Appendix - 1

Assessment of Microirrigation Technology on yield, water use, Salinity and Nitrate contamination in ground water in RR district of AP

Study Questionnaire

General Information :

Name of the Farmer :

Village :

Mandal :

District :

Part A

1. Age ( in completed years)

2. Educational Status
   2.1 Illiterate
   2.2 Semiliterate
   2.3 Literate

3. Details of land
   3.1 Own land
   3.2 Leased land
   3.3 Extent in ha
   3.4 Field Dimensions
      3.4.1 Length
      3.4.2 Breadth
      3.4.3 slope (%)
4. Details of Crop

4.1 Name of the Crop

4.2 Variety

4.3 Crop Age

4.4 Crop water requirement

4.5 Duration

4.6 Spacing

4.6.1 Row to Row

4.6.2 Plant to Plant

5. Details of expenditure incurred on cost of cultivation

5.1.1 Land preparation

5.1.2 Seeds / plant material

5.1.3 Nursery raising

5.1.4 Transplanting

5.1.5 Manures

5.1.6 Fertilizers

5.1.7 Irrigation scheduling

5.1.8 Weed control

5.1.9 Plant protection

5.1.10 Harvesting

5.1.11 Transportation
6. Details of MI System

6.1 Type of MI system

6.1.1 Drip (inline, online)

6.1.2 Sprinkler

6.2 Date of installation

6.3 Lateral spacing (m)

6.4 Emitter details

6.4.1 Nos/plant

6.4.2 Spacing (m)

6.4.3 Discharge rate (lph)

6.5 Cost of MI System

6.5.1 Annual system maintenance cost

6.6 Pump details

6.6.1 Type of pump – set with BHP

6.6.2 Rated discharge( lps), and head (m)

6.6.3 Daily power availability (hrs)

6.6.4 Operating hours of pumping

7. Yield obtained, (tones/ha)

7.1.1 Without MI system

7.1.2 With MI system

8. Details of market

8.1 Source

8.2 Rate (Rs/ton)
Part B

Technical information

1. Soil particulars
   1.1 Soil type
   1.2 Soil texture
   1.3 Soil EC (dsm-1)
   1.4 Soil pH
   1.5 Soil fertility status
      1.5.1 Available N
      1.5.2 Available P
      1.5.3 Available K

2. Details of water source
   2.1 Source of water
      2.1.1 Bore well
      2.1.2 Open well
      2.1.3 Canal
   2.2 Depth of water source (m)
   2.3 Depth of water level
      2.3.1 After monsoon
      2.3.2 Before monsoon
   2.4 Flow rate (lph)
   2.5 Water EC
   2.6 Water pH
3. Details of fertilizers

3.1 Type of fertilizer use

3.1.1 Solid fertilizer (NPK)

3.1.2 Liquid fertilizer

3.1.3 Organic fertilizer

3.2 Quantity of fertilizer

3.3 Price of the fertilizer

3.4 Source of fertilizer