Purba Medinipur Krishi Vigyan Kendra Bidhan Chandra Krishi Viswavidyalaya Indian Council of Agricultural Research P.O. Dayaldasi, Dist. Purba Medinipur, West Bengal - 721632



1. Introduction:

KrishiVigyan Kendra (Farm Science Centre) has been established by the ICAR, Ministry of Agriculture Cooperation & Farmers Welfare, Govt. of India in all rural districts of the country for transfer of technology suitable for the respective district in the field of Agriculture, Horticulture, Animal husbandry, Fishery etc. PurbaMedinipur KVK, under the administrative control of Bidhan Chandra KrishiViswavidyalaya, was established on 21.06.2016 to cater the need of the farming community of PurbaMedinipur district. But, this KVK has started its journey effectively from 2017-18. The KVK is located at Mulakhop, Dayaldasi, Nandakumar, PurbaMedinipur (22.1794° N, 87.8708° E). Almost 90% of the land under KVK is low lying. Since it is under the coastal saline zone, the pH and EC of the farm soil during winter (October to February) remain normal, but during the hot summer season, it goes upto 8 and 12-15 respectively. Annual precipitation is more than average; distribution of precipitation is almost equal. But the high magnitude of rainfall causes water stagnation and it become alarming during rainy season onwards (July to January). Entry of Tidal saline water from nearby Haldiriver is common Phenomenon causing increase in salinity of the farm soil. It simply reflects and symbolizes the scenario of the district.

Name and address of KVK with phone, fax and e-mail

| Address | Website | E mail |
|--|------------------------|-----------------------------|
| PurbaMedinipurKrishiVigyan Kendra P.O. Dayaldasi, Dist. PurbaMedinipur, West Bengal PIN - 721632 | www.purbamedinipur.org | purbamedinipurkvk@gmail.com |

Name and address of host organization with phone, fax and e-mail

| Address | Telephone | E mail |
|---|--------------|--|
| Bidhan Chandra KrishiViswavidyalaya P.O. Mohanpur, Dist. Nadia, West Bengal, PIN – 741 252 | 033-25876048 | deebckv@gmail.com Website: www.bckv.edu.in |

Name of Senior Scientist and Head with phone & mobile No.

| Name | Telephone / Contact | | | |
|------------------|---------------------|-------------|---------------------|--|
| Tame | | Mobile | Email | |
| Dr. K.K. Goswami | | 09434241001 | kkgag2005@gmail.com | |

Year of sanction of KVK: 2016

Dated: 21.06.2016

1.1 Total land with KVK (in ha):

| S. No. | Item | Area (ha) |
|--------|--|----------------|
| 1 | Under Buildings (Dedicated) | 0.6 |
| 2. | Under Demonstration Units (Dedicated) | 2.07 |
| 3. | Under Crops(Dedicated) | 1.33 |
| 4. | Orchard/Agro-forestry(Dedicated) | 2.0 |
| 5. | Others with details (Fishery, Vegetables etc.) (Dedicated) | 4.4 |
| | Total | 10.4 (approx.) |

1.2 Staff Position:

| Sl. No | Name of the incumbent | Designation | Discipline/Qualificat ion | Photo |
|-----------|-------------------------------|------------------------------|-----------------------------------|-------|
| 1 | Dr. Krishna Kishor Goswami | Senior Scientist and Head | Ph.D.(Ag.) in Agril. Extension | |
| 2 | Mr. Tarun Sarkar | Subject Matter Specialist | Agronomy | |
| 3 | Md Mehedi Hassan | Subject Matter Specialist | Soil Science | |
| 4 | Mr. Sayan Sau | Subject Matter Specialist | Horticulture | |

| 5 | Mr. Sudip Mandal | Subject Matter Specialist | Seed Science | |
|----|------------------------|---|--|--|
| 6 | Mr. Sagar Tamang | Subject Matter Specialist | Plant Protection | |
| 7 | Vacant | Subject Matter Specialist | NA | |
| 8 | Dr. Avijit Manna | Programme Assistant(Laborator y Technician) | Ph. D.(Ag.) in Soil and Water Conservation | |
| 9 | Mr. Shovan Mazumder | Programme Assistant(Computer) | B.Tech. (IT) | |
| 10 | Mr. Rajib Patra | Farm Manager | B. Sc. (Ag.) | |

| 11 | Mr. Kumares Das | Assistant | Bio Sc. | |
|-----|-----------------------|-----------------------------|----------------|--|
| 12 | Mrs. Anna Basumata | Stenographer Grade III | M.A. (English) | |
| 13. | Mr. Asim Ghorai | Driver | HS | |
| 14. | Mr. Samir Das | Driver | Madhyamik | |
| 15. | Mrs. Sadhana Maji | Skilled Supporting staff | MA (Bengali) | |

| 16. | Mr. Piju Shit | Skilled Supporting staff | HS | |
|-----|---------------|--------------------------|----|--|
|-----|---------------|--------------------------|----|--|

1.3 Infrastructural facilities available at KVK:

| Items | Details |
|-----------------|--|
| Land | 26.5 acre |
| Office Building | Make sift office is running in small renovated |
| Farmers' Hostel | building, fund has been transferred to PWD |
| Vehicle | Yes |
| Tractor | Not yet purchased |
| e-connectivity | Yes |
| Demo unit etc | Low cost temporary unit of poultry, fishery, |
| Demo unit etc | vermicompost unit, IFS |
| Any other | Crop cafeteria, Medicinal garden |

1.4 District at a glance:

The district PurbaMedinipur is comprised of 25 administrative blocks, 4 sub-divisions and 3041 villages. Total irrigation % of this district is 56.80% with a cropping intensity of 178%. Total population of the district is 5094238, among which population in the farming sector is 2890881. There are three distinct agro-ecosystems in the district. Six blocks are under AES I with loamy clay soil, 13 districts are under coastal saline soil type (AES II) and remaining six blocks are under clay loamy soil (AES III) type.

