mustard - Fallow |
| Bunded Lowland – Kharif Paddy –Fallow-Fallow / Kharif Paddy – Summer Paddy-Fallow/ Kharif Paddy – Gram/ Lentil/ Lathyrus –Fallow. |

|  |  |  |
| --- | --- | --- |
| 2.2 | *Agro-climatic Zone* | *Characteristics* |
|  | Red & Lateritic Zone | The average rainfall of the zone is 1216 mm. of which about 80 % received during the four monsoon months. Two major groups of soil namely Red and lateritic are found in this agroclimatic zone. The soils are vary in depth and in many cases shallow in nature. Due to undulating terrain the soils are highly eroded. Soil fertility level is very poor with low N & P. The soils are coarsely textured, highly drained, erosion prone and pH varies from 5.5- 6.6. |
| *2.3* | *Agro ecological situation* | *Characteristics* |
|  | Purulia District, an integral part of Chotonagpur plateau under the sub humid, sub tropical red and lateritic agro climatic zone of West Bengal lying between 22.60 and 23.5 0 North Latitude and 85.750 and 86.650 East Longitude, 255 mt. high from mean sea level, has earned the distinction as drought prone area, because of its significant and distinct characteristics among other districts of West Bengal. The topography of the land is highly undulating with steep slopes with 60% of the high land, 30% medium land, and 10% of the land is low lying. Here the climate is extreme in nature and the soils are mostly red and lateritic having poor fertility status and less water holding capacity. The average rainfall of the district varies from 1300 to 1400 mm. but the mostly clubbed during monsoon with occational long inter spells between two rainy days. Monsoon also generally withdraws earlier, i.e. from mid September. Soil pits are acidic in nature and varies from 5.5 -6.6. Yhe land holding pattern show 90% of the farming families are marginal and small farmers, mostly owing the high & medium high lands from 1 – 2 ha. | 1. Soils are mostly red and lateritic having poor fertility status and less water holding capacity.  2. The topography of the land is highly undulating with steep slopes & on topographical analysis of the we find 60% of the land is high, 30% land medium,and 10% of the land as low lying.  3. Leteritic red, gravelly and colluvial soils found in the district.  4. Temperature- The temperature varies from 7.8 to 46.8 0c from winter to summer.  5. Av. Rainfall for last 50 year is 1375.2 mm.  6. Drought prone. |

1. Soil type

The soils are mostly formed in situ condition by weathering of parent rocks. Only in valley bottom colluvial soils are formed. The parent rock is mainly Granite and Feldspar. Quartz, Muscovite, Mica, etc. also found in different depth. Soils are mostly acidic in nature and pH varies from 5 to 6.5. Soil types of different land situations given below:

| *Sl. No.* | *Soil type* | *Characteristics* | *Area (ha)* |
| --- | --- | --- | --- |
| 2.4.1 | Tanr/Gora land (High Land) | Undulated sloping up lands without bunds, shallow soil depth, gravelly, coarse textured and well drained having low water holding capacity. These lands are either severely eroded or very susceptible to erosion. Soils are very poor in organic matter and other plant nutrients. About 9 percent land falls under this group. Important crops grown in these soils during rainy season are Groundnut, Arhar, Black gram, Niger, etc. In case of highly eroded land usually forest trees are grown. | 1,21,266 |
| 2.4.2 | Baid (Medium High Land) | Bunded sloping up lands, shallow soil depth, coarse textured soil, well drained having low water holding capacity. Soils are poor in organic matter and other plant nutrients. About 51% land is covered under this type. During rainy season transplanted Paddy is grown in this land situation. Where irrigation facilities are available, second crop like wheat, mustard, potato, vegetable, etc. can be grown. | 86,618 |
| 2.4.3 | Kanali (Medium Land) | Very gently sloping to moderately sloping medium lands are situated in between bunded high lands and valley bottom, soil is moderately deep, light to medium texture, moderate to low in organic matter and other plant nutrients. Clay contents increases along with depth, these lands are suitable for paddy cultivation during rainy season. About 30% cultivable land is under this class. | 1,03,942 |
| 2.4.5 | Bahal (Low Land) | Low or valley bottom soils are mostly colluvial. Soils are deep to very deep with medium to fine texture. Permeability is low and suffers drainage problem. Colluvial is formed under hydromorphic condition on the materials brought down from high lying areas by rain water. Soils are intensively used for paddy cultivation. Soils are moderately to high in organic matter and other plant nutrients. About 10% of cultivable lands are under this class. | 34,647 |

