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| Project Objectives & its Relationship with the Sector Objectives: | Cotton production and area is continuously reducing due to biotic and abiotic stresses and competition from other crops. The area and production of cotton during 2011-12 was 6.261 Million acres and 11.129 Million bales respectively while and it decreased to 5.582 Million acres (area) and 6.593 Million bales (production) during 2015-16 with further decline this year to 44.388 million acres.. Last 5 years data (given at **Annexure-1**) revealed the fall of cotton area especially in 2015-16 there is drastic decrease in area as well as yield in Punjab.  Since Cotton crop is a lynchpin in the economy of the country and is most suitable in our climate but due to its vulnerability to pest and diseases by virtue of inclement weather conditions, the sporadic appearance of many pest and diseases are common like alarming spread of Pink Bollworm and other sucking pest in Punjab. Effective solutions against these problems can help the farmers and cotton sector on sustainable basis.  The pink bollworm (PBW), *Pectinophora gossypiella* (Saunders) (Lepidoptera: Gelechiidae), is a key pest of cotton. This single pest can reduce cotton yield up to 30% if not managed properly. The larvae of Pink Bollworm immediately begin to bore into squares or flowers after hatching but the damage to boll is most serious and irreversible. Larva feed one to five developing seeds while in younger bolls entire contents may be destroyed to complete its development. The lint is damaged when larva move from seed to seed and make tunnels to come out from the boll resulting in severe quality loss and poor market price. The insect is highly adaptable to different climatic conditions and larvae hide over unfavourable season in double seed in which they are well protected and remain alive for many months. The survival of the pest from one season to another is entirely through hibernating larvae in seeds, unopened bolls (80%), soils and plant debris (20%). The control of PBW is very difficult with conventional insecticides because it conceals itself in rosette flowers and left no entrance hole in bolls. A potentially viable alternate to chemicals is the use of PB-Ropes. PB-Rope L is a twisted tie which releases the same scent that female bollworms release to attract males. This scent confuses the male adults preventing them from finding and mating with the female adults. This reduces the number of eggs laid which reduces the population of the PBW resulting in less damage to the crop. The use of PB-Rope L in addition to the regular plant protection schedule has been found to be economically viable as a means of managing PBW. Keeping in view, the cotton crop under the proposed project” **community based Integrated management of Pink Bollworm and Provision of Missing Facilities to Pest Warning Wing**” will be increased to make it profitable through massive awareness about best pest management practices, wherein, field demonstrations will be arranged with the provision of recommended number of PB Ropes and Sex Pheromone Traps. District wise target will be set to distribute demonstration plot through a transparent procedure. PB ropes and sex pheromone traps will be provided to the farmers in 54 tehsils of Pink Bollworm affected areas. Field days, print and electronic media will also be utilized for the envisioned targets. Field staff of Pest Warning i.e. Assistant Directors (PP) & AO (PP) will be provided with Laptops for recording and processing data of pheromone traps, forecasting field infestation of pests and to review of Android Applications progress report on dashboard. AOs (PP), Field Assistants & Pest Surveyors will be provided with Motorcycles for data collection and pest scouting purposes. One Multimedia and Laptop will be provided for Auditorium and one Multimedia and Laptop for Committee Room of D.G. (Ext. & AR) Punjab, Lahore. |
|  | **Main Objectives of the Project are as Under:**  The Project aims at integrated management of Pink Bollworm in core tehsils of Cotton districts resulting in productivity enhancement of cotton. The envisaged project targets would be achieved through undertaking following activities:   1. Demonstration for control of pink boll worm by Provision of PB-Ropes and Sex-Pheromone traps to farmers free of cost. 2. To promote a viable component of IPM techniques for effective PBW control and conservation of natural enemies. 3. Maintenance of Pink Bollworm moth catches data recorded on weekly intervals. 4. Communication with mobile alerts to farmers and policy makers about the hot spots identified manually as well as on the basis of eco-biological prediction models. 5. Publicity through use of print and electronic media. 6. Provision of Laptops to field officers of pest warning for recording and pressing PB-Ropes and Pheromone traps data. 7. Provision of Motorcycles to Agricultural Officers (PP), Field Assistants and Pest Surveyors for pest scouting and data collection PB-Ropes and Pheromone traps. 8. Increased farmers income through increased crop productivity, diversified agricultural practices. |