Climate and region: Hot& Humid, Lower Gangetic Plain Region (III)

Farming situation: Rice-Rice, Rice-Pulse, Fish-Fish, Rice-Fish

Major crops: Paddy, Potato, Pulses, Chilli, Banana, Mango, Coconut, Beetle Vine, Cashew, Gladiolus, Tube Rose, Turmeric, Cole crops

Thrust areas identified by the KVK for the district:

- Increasing production & productivity of pulses & oilseed crop.
- > Promotion of integrated farming system.

- Diversification of agriculture through high value crops with the utilization of rice fallow also.
- Soil health management.
- Farm mechanization befitting small holding size.
- ➤ Development of seed production & marketing grid in the district.
- ➤ Mobilization of farmer group like FCs, FPOs & FPCs.
- > Judicious application of inputs under existing production system.
- Judicious plant protection.
- Economic main streaming of farm women through capacity building

1.5. Demonstration units developed by PurbaMedinipur KVK for technology show case-

- ➤ Pond based Integrated Farming System Unit (Poultry, Duckery, Fishery)
- Low cost Poly house for high value vegetable cultivation (1 no.)
- Low cost Poly tunnel for vegetable seedling production (1 no.)
- Medicinal plant block (1 no.)
- Mushroom production unit (1 no.)
- Compost and vermin compost production unit (1 no.)
- > Azolla production unit (1 no.)
- Dragon fruit progeny block
- > Crop cafeteria (1 no.)

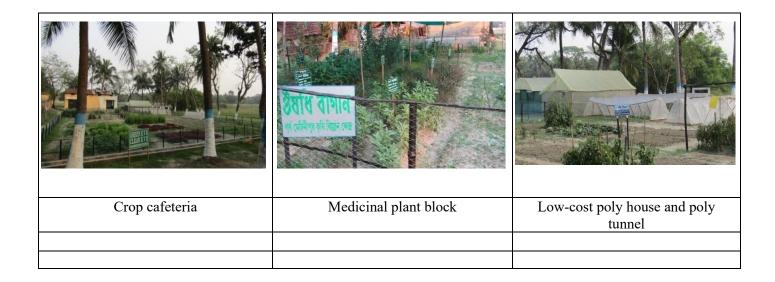
Demonstration units at PurbaMedinipurKVK







Model pond based IFS unit



1. Salient activities of Purba Medinipur KrishiVigyan Kendra

Under various mandates, training as well as conducting frontline demonstrations (FLDs) along with on farm trials (OFTs) is the major activities of a KVK system. The achievements of PurbaMedinipurKVK is categorically analyzed in the present section with respect to these specific mandates-

1.1. Capacity Building Programmes:

The KVK considers capacity building programme as the major programms among the mandated activities. Purba Medinipur KVK has conducted various types of training programmes including long term and short term courses during its journey for the last 3 years. A sum total of 1118 training programmes were conducted with an involvement of 28,018 participants from different sections of the farming community. Training courses on number of areas including management of field crops, traditional horticultural crops, high value crops, seed production and storage, seed certification process, planting material production, disease-pest and weed management, animal husbandry, forage crop production, nutrition gardening, vermin-composting, soil health management, protected cultivation, Integrated Nutrient Management, Integrated Pest Management etc. were conducted with an average of 112 number of trainings per year. Table 1 shows the distribution of training programmes for farmers and farm women and rural youth over the last three years from 2017-18 to 2019-20.

| | No. of capacity development programmes | | | | | | | | Total number capacity development programmes | | | | | | | |
|-----|--|------------------|-------|----|---------------------------------|-----------|-------|----|---|----------|---------------------|------|------|-------|-----------|-------|
| F | armers/F | rmers/Farm women | | | Rural youth Extension personnel | | | | dev | eiopment | progran | nmes | | | | |
| TC | No. o | f Partici | pants | TC | No. o | f Partici | pants | TC | No. of Participants | | No. of Participants | | TC | No. o | f Partici | pants |
| | M | F | Total | | M | F | Total | | M | F | Total | | M | F | Total | |
| 150 | 4231 | 1062 | 5293 | 03 | 82 | 06 | 88 | 0 | 0 | 0 | 0 | 153 | 4313 | 1068 | 5381 | |

TC= Training Course, M=Male, F=Female

Critically examining the nature of the training progrmmes it has been found that both number of total training progrmmes and participant number increased very sharply, spanning 10 blocks, particularly over the last two years (Fig. 1).

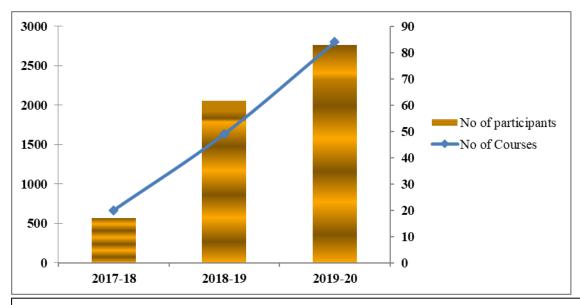


Fig. 1: Distribution of training programmes according to number of participant and course over the last three years

Among different training programmes majority of the programmes were conducted for the farmers and farm women (98%) followed by rural youth (2%) [Fig. 2].