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

| *Sl. No.* | *Crop* | *Area (ha)* | | *Production (MT)* | | ***Productivity (Qtl./ha)*** | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Aus Paddy | 2604.0 | | 8193.0 | | 31.5 | |
|  | Aman Paddy | 255268.0 | | 1037002.0 | | 40.6 | |
|  | Kharif Maize | 2682 | | 4872 | | 18.2 | |
|  | Kharif Blackgram | 1512 | | 843 | | 5.6 | |
|  | Kharif Greengram | 224 | | 115 | | 5.1 | |
|  | Kharif Redgram | 941.0 | | 812.0 | | 8.6 | |
|  | Kharif Groundnut | 671 | | 617 | | 9.2 | |
|  | Kharif Sesame | 158 | | 77 | | 4.9 | |
|  | Tomato | 5320 | | 7699 | | 14.5 | |
|  | Brinjal | 8510 | | 16875 | | 19.8 | |
|  | Chilli | 1200 | | 210 | | 1.8 | |
|  | Bhindi | 3030 | | 3774 | | 12.5 | |
|  | Cabbage | 2100 | | 6177 | | 29.4 | |
|  | Cauliflower | 1230 | | 3145 | | 25.6 | |
|  | Onion | 460 | | 489 | | 10.6 | |
|  | Sugarcane | 886 | | 38744 | | 437.3 | |
|  | Rapesed/Mustard | 3489 | | 2432 | | 7.0 | |
|  | Linseed | 467 | | 158 | | 3.4 | |
|  | Niger | 155 | | 98 | | 6.3 | |
|  | Gram | 357 | | 285 | | 8.0 | |
|  | Pea | 289 | | 249 | | 8.6 | |
|  | Lentil | 112 | | 68 | | 6.1 | |
|  | | Lathyrus | | 393 | | 225 | | 5.7 | |
|  | | Wheat | | 2216 | | 6095 | | 27.5 | |
|  | | Potato | | 2020 | | 40470 | | 200.3 | |
|  | | Summer Paddy | | 1396 | | 5692 | | 40.8 | |
|  | | Summer Cucurbits | | 8550 | | 10493 | | 12.3 | |

1. Weather data

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Month | Rainfall (mm) | Rainy Days | Temperature 0 C | |
| Maximum | Minimum |
| April, 2015 | 94.7 | 4 | 36.0 | 22.4 |
| May, 2015 | 46.6 | 3 | 38.2 | 25.5 |
| June, 2015 | 221.2 | 15 | 34.8 | 25.7 |
| July, 2015 | 529.7 | 19 | 31.2 | 24.6 |
| August, 2015 | 179.5 | 11 | 32.1 | 25.1 |
| Sept., 2015 | 76.0 | 5 | 33.6 | 24.5 |
| Oct. 2015 | 6.9 | 1 | 33.2 | 22.2 |
| Nov. 2015 | 0.0 | 0 | 30.7 | 17.2 |
| Dec. 2015 | 10.8 | 1 | 25.8 | 13.3 |
| Jan. 2016 | 4.4 | 1 | 25.9 | 11.2 |
| Feb. 2016 | 2.3 | 0 | 30.6 | 16.6 |
| Mar. 2016 | 13.8 | 2 | 35.4 | 20.6 |
| *TOTAL* | *1185.0* | *62* |  |  |

\* Data given in the table is the average value for the district collected from 13 meteorological stations spreads throughout the district.

