Soil, Water Quality and input Testing Laboratory Services Centre

- To undertake soil testing at reasonable costs.
- To undertake irrigation water quality testing.
- To undertake testing of some of the inputs.
- To provide recommendation on fertilizer application and fertility management.
- To arrange for suitable inputs like bio-fertilizers.
- To provide guidance for soil reclamation and related technical areas.
- To train / demonstrate / educate farmers in the technical areas of soil fertility development, integrated input use, improved compost making, etc.

2. Location and Area of Operation:

In order to have close interaction with the farmers and facilitate frequent field visits the unit should be located in rural areas like taluka headquarters or an upcoming major panchayat headquarters It is considered that a lab with a capacity of 10,000 samples will have scope to cover a taluka. In areas having considerable saline/alkaline lands and irrigated garden lands growing commercial crops and vegetables will have ample potential for this kind of service.

3. Project Components: Laboratory Equipment (PH Meter, EC Meter, Photometer, etc.), office equipment, furniture, etc.

4. Project Cost: Rs.

A Capital cost

- Water and Electricity supply to the lab 25,000
- Wooden drawer with cabinet to keep samples (2 sets) 20,000
- Laboratory Equipment (such as pH Meter, EC Meter, Photometer, Caloriemeter, glassware, laboratory, furniture, etc.) 2,32,000
- Office equipment (such as furniture, motor cycle, computer, 1,17,000 telephone, audiovisual aids, contingencies, etc.,) 3,94,000

Capitalised Cost

- Rent for ten months 25,000
- Stock of chemicals 20,000
- Six months' operational cost 84,500
- Total : 5,23,500

B. Recurring Cost:

It varies from Rs. 1,33,200/- to Rs. 1,54,800/-
5. Margin (15%): Rs. 92,000

6. Bank Loan: Rs. 4,31,500

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

8. Income:

   (i) Though it is possible to test 10,000 - 12,000 samples in a year, the installed capacity is taken conservatively as 8,000 per year for working out the economics.

   Capacity utilization is considered as follows:

   First year Second year Third year 4th year onwards
   35% 50% 75% 80%

   (ii) The major income will accrue from soil and water testing. An income of Rs. 50 per sample of soil/ water is considered as reasonable. Return from the input testing is not taken into the cash flow, though some income is possible from this. Considerable amount of returns is also expected from the extension service rendered like land reclamation etc. However, highly conservation charges of Rs. 250 per acre for this service are assumed in the project due to the lack of field experience as of now.

   (iii) From Soil and water samples testing and Technical advice/services like land reclamation, the income varies from Rs. 1,40,000/- to Rs. 3,38,750/-

9. Other Information:

   Apart from the soil testing services, the unit can also widen its scope slowly by adding small capacities for organic manure production (for which land is needed) and bio-fertilizers. Small quantities of bio-fertilizers like Azatobacter, Azospirillum can be multiplied for local clients with the same infrastructure.