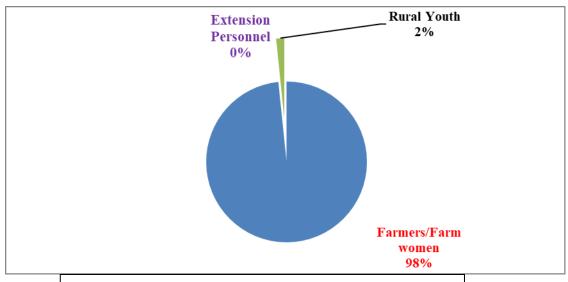


Fig. : Distribution of training courses among different groups of stakeholders

It has been found after data analysis that in case of rural youth the percentage of female trainees (25.50%) was comparatively higher than the other two categories (Fig. 3). Majority of male trainees were observed for farmers and farm women category.

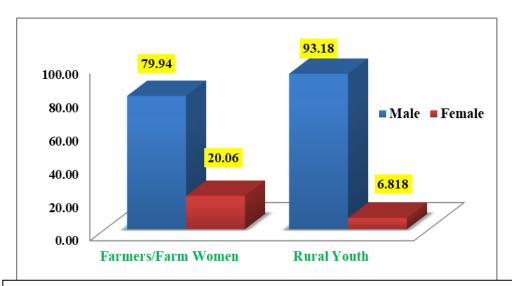


Fig. 1: Distribution of training programmes according to number of participant and course over the

Fig. 3: Distribution of training programmes according to gender under different groups

1.1.1. Training programmes for farmers and farm women:

It has been noticed that number of trainees under farmers and farm women category have drastically increase (566 to 2673) during last two years

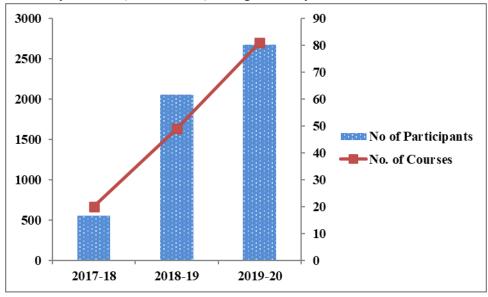


Fig. 4: Distribution of training programmes for farmers and farm women

1.6 Details of operational area / Villages of the KVK:

| Sl. No. | Name of the block | Name of the villages | Major crops & enterprises | Major problems identified (crop-wise) | Identified Thrust Areas |
|------------|-----------------------|--|---|---|---|
| 1 | Nandakumar | Jalpai, Chunakhali, Thakur Chak,Sibdattapur,Shri dharpur, Ramchandrapur,Mirp ur | Paddy, Vegetables, Fishery | Improper crop husbandry Non availability of quality seed and planting material Soil health deterioration High disease pest | Increasing production & productivity of pulses & oilseed crop. Promotion of |
| 2 | Nandakumar | Shyamsundarpur, Sandalpur, Rautari, Naikundi, Bhavanipur, Dakshin Narikelda | Paddy, Vegetables, Betelvine, Fishery | incidence Low productivity of horticultural crops. Nondescript variety Improper management | integrated farming system. Diversification of agriculture through high |
| 3 | Panskura | Dobuapukur,Purosott ampur, | Paddy, Vegetables, Agro- forestry, Betelvine, Fishery | practices Low productivity of existing live stock. Indigenous breed. Improper feed | value crops with the utilisation of rice fallow also. Soil health management. Farm |
| 4 | Contai | Erenda, Jamna,Adaberia, | Paddy, Vegetables, Fishery | management. High disease incidence of livestock. | mechanization befitting small holding size. |
| 5 | Ramnagar II | Demunia | Paddy, Vegetables, Fishery | Lack of awareness. Inadequacy of women led vocation. Inadequate hand on skill on crop husbandry and backyard system management. Lack of market support. Lack of awareness on export oriented Horticulture. | Promotion of organic farming. Capitalization of natural resources for enhancement of fish production. Production enhancement of Livestock & birds. Development of |
| 6 | Panskura | Dabuapukur | Fruits, Vegetables, Oilseed&Pulse | | seed production & marketing grid in |
| 7 | Sutahata | Rupnarayanchak | Vegetables, Pulse &Oilseed | Conventional management practices | the district. Mobilization of farmer group like |
| 8 | Mahisadal Panskura | Kapasberia, Erapur | Vegetables Vegetables | | FCs, FPOs & FPCs. |

2. Salient activities of Purba Medinipur Krishi Vigyan Kendra:

The main mandate of this Krishivigyan Kendra is technology assessment and demonstration for its application and capacity development. To fulfill the mandates the following activities have been performed by the KVK since its inception.

2.1-Summery report of activities

- District profile has been prepared
- > Thrust areas have been identified
- Annual action plan has been prepared based on need of the areas
- > Training conducted: 233, Participation of farmers: 7241
- Frontline demonstration (FLD) conducted: 40, Participation of farmers: 1168
- ➤ On Farm Trial (OFT) :31, Participation of farmers: 207
- > Office website has been developed
- Publications on technical issues: 36, Circulated among 12520 farmers
- ➤ 3 Annual reports and 3 Action plans have been prepared

2.2 Special Activities observed-undertaken:

- Sankalp Se Siddhi
- > Swachh Bharat Mission
- ➤ World Soil Day
- ➤ International Womens' Day
- Bono Mahotsav
- > Exposure Visit
- Multi location trial in Black Gram in collaboration with AICRP-NSP (Crops), BCKV
- ➤ Linkage developed with Deptt. of Agriculture, Horticulture, ARD, Fishery, ATMA, NABARD, NGOs etc.
- > Census report of the district has been procured
- ➤ Data base of apporox.23,000 farmers of the district has been prepared

2.3 Special attainments:

➤ 1st Zilla Kisan Mela and Pre-Rabi Kisan Sammelan held on 20th and 21st of February 2019, Attendance: Approx 2500, Activities: Exhibition, Crop competition, Farmer-Scientist interaction, Essay competition, Quiz competition.