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

|  |  |  |  |
| --- | --- | --- | --- |
| ***Category*** | ***Population*** | ***Production*** | ***Productivity*** |
| Cattle | | | |
| *Crossbred* |  | 49,000 tonnes |  |
| *Indigenous* | 857442 |  |
| Buffalo | 162595 |  |
| Sheep | |  |
| Crossbred |  |  |
| *Indigenous* | 330664 |  |
| Goats | 718075 |  |
| Pigs |  |  |  |
| *Crossbred* |  |  |  |
| *Indigenous* | 86660 |  |  |
| Rabbits |  |  |  |
| Poultry | | | |
| Hens |  | 7,63,55,000 |  |
| *Desi* | 1603280 |  |
| *Improved* |  |  |
| Ducks | 498778 |  |
| Turkey and others | 974 |  |  |
| Fish |  |  |  |
| *Marine* |  |  |  |
| *Inland* | 490.77 ha. | 3193.7 qtl. |  |
| Prawn |  |  |  |

*Source: District Statistical Handbook, Purulia and District Animal Census Report 2008*

**KVK Uttar Dinajpur**

District level data on agriculture, livestock and farming situation (2015-16)

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

|  |  |  |  |
| --- | --- | --- | --- |
| ***Sl. No.*** | ***Farming system/enterprise*** | | |
| ***Pre-kharif*** | ***Kharif*** | ***Rabi/ winter*** |
| A. IRRIGATED CONDITION | | | |
| *(a) Upland & medium land situation* | | | |
| 1. | Jute / Mesta | Rice | Wheat / mustard |
| 2. | Ridgegourd / cucumber / Okra / Brinjal / Pumpkin | Rice | Potato / Mustard |
| 3. | Okra / Pointed gourd | Rice | Brinjal / Chilli / Tomato / Cabbage / Cauliflower |
| 4. | Greengram | Pointed gourd / Brinjal | Cabbage /Cauliflower /Tomato |
| 5. | Pointed gourd | Pointed gourd | Radish / Tomato (Late) |
| 6. | Sesame / Maize | Rice | Brinjal /Cabbage / Cucumber |
| 7. | Chilli / Maize | Rice | Potato |
| *(b) Low land situation* | | | |
| 1. | Maize | Rice | Fallow |
| 2. | Jute | Rice | Fallow |
| 3. | Maize | Rice | Potato |
| B. RAINFED CONDITION | | | |
| *(a) Upland situation* | | | |
| 1. | Jute | Rice | Fallow |
| 2. | Fallow | Rice | Mustard |
| 3. | Ginger / Turmeric | Ginger / Turmeric | Fallow |
| *b. Low land situation* | | | |
| 1. | Jute | Rice | Fallow |
| 2. | Sesame | Rice | Fallow |
| 3 | Maize | Fallow | Potato |

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

|  |  |  |
| --- | --- | --- |
| ***Sl. No.*** | ***Agro-climatic Zone*** | ***Characteristics*** |
| 1. | *Terai* zone (Islampur sub-division) | * Soil pH varies from 4.6 to 6.2; * Soil organic matter : 0.10 – 0.72 * Available P2O5 : 8 – 94 kg ha-1 * Available K2O : 30-290 kg ha-1 * Phosphate fixation capacity is high; * Ca and Mg and some of the important micronutrients are deficient |
| 2. | New and Old Alluvial zone (Raiganj sub-division) | * Soil pH varies from 4.6 – 6.3; * Soil organic matter : 0.18 – 0.90 * Available P2O5 : 4.5 – 200 kg ha-1 * Available K2O : 12 – 367 kg ha-1 |

*Source: Directorate of Agriculture, Govt. of W.B.*

|  |  |  |
| --- | --- | --- |
| *Sl. No.* | *Agro ecological situation* | *Characteristics* |
| 1. | *Agro-ecological region (AER)* -15 Western Himalayas, warm dry to moist sub-humid (inclusion of humid) eco region with brown forest and podozolic soils & GP 180-210 (+) days, and Agro ecological sub region (AESR) 15.1 (Bengal basin and North Bihar Plain, hot moist sub-humid ESR with deep loamy to clayey alluvium-derived soils , medium to high AWC and LGP 210-240 days) | * Soil pH varies from 4.6 to 6.2; * Soil organic matter : 0.10 – 0.72 * Available P2O5 : 8 – 94 kg ha-1 * Available K2O : 30-290 kg ha-1 * Phosphate fixation capacity is high; * Ca and Mg and some of the important micronutrients are deficient |

