Plant Protection Services Centre

Objectives:

- To provide guidance and consultancy services for control of various pests & diseases, nematodes and weeds at reasonable costs to farmers.
- To undertake regular visits, provide prescriptions/advice, respond to enquiries in case of need (like epidemics), as also undertake control operations at reasonable charges using their own equipment and inputs.
- To undertake plant protection services as a package deal, from seed to harvest, with agreement with the farmers.

2. Location and Area of Operation:

A command area of 30,000-40,000 ha having different multiple crops. Though there is potential to set up one unit of this nature for each Panchayat, to start with one unit per taluka may be considered to fetch adequate business. Commercial crop growing areas like fruits and vegetables, pulses, oilseeds, cotton will have more potential compared to millet growing areas.

3. Project Components: Power sprayers, hand sprayers and bursters, refrigerators, stabilisers, microscope, audiovisual aids/colour projector and materials, etc.

4. Project Cost: Rs.

A Capital cost: No. of Items Cost (Rs.)

- Rented building of 1200 sq. ft.
  (10 months advance @ Rs. 3000/- month) 30,000
- Equipments :-
  a. Power sprayers 4 25,000
  b. Hand sprayers and Dusters 10 20,000
  c. Refrigerators and Stabilisers 2 each 40,000
  d. Microscope (Compound) 1 15,000
- Stocking of Neem seed, cake and oil LS 25,000
- Mass multiplication of predators and parasites 93,000
- Stocking other biological control measures
  like NPV, Trichoderma, B.t depending upon
- the pest outbreak LS 25,000
- Audiovisual aids/colour projector and materials LS 20,000
- Furniture for lab LS 15,000
- Transport (Two wheeler & Autorickshaw) 1,50,000
- Office equipment (Office furniture, Computer and Accessories,
xii. Telephone connection etc., Contingencies) 67,000
xiii. Capitalisation of Recurring cost for 1st year 1,50,000

**Total Capital Cost: 6,75,000**

**B. Recurring Cost:** It varies from Rs. 1,50,000/- to Rs. 2,46,000/-

5. **Margin Money @ 15%** Rs. 1,01,200

6. **Bank Loan** Rs. 5,73,800

7. **Rate of Interest** 14% p.a.

8. **Repayment period** 6 years including grace period of one year

9. **Income:**

   Sale of biocontrol agents, Neem based formulations, advice on plant protection/prescription, spray services, special services like control of Rodents/control of plant epidemics, etc. The income received is estimated at Rs. 1,30,000/- and Rs. 2,78,000/- in the first and second year and thereafter at Rs. 4,25,000/- each year.

10. **Economics of the Project:**

    NPW Rs. 2,77,553  
    BCR 1.08 : 1  
    IRR 37%  
    Average DSCR 2.36

11. **Other Information:**

    The entrepreneur may engage in -

    i. Sale of *Trichogramma* parasite eggs and Botanical and neem based formulations
    ii. Advice/prescriptions on plant protection, rodent control, control of pests in stored grain and fumigation etc.
    iii. Taking up spray services in farmers' fields on crops, sericulture houses, etc., ICAR institutions and SAUs have started charging know-how fees for providing technology in recent years. However, as the scheme being GOI sponsored, it is assumed that the technology will be made available free of cost. Also, the unit should be exempt from pesticide controls and licenses. Stocking and sale of chemical insecticides and pesticides are controlled under certain acts/regulations hence, sale of pesticides has not been provided in the project.
iv. The entrepreneur, along with one assistant and one semiskilled helper in the first year and two assistants and two semiskilled helpers from the second year onwards are considered adequate. One assistant / semi-skilled helper will also be taking care of driving of the three-wheeler.

Note:

- Margin of 15% is assumed, but the actual margin will be as per the discretion of the banks.
- Interest rate of 14% is assumed for both investment and working capital. However, the actual rate will be as per banks' discretion.
- Similarly, the other economic / financial parameters such as the repayment period, DSCR, IRR, etc., may also vary depending upon the margin, interest rate, etc., taken into account by the bank.