- > Strengthening of SHG like "Rabindra Swayambar Ghoshthi" through production of Baby food (SISHU AHAR).
- > Draft Master Plan of the Farm has been completed for establishment of different proposed projects.

2.4 On Farm Trial (OFT) conducted by Purba Medinipur KVK:

On Farm Trial (OFT) can be defined as the testing and evaluation of newer technologies at farmer's field and to refine and modify the technologies, if required for better adoption by farmers. It is confirmation of already proven research results under real farming situation. PurbaMedinipur KVK has conducted OFTs in numerous disciplines since last 3 years in farmer's field through participatory research mode. The basic aim is to solve the farmer's problems and provide latest improved technologies as well as varieties to increase their production and quality produces for increasing income. The best ten OFT and their recommendations are portrayed below-

OFT 1:

| Title | Performance study of Taro lines at PurbaMedinipur District |
|-------------------|---|
| Purpose of | Replacement of non-descript plant material were felt necessary for augmentation of |
| study | productivity with new lines |
| Outcome | Among the seven unreleased lines the BCB II reported to be maximum yielder (13.55 t/ha) as it produced heaviest mother corm (271.67g) side by side highest yielder in respect of total corm yield from a single plant (451.67g). Thus, We may recommend BCBII as a high yielding yam cultivar for our district after necessary verification from the source of technology. |
| Horizontal spread | This is a very successful technology. More than 25 farmers spreading in 5 adopted villages accepted this technology. |

OFT 2:

| Technology | Relevance | Recommendations |
|------------------------------------|-------------------------------|----------------------------------|
| Agronomy | | |
| Algal weed management in aman | Tamarind dust as aquatic | Tamarind dust @37.5 kg/ha as |
| paddy with application of tamarind | weed controller has | aquatic herbicide showed better |
| seed | herbicidal property which is | result though further testing is |
| | locally available and dusting | needed. |
| | in local level is easy. | |
| Algal weed management in aman | Chopped leaf petiole of | Chopped leaf petiole of Betel |

| paddy with application of chopped | Betel vine as aquatic weed | vine @37.5 kg/ha as aquatic |
|---------------------------------------|---------------------------------|---|
| leaf petiole of Betel vine | controller has herbicidal | herbicide showed better result |
| | property which is locally | though further testing is needed. |
| | available. | 8 |
| Performance of different new | Existing lentil cultivars are | ILL-10802 is recommended for |
| varieties of Lentil in farmers' field | not high yielder | this district. It has shown better |
| of PurbaMedinipur district | not high yielder | yield performance than others in |
| of furbalifedinipul district | | this climatic condition. |
| Efficiency of liquid manyons in | Cost minimization | |
| Efficiency of liquid manures in | Cost minimization | (Panchyagavya+Vermicompost) |
| productivity of boro rice | | may be recommended since |
| | | inputs are locally available and |
| | | of low cost. |
| Horticulture | | |
| Effect of different nutrient | Poor yield and non - | For highest economic gain from |
| management in red amaranthus | availability of standard | cultivation of Red amaranthus, |
| (Amaranthuscruentus) | fertilizer recommendation | farmer should go for integrated |
| | | nutrient management practice |
| | | with- FYM @ 10 ton+ N:P:K @ |
| | | 80:60:60Kg/ha |
| Impact of foliar applied boron(B) | Non practice of micronutrient | Farmer should go for practicing |
| and molybdenum(Mo) on | causing huge crop loss. The | B@ 100ppm+Mo@ 50ppm along |
| cauliflower | district is highly deficient in | with normal RDF of 150:100:100 |
| | micronutrient (B&Mo) | of N:P:K (kg) + 10ton FYM//ha to |
| | | get maximum production of |
| | | cauliflower. |
| Study on performance of taro lines | Non availability of quality | We may recommend BCBII as a |
| (Colocasiasp) at PurbaMedinipur | planting material | high yielding and economic yam |
| KVK | | cultivar for this district. |
| Study on effect of Zinc | Lack of Zinc application | Technology option 3 (RDF+ |
| fertilization on Betelvine at | though it is essential for | ZnSO ₄ @ 15 kg/ha+ ZnSO ₄ @ |
| PurbaMedinipur | quality leaf production of | 0.03%) recommended for higher |
| | betelvine. | marketable leaf production and |
| | | more return from unit area. |
| | | · |