1. Soil type

|  |  |  |  |
| --- | --- | --- | --- |
| *Sl. No* | *Soil type* | *Characteristics* | *Area in ha* |
| 1. | New Alluvium | * Soil pH varies from 4.6 to 6.2; * Soil organic matter : Low to medium * Phosphate fixation capacity is high; * Ca and Mg and some of the important micronutrients are deficient | 96,320 |
| **2.** | Alluvium | * Soil pH around 6.3 ; * Soil organic matter : Medium | 29,076 |
| **3.** | Old Alluvium | * Soil pH varies from 5.0 – 6.3; * Soil organic matter : Medium | 95,896 |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Sl. No.* | *Crop* | *Area (ha)* | *Production (q)* | *Productivity (q/ha)* |
| 1. | Aus Paddy | 3887 | 58360 | 15.00 |
| 2. | Aman Paddy | 190469 | 4619330 | 24.25 |
| 3. | Boro paddy | 69985 | 2449480 | 35.00 |
| 4. | Jute | 28898 | 515540 | 17.84 |
| 5. | Wheat | 52532 | 1050640 | 20.00 |
| 6. | Mustard | 54020 | 526150 | 9.74 |
| 7. | Potato | 15230 | 2793180 | 183.4 |
| 8. | Pulses (Khesari, Lentil, Gram, Blackgram, Kulthi etc.) | 6458 | 63290 | 9.80 |
| 9. | Chilli | 3560 | 21360 | 6.00 |
| 10. | Tomato | 1924 | 236880 | 123.05 |
| 11. | Cauliflower | 2588 | 406320 | 157.00 |
| 12. | Cabbage | 3488 | 638310 | 183.00 |
| 13. | Brinjal | 3200 | 169600 | 53.00 |
| 14. | Ginger | 908 | 36320 | 40 |
| 15. | Turmeric | 1546 | 27860 | 18.02 |
| 16. | Sugarcane | 477 | 310050 | 650.00 |
| 17. | Mesta | 870 | 8610 | 9.90 |
| 18. | Maize | 7145 | 500150 | 70.00 |
| 19. | Linseed | 2073 | 29610 | 14.28 |
| 20. | Sesame | 1092 | 5460 | 5.00 |
| 21. | Mango | 945 | 60240 | 63.75 |
| 22. | Jackfruit | 522 | 34190 | 65.50 |
| 23. | Litchi | 400 | 14600 | 36.5 |
| 24. | Sapota | 8 | 530 | 66.25 |
| 25. | Guava | 456 | 28730 | 63.00 |
| 26. | Citrus fruits | 195 | 8300 | 42.56 |
| 27. | Banana | 704 | 72860 | 103.50 |
| 28. | Papaya | 350 | 17670 | 50.48 |
| 29. | Pineapple | 1650 | 132000 | 80.00 |
| 30. | Cashew nut | 2 | 270 | 135 |
| 31. | Coconut | 195 | 17.472 lakh nuts | - |
| 32. | Arecanut | 345 | 166.46 lakh nuts | - |
| 33. | Marigold | 20 | 60 lakh Cut flower | - |

*Source: Directorate of Agriculture, Govt. of W.B.*

5. Weather data

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Month* | *Rainfall (mm)* | *Rainy day* | *Temperature 0 C* | | *Relative Humidity (%)* | |
| *Maximum* | *Minimum* | *Max* | *Min* |
| April, 15 | 48.4 | 2 | 34.2 | 21.5 | 87.6 | 59.4 |
| May, 15 | 191.00 | 17 | 37.8 | 26.8 | 87.5 | 65.8 |
| June, 15 | 94.0 | 9 | 32.2 | 25.2 | 92.5 | 77.6 |
| July, 15 | 178.7 | 10 | 31.4 | 25.8 | 93.1 | 77.4 |
| Aug, 15 | 389.1 | 20 | 32.6 | 26.2 | 94.2 | 80.7 |
| Sept., 15 | 160.1 | 7 | 31.8 | 25.6 | 92.9 | 73.5 |
| Oct., 15 | 0.0 | 0 | 33.2 | 24.1 | 93.5 | 68.6 |
| Nov., 15 | 0.0 | 0 | 32.6 | 19.4 | 93.3 | 54.3 |
| Dec., 15 | 0.0 | 0 | 24.9 | 13.1 | 95.9 | 62.7 |
| Jan., 2016 | 3.1 | 1 | 19.4 | 10.8 | 97.5 | 53.1 |
| Feb., 2016 | 0.0 | 0 | 28..9 | 21.4 | 92.2 | 54.5 |
| March, 16 | 37.5 | 2 | 35.8 | 22.4 | 89.0 | 65.2 |