| Soil Science | | | |
|---|---|--|--|
| Spacing effect of cabbage | Severity of pest disease | For maximum yield with highest | |
| cultivation with recommended | infestation and low nutrient | B:C ratio one should go with | |
| dose of nutrient management | status of the soil. | 60×30 cm spacing under local | |
| | | conditions. | |
| Study on effect of organic | Erratic dose of nutrient | For highest economic gain and | |
| supplements on yield and soil | application causes low yield | soil health improvement, | |
| quality improvement in | and extra cost involvement | treatment with[70 % RDF+ 30 % | |
| cauliflower | in cauliflower cultivation in | Neem cake] is best suited under | |
| | local areas. Organic | local condition. But the | |
| | supplementation may | technology needs more | |
| | improve soil fertility status | assessment. | |
| | and reduction of cost of | | |
| | cultivation | | |
| Different methods of Zinc | Stagnant productivity of | Application of chelated Zinc @ 5 | |
| application in Kharif rice in | Kharif rice may be due to | g/10 lit of water at 30-35 DAT | |
| irrigated farming situation in East | application of only major | and 50-55 DAT is the best for | |
| Medinipur | inorganic fertilizers. | getting better yield in Aman | |
| | | paddy. | |
| Plant protection | | | |
| Controlling cabbage diamond back | | | |
| moth (<i>Plutellaxylostella</i>) with perimeter trap cropping | improvement without any chemical spray. | 22.43 t/ha of cabbage was observed in mustard as trap crop | |
| permieter trap cropping | enemical spray. | followed by Chinese cabbage. | |
| Effective management schedule | Effective control of | , , | |
| of spray and root feeding | eriophyid mite with | treatments,6 sprays along with | |
| application against eriophyid | different spray and root | root feeding of Neem oil @ 1% | |
| mite. | feeding schedule | per yearwas significantly | |
| | | superior in reducing the mite | |
| | | population besides minimum | |
| | | number of damaged nuts. | |
| Seed Science | | | |
| Effect of different nutrient | In-situ seed production by | Farmer may go for integrated | |
| management on Red | | | |

| Amaranthus(Amaranthuscruentus.) | different nutrient | nutrient management practice |
|--|---|---------------------------------|
| seed production. | management practice. | with- FYM @ 10 ton+ N:P:K @ |
| | | 80:60:60Kg/ha (TO II) for |
| | | highest economic gain from seed |
| | | yield of red amaranthus. |
| Evaluation of water tolerant rice | To introduce high yielding | Swarna Sub1 recommended for |
| varieties at Purba Medinipur | water tolerant rice variety | cultivation in water logged / |
| | | flood based situation at Purba |
| | | Medinipur district for getting |
| | | higher yield and return. |
| Effect of different post-harvest | To reduce huge storage loss | We may recommend use of |
| treatments on seed quality of green gram in storage condition. | by introducing proper storage practice. | Zeolite beads @ 1kg/30 kg of |
| gram in storage condition. | storage practice. | seed for better storability of |
| | | green gram seeds. |

Achievements of Frontline Demonstrations in last three years

| Sl. | Сгор | Technology Demonstrated with | Area (ha) | Yield | (q/ha) | Net return | (Rs./ha) |
|------|---------------------|--|-----------|-------|--------|------------|----------|
| No. | Стор | detailed treatments | covered | Demo | Check | Demo | Check |
| Cere | eals | | | | | | |
| 1 | Paddy | Swarna Sub1 variety | 7 | 46 | 35 | 91000 | 26500 |
| 2 | Local Aromatic Rice | Variety: Harinkhuri, Radhatilak, Kalojira | 4 | 32 | 25 | 80,000 | 62,500 |
| 3 | Boro Paddy | Use of Pheromone lure against YSB | 3 | 48.58 | 44.80 | 42444 | 36450 |
| 4 | Paddy | Use of nitrogenous | 2 | 51.38 | 46.97 | 36480 | 19182 |

| | | (urea) fertilizer | | | | | |
|------|---------------|--|-----|-------|-------|---------|--------|
| | | through leaf colour | | | | | |
| | | chart | | | | | |
| Puls | ses | | | | | | |
| 5 | Lentil | Certified seed production of Moitree variety | 1.5 | 12 | 10 | 67700 | 18700 |
| 6 | Lentil | Certified Seed Production of (variety–P.L-8) | 5 | 12 | 9.5 | 68000 | 18900 |
| 7 | Lentil | Use of selected fungicide against ascochyta blight | 1.0 | 14.30 | 12.50 | 50200 | 43500 |
| 8 | Lathyrus | Variety: Pratick Seed Treatment, PPC | 2 | 1850 | 1575 | 70,300 | 59,850 |
| Oil | seeds | | | | | | |
| 9 | Groundnut | Seed Production of Variety (T.G-37 A) | 4 | 33 | 28 | 169500 | 58000 |
| 10 | Groundnut | Variety: TG-51, Seed Treatment,PPC | 10 | 30 | 22 | 44750 | 22100 |
| 11 | Sunflower | Variety: PAC-36-1, Seed Treatment, PPC | 25 | 17 | 14 | 77700 | 52800 |
| 12 | Sesame | Variety- Savitri, Seed Treatment, PPC | 10 | 12.5 | 11 | 50450 | 38500 |
| 13 | Ground Nut | Variety: TG-37, Seed Treatment, PPC | 5 | 27.05 | 22.5 | 105,275 | 83,450 |
| 14 | Mustard | Variety: NRCHB- 101, Seed Treatment | 5 | 17.25 | 11.1 | 21385 | 15507 |
| 15 | Mustard | Sulphur fertilizer | 19 | 18.75 | 15.34 | 50625 | 37583 |

| | | application in mustard | | | | | |
|-----|-----------|--|-----|-------|-------|--------|--------|
| 16 | Groundnut | Application of gypsum | 30 | 34.3 | 26.2 | 54194 | 37876 |
| Hor | ticulture | | | | | | |
| 17 | Knol-Khol | Application of Boron | 1.5 | 310.5 | 252 | 355350 | 263400 |
| 18 | Broccoli | Introduction of broccoli to unexploited area | 1.5 | 225 | 420 | 512500 | 355000 |
| 19 | Banana | Application of Banana Bunch cover | 1.5 | 516 | 480 | 502500 | 375000 |
| 20 | Brinjal | Use of non-chemical insecticide against fruit and shoot borer in field condition | 0.5 | 600 | 525 | 650000 | 537500 |
| 21 | Cucumber | Management of cucumber beetle to minimize the Bacterial Wilt infestation. | 0.5 | 450 | 405 | 515000 | 447500 |
| 22 | Potato | Use of New generation fungicide against late blight | 1.5 | 375 | 316.5 | 195000 | 136500 |

| 23 | Tomato | Use | of | Organic | 1.0 | 1500 | 1200 | 1160000 | 860000 |
|----|--------|---------|--------|---------|-----|------|------|---------|--------|
| | | Insecti | cides | and | | | | | |
| | | sticky | trap | against | | | | | |
| | | suckin | g pest | | | | | | |

Number of new crop varieties evaluated by the KVK:

| Crop/variety | Year of testing | Best suited varieties |
|---------------------|-----------------|--------------------------------------|
| Paddy: | | |
| a) Swarna Sub-1 | 2018-19 | Swarna Sub-1 for medium low land |
| b) Jalamagna | | condition |
| c) Kalabhat | | Jalamagna for low land condition |
| a) CR Dhan 409 | 2020-2021 | "CR Dhan 507" for low land condition |
| b) CR Dhan 505 | | |
| c) CR Dhan 506 | | |
| d) CR Dhan 507 | | |
| Groundnut | 2018-19& | TG-51& TG- 37A |
| a) TG-51 | 2019-20 | |
| b) TAG-24 | | |
| c) TG -37 A | | |
| Sesame | 2018-19& | Sabitri |
| a) Sabitri | 2019-20 | |
| b) Tilottama | | |
| Sunflower | | PAC-361 |
| a) PAC-361 | 2018-19& | |
| b) PAC-36 | 2019-20 | |
| Lentil | 2018-19, | WBL 77 |
| a) ILL 10802 | 2019-20& | |
| b) WBL 77 | 2020-21 | |
| c) IPL 526 | | |
| d) Pant Lentil 8 | | |
| Lathyrus | 2018-19 & | Pratick |
| a) Pratick | 2019-20 | |
| b) Ratan | | |
| c) Bidhan Khesari 3 | | |
| Black Gram | 2018-19 | Samrat |
| a) Samrat | | |
| | ı | |

Cluster Front Line Demonstration (CFLD) conducted by Purba Medinipur KVK:

1.1.1. Cluster Front Line Demonstration on Pulse crops during last three years

| Season | Crop | Area (ha) | Variety |
|--------|------------|-----------|------------------|
| Kharif | Black gram | 10.0 | PU-31, Sulata |
| Rabi | Lentil | 30.0 | WBL 77, PL-8 |
| Summer | Green gram | 20.0 | Samrat, IPM 02-3 |
| | Total | 60.0 | |

1.1.2. Cluster Front Line Demonstration on Oil seed crops during last five years

| Season | Crop | Area (ha) | Variety |
|--------|-----------|-----------|-----------------|
| Rabi | Mustard | 75.0 | B-54, NRCHB 101 |
| | Sesame | 10.0 | Savitri |
| Summer | Groundnut | 75 .0 | TG-37 |
| | Sunflower | 10.0 | Siri-333 |
| | Total | 170.0 | |

Photographs of Cluster Front Line Demonstration conducted by Purba Medinipur KVK







CFLD on Black gram

CFLD on Mustard







Field day under CFLD

Training on pulse under CFLD

Seeds and planting material produced in KVK farm

| ~ ************************************ | | | | | |
|--|--|----------|--|--|--|
| Crop | Variety | Quantity | | | |
| Paddy | Sankar, Black rice, GovindaBhog, Jalamagno, | 10 q | | | |
| | Swarna Sub 1, RadhaTilak, Radhunipagal, Kalojira | | | | |
| | Jitendra, Dhudeswar | | | | |
| Mustard | B9, B54, NRCHB 101 | 1 q | | | |

| Lathyrus | Pratick, Bidhan Khesari 3 | 1 q |
|-------------------|---|------------|
| Dhaincha | Local | 0.50q |
| Taro | Muktakesi, Desi | 0.50 q |
| Elephant foot yam | BidhanKusum, Gajendra | 2 q |
| Vegetables | Tomato, Brinjal, Cabbage, Cauliflower, Knolkhol, | 50000 nos. |
| | Broccoli, Chinese cabbage, Lettuce, Capsicum etc. | |
| Dragon fruit | Red and White type | 1500 nos. |
| Turmeric | Kalyani local | 0.5 q |

Extension Activities Undertaken (Last 3 years) (Numbers)

| S.N. | Activity | Event No. | Participants |
|------|---|-----------|--------------|
| 1. | Field Days | 18 | 176 |
| 2. | Agril. Exhibition | 4 | 126 |
| 3. | Farmers' Fairs | 1 | 2495 |
| 4. | Radio Talk | 2 | - |
| 5. | TV show | 3 | - |
| 6. | Film show | 10 | 450 |
| 7. | Training materials produced | | |
| | (a) Pamphlets | 13 | 12000 |
| | (b) Video-cassette/ CD | - | - |
| | (c) Slides | - | - |
| 8. | Extension Training meetings organized | 65 | 2650 |
| 9. | i. KisanGhosthi | 2 | 60 |
| | ii. Farmers Seminar | 2 | 190 |
| | iii. Lectures delivered as resource persons | 5 | - |
| | iv. Newspaper coverage | 4 | - |
| | v. Popular articles | 3 | - |
| | vi. Advisory Services | 150 | - |
| | vii. Scientific visit to farmers field | 24 | 650 |
| | viii. Farmers visit to KVK | 42 | 1890 |
| | ix. Diagnostic visits | 50 | 175 |
| | x. Exposure visits | 4 | 80 |
| | xi. Animal Health Camp | 5 | 75 |
| | xii.Soil test campaigns | 2 | 85 |

| xiii. Self Help Group Conveners meeti | ngs 12 | 156 |
|--|----------|------|
| xiv.Celebration of important days (spe | cify) 17 | 650 |
| xv.Farmers'- Scientists' Interaction | 25 | 990 |
| xvi.Technology week | 1 | 1123 |