*Source: Directorate of Agriculture, Govt. of W.B.*

1. Production and productivity of livestock, poultry, fisheries etc. in the district

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Category*** | ***Population*** | | ***Production*** | ***Productivity*** |
| Cattle | | | Milk – 65.51 ton  Egg – 599.43 lakhs  Meat – 12960 ton  Wool – 1.103 ton | **-** |
| *Crossbred* | 32,627 | | **-** |
| *Indigenous* | 7,50,579 | | **-** |
| Buffalo | 35,411 | | **-** |
| Sheep | 6,348 | | **-** |
| Goats | 5,94,239 | | **-** |
| Pigs | 23,778 | | **-** |
| Poultry | | | **-** |
| Hen | 1,467,493 | | - |
| *Desi* | 14,30,317 | | **-** |
| *Improved* | 37,176 | | **-** |
| Duck | 4,12,214 | | **-** |
| *Desi* | 4,08,452 | | **-** |
| *Improved* | 3,762 | | **-** |
| Turkey and others | 1,378 | | **-** |
| Fish | | - | - | - |
| Inland | | 1534.47 ha | 13244.62 q | 8.63 q/ha |

**KVK Paschim Medinipur**

District level data on agriculture, livestock and farming situation (2015-16):

|  |  |  |
| --- | --- | --- |
| Sl. no. | Item | Information |
| 1 | Major Farming system/enterprise | Rain-fed rice-based production system |
| 2 | Agro-climatic Zone |  |
| 3 | Red and Lateritic Zone  Blocks:  (Binpur- I, & II, Jamboni, Jhargram ,Gopiballavpur-I&II,Sankrail, Nayagram, Midnapur, Sankrail Kashiary,Khargapur-I &II,Salboni,Gorbeta-I &II, | The average rainfall of zone is 1200 mm (+ 236.14mm SD), 80% of rain fall received during (June-Sep) and temperature varies from 16-420C in peak winter and summer. There are two major group of soil viz, red and lateritic are found in this zone. The soil varies in depth and in cases shallow in nature. Due to undulating terrine the soil are highly eroded in nature. The soil fertility levels very poor with low N, P and K as well as organic content. The soils are coarse in texture, poor water retention capacity, and erosion prone and PH varies from 4.8-6.6.The rolling plane merged in to flat alluvial and delted plane to east and southeast of the district. The land is highest near Silda (130 mt. Above MSL). |
| 4 | Old Alluvial Zone  Blocks:  (Khargapur I &II,Narayangarh, Kashiary, Sabang, Mohanpur, Datan I & II, Debra, Pingla,Keshpur,Gorbeta II,Ghatal | This zone is influenced by humid to sub-humid, sub-tropical monsoon climate. The mean annual rain fall is 1460mm of which 80% received from June to September. Flood and drought both are damage the crop in this zone. Soil of this area is yellowish to reddish yellow in colour and moderately well drain to somewhat poorly drain. The soil texture is mostly clayey hard when dry. Old alluvium fertile and acidic interaction having PH 5.8-7.2(specially blocks are Sabong, Pingla, Debra and to some part of Narayangarh) |
| 5 | Agro ecological situation |  |
| 6 | **Rain-fed** | The average rainfall of zone is 1200 mm (+ 236.14mm SD), 80% of rain fall received during (June-Sep) and temperature varies from 16-420C in peak winter and summer. The 50% of the area is drought prone, 63% of the net cultivable area has been brought under irrigated  Cropping pattern:  i Rice-Potato-Sesamum  ii. Rice-mustard-Vegetable/Moong  iii. Rice-Rice-fallow  iv. Rice-groundnut-fallow  v. Matstick /Betelvine/flowers (perennial)  vi. Rice-red gram/black gram-fallow  vii. Rice-vegetable-vegetable |
| 7 | Soil type | Red and lateritic, Vindhya alluvial, Recent alluvial |