District-level programmes organized by KVK

| Name of the | Collaborative | Date of the | Purpose | |
|----------------------|---------------|-------------------------------|-------------------------------------|--|
| programme | organization | programme | rurpose | |
| | | | To impart relevant and location- | |
| | | | specific agricultural education to | |
| Diploma in | SAMETI, WB | One weer (52 | equip input dealers with sufficient | |
| Agricultural | & | One year (52 | knowledge to transform them into | |
| Extension for Inputs | MANAGE, | Weeks) Starting date 22.11.19 | para-extension professionals so as | |
| Dealers (DAESI) | Hyderabad | uate 22.11.19 | to enable them to address the day- | |
| | | | to-day problems being faced by | |
| | | | the farmers at field level. | |
| One day seminar on | SHILPA | 04.02.2020 | To showcase recent approaches in | |
| approaches towards | BICHITRA | | agriculture and its allied sectors | |
| Doubling farmers' | | | to augment farmers' income by | |
| income | | | two fold from his/her existing | |
| | | | land. | |
| One day district- | Coconut | 28.11.2019 | To update the coconut farmers | |
| level workshop on | Development | | about advancement in different | |
| 'scientific coconut | Board, state | | cultivation operation of the crop | |
| cultivation | centre, | | to get higher yield and return | |
| technologies and | Kolkata | | beside its more utility options in | |
| value addition' | | | processing. | |

This Kendra has also extended its hand in a CSR project with 'Haldia Energy Limited' through year-round technical advisories along with demonstration for upgrading the farmers, mostly of the backward classes.

Success stories/Case studies

A.

| Name of farmer | Pramatha Majhi, |
|--|---|
| Address | Brindabanchawk, Pashukura II, PurbaMedinipur |
| Contact details (Phone, mobile, email Id) | 9734125060 |
| Landholding (in ha.) | One acre |
| Name and description of the farm/ enterprise | ShriPramathaMajhiofBrindabanchawk, Pashukura II, PurbaMedinipur, is an innovative farmer having only one acre land. Though he is a non-matriculate, he always likes to take venturesome steps in his family. Having received training from KVK and Department of Horticulture, he has planned his faming in such a way that he now can maintain his family of three members with a Pakka residence. Sri Majhi is the pioneer of Paskura block in introducing high value crops like Broccoli, Red Cabbage, Chinese cabbage, cherry tomato, colored capsicum, use of mulching in seasonal crops to reduce weed load and conservation of moisture. Through protected cultivation with micro irrigation facility he is harvesting crops like different leafy vegetables, seedlings, colored capsicum etc. Out of his one acre of land with irrigation facility, Sri Majhi is now earning Rs. 3.00 lakhs per annum net income which is an example in his area. Sri Majhi has already received awards like 'KrishakSamman' and 'Best farmer' from Govt. of West Bengal. |

| Name of farmer | Shri Amit Bera |
|--|---|
| Address | Village + PO-Teorkhali, PS- Bhupotinagar, District: PurbaMedinipur, Pin-721655 |
| Contact details (Phone, mobile, email Id) | 8001758123 |
| Landholding (in ha.) | 0.27 |
| Name and description of the farm/ enterprise | Shri Amit Bera was born in a very poor family and had to get engaged in family farming from his child hood days. That made him creates a clear knowledge about cultivation of all types (cereals. fruits, flowers and vegetables) of crops grown in the area. In the year 1994, ShriBera got a scope to listen to a motivational speech of Dr. DevalDev, an eminent environmentalist, on importance of land race conservation that influenced him to take responsibility of doing the job. After that he roamed about throughout the country and till date he could able to collect 324 numbers of indigenous and rare rice varieties like Jugol, Rani Geli, BhutMuri, Radhunipagol, Sabita, Dhudeswar etc. In the collected list, he claims 26 such varieties to having only with him in the state. Not only rice, he himself engaged in collection and conservation of seed and planting materials of different vegetable and tuber crops. His love and determination to the revolutionary work of seed conservation fetched him so many state and national recognition. That huge collection of germplasm utilized by the researchers in breeding programme at several renowned research centers of the country. He always used to think about organic and environmentally safe homemade inputs to be used in farming and tries soulfully to spread his thinking in the farming community through repeated awareness programme. ShriBera emphasizes on integrated farming system and set up a model IFS unit in his 16 katha (0.11 Ha) land consisting of pond, duckery, cereal cultivation area, vegetable area, seed production unit, vermicompost unit and mini mushroom spawn production unit. From his small IFS unit ShriBera earn a net profit of Rs.1.75 Lakh per year. This IFS model is now an attraction for people from every sphere like student, researcher, farmers of the district and the state. In recent times, ShriBera has formed an FPC namely "Bhagbanpur II FPC Ltd" on 25.1.2019 with 200 members to spread the idea of IFS, Multi cropping, Organic farming in an organizational way and also to |

| Name of FPO/FPC | Address with phone and e-mails | Commodity/enterprises on which FPO is working |
|----------------------|--|---|
| DIVINIUS FPC | Satmile, Contai, PurbaMedinipur M – 9732740740 e-mail– diviniusfpc@gmail.com | Vegetable cultivation, Fishery and Poultry business |
| NABODISHA FPC | Erenda, Bhagobanpur, PurbaMedinipur M – 9153080569 e-mail– nabadishafpc@gmail.com CEO- PRASENJIT SAHOO MOB: 9083976356 | Cultivation of different vegetables and groundnut |
| DESHAPRAN FPO | Contai, PurbaMedinipur M – 9647237914 | Vegetable cultivation, Fishery and Poultry business |
| BHAGWANPUR II FPC | Vill+P.O- TIORKHALI,DIST-PURBA MEDINIPUR,WEST BENGAL, PIN – 721655 M-9732752492 E mail-bhagawanpur2fpc@gmail.com | Paddy , Vermi compost |
| HRIDAYSANGAM FPC | PURBA BAKULDA, BAKULDA, PURBA MEDINIPUR, WEST BENGAL, 721139 M: 7477632340 Email: https://doi.org/10.1009/html | Rose, Paddy, Vegetables |

Details of awards / prize received by the associated farmers:

| Sl. No. | Name of the Award | Name of the Farmer | Year | Conferring Authority | Amount | Purpose |
|------------|-------------------|--|----------------------|-------------------------|----------|---|
| 1. | Kishak Ratna | Debabrata Maity Chandicharan Boyal Ashok Kumar Maity | 2019 2019 2019 | Govt. of WB | 20000.00 | Extraordinary contribution in the field of Agriculture |
| 2. | Best Farmer | Amit Bera Tapan Pattanayak Hazi Alamgir Sk Ambika Jana Nayak | 2019 | PurbaMedinipur KVK | - | Exemplary contribution in farm and allied sector |

Innovative approaches performed by Puurba Medinipur KVK

1. Association for home delivery of vegetables

KVK, East Midnapore in collaboration with the Panskura vegetable producers' Company and Usha Agro, Panskura, involved farmers to start home delivery of vegetables along with the daily need articles in the nearby areas during pandemic situation. The KVK also guided farmers in following government guidelines to prevent COVID-19 spread while handling the farm produce. The initiative was named as 'Green Basket' and mainly aims to provide help during the crisis of COVID-19. The door-to-door delivery of vegetables enabled farmers to sell their produce at reasonable prices and also to the consumers to get fresh vegetables at their door step during the adverse situation.

Already 700 customers have been registered as purchaser by the organization and 100 producers, mainly vegetable growers are supplying the graded quality products.

2. Promotion of participatory organic seed production of potential aromatic rice cultivars through PKVY

In last few years, the trend of demand for such folk aromatic cultivars showed steady growth and one of the prime reasons is for getting higher profit from such folk aromatic rice varieties than present high yielding cultivars.

In these circumstances, Purba Medinipur Krishi Vigyan Kendra, has taken initiative of producing certified seed of three aromatic rice varieties namely GobindaBhog, Radhatilak and HarinKhuri (as found best fitted for the district) through organic production protocol to prove it as a profitable Agripreneurship venture under PKVY project.

More than 77 farmers involved in this activity has already got "Green certificate" for 20 hacters of land in the process of obtaining organic certification.

3. Promotion of Nutri-garden at home stead level with collaboration of ATMA

Realising importance of the 'Nutri garden' PurbaMedinipur KVK has taken an endeavor to promote this venture through research mode with financial assistance from ATMA, PurbaMedinipur.

Already action has been taken to involve 200 nutri-gardeners, mainly women folk, spreading in 6 different blocks of PurbaMedinipur. Year round cropping sequence has been taken into account for consistent supply of vegetables to the kitchen.

Sanctioned project on Infrastructural Development of the Purba Medinipur KVK, Bidhan Chandra Krishi Viswavidyalaya under RKVY-RAFTAR 2020-21

| Sl. No. | Components | Fund allocated |
|---------|---|----------------|
| | | (Rs. In lakh) |
| 1 | Implements | 18.75 |
| 2 | Trainees Hostel | 109.00 |
| 3 | Spawn and bio pesticide production unit | 20.00 |
| 4 | Hi-tech Horticulture units | 28.00 |
| 5 | Model IFS unit | 20.00 |
| 6 | Others(Administrative) | 3.92 |
| Total | | 199.67 |

Project proposals have been prepared for the development of KVK farm and farming community:

| S.N. | Themes | Approx. | Proposed | |
|------|--|--------------|------------------|--|
| | | Amount(lakh) | nt(lakh) funding | |
| | | | agencies | |
| 1 | Establishment of progeny orchard for both major and minor | 12.0 | Deptt. of | |
| | fruits | | Horticulture | |
| 2. | Establishment of centre of excellence for horticultural crops | 62.5 | Do | |
| | (Hi-tech cultivation of different orchids, off-season vegetables | | | |
| | along with strawberry, precision farming of cashew) | | | |
| 3. | Establishment of model nursery unit | 11.0 | Do | |
| 4 | Establishment of mushroom spawn production unit | 25.0 | Do | |
| 5 | Establishment of model land shaping technology | 10.0 | Zilla | |
| | | | Parishad | |
| 6 | Land shaping of low lying areas through ridge-furrow method | 21.0 | Do | |

Proposed layout of Purba Medinipur Krishi Vigyan Kendra



1. Demonstration units for submerge low land specific crops. 2. Weed museum 3. Demonstration units for medium land specific crops. 4. Demonstration units for high land specific crops. 5. Administrative building premises with ornamental landscaping, 6. Fishery unit 7.Model of land shaping (ridge furrow) unit 8. IFS model, 9. Units of Hi-tech Horticulture, 10.Medicinal garden, 11.Farmers Hostel 12.Plant propagation units, 13.Progeny orchard, 14.Garage & Farm machinery hub, 15.Bamboo garden 16.Ornamental fish production units, 17. Farm road