## APPENDIX – I

### PRODUCTION AND MARKETING OF RUBBER IN KANYAKUMARI DISTRICT

*(Interview schedule for cultivators)*

1. **Name of the grower:**

2. **Place of the estate:**
   - Rural
   - Semi urban
   - Urban

3. **Gender:**
   - Male / Female

4. **Age:**
   - 20-30- Years
   - 30-40
   - 40-50
   - Above 50

5. **Social status:**
   - FC BC / MBC SC / ST

6. **Literacy level:**
   - Illiterates
   - School Level
   - College level
   - Professional
   - Others

7. **Occupation:**
   - Main
   - Allied

8. **No of members in the family:**
   - Male
   - Female
   - Total

9. **Acres owned / leased**
   - Owned
   - Leased

10. **No of trees per acre:**
11. How did you become a rubber cultivator:
   - Inheritance
   - Purchasing
   - Planted in fresh land
   - Removing other crops
   - Other ways if any

12. Rubber variety cultivated:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Variety</th>
<th>Age</th>
<th>Acres</th>
<th>Tapped area</th>
<th>Production per Annum (in kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Which variety yields more?

14. Experience in rubber cultivation.

15. The rate of land per acre during the period of purchase and the present value.

16.0 What was grown before rubber.
   - Rubber
   - Other crops

16.1 If the answer to 16.0 is ‘other crops’ why was it planted with rubber?

17. Were the trees rain guarded?
   - Yes
   - No

18.0 Type of the disease attacked?

19.1 Preventive measures taken to control diseases.
### 19.2 Manures, fertilizers and pesticides used:

<table>
<thead>
<tr>
<th></th>
<th>I Year Rs</th>
<th>II Year Rs</th>
<th>III Year Rs</th>
<th>IV Year Rs</th>
<th>V Year Rs</th>
<th>VI Year Rs</th>
<th>VII Year Rs</th>
<th>Current Year Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fertilizers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pesticides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 20.0 Cost of input

- **20.1 Type of seedlings used**: :
- **20.2 Number of seedlings planted**: :
- **20.3 Sources of seedlings**:  
  - Own farm [ ]  
  - Other sources [ ]
- **20.4 Cost of seedlings**: :
- **20.5 Land revenue tax**: :

### 20.6 Cost of tools and implements:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Cost of Purchase / Construction</th>
<th>Present Value</th>
<th>Repairs &amp; maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Land</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Building</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Machinery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Tools &amp; Equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
  a) |                                 |               |                        |
|         |                                 |               |                        |
|         |                                 |               |                        |

### 20.7 Insurance

- **20.7 Insurance**: :

### 21. Value of rent per acre in case of leased land

- **21. Value of rent per acre in case of leased land**: :
22. Do you face any problem in the cultivation of rubber?  
   Yes ☐  No ☐

22.1 If yes, rank the following problems in their order of importance
   1. Lack of skilled labour
   2. Climatic changes
   3. Attack of diseases
   4. Defects in processing
   5. High labour cost
   6. Lack of smoke house

23.0 Type of processing being followed:
   a. Sheet rubber ☐
   b. Ammoniated field latex ☐
   c. Field latex ☐
   d. Any other form ☐

23.1 How many hours after tapping is the latex collected?

23.2 What is the type of collection vessel used?
   a. Coconut shell ☐
   b. Plastic cup ☐

23.3 How many hours after tapping is the latex collected?

23.4 If sheet rubber is produced please furnish the following information.
   a) How much diluted latex is taken in a pan to make one sheet?

   b) Do you follow the same day sheeting or the next day sheeting?

   c) Whether precoagulation of latex is observed, if so what preventive 
      action is being taken?

   d) What is the coagulant used and what is its concentration and quantity 
      per sheet?

   e) Do you observe surface blackening of coagulum / sheet?
23.5 How are the sheets being dried?
   (i) Sun drying / partial sun drying for how many days and also please specify how the sheets are exposed to sun.
   (ii) Kitchen smoking
   (iii) Smoke house drying
   (iv) Any other method (Please specify)

23.6 If dried through smokehouse specify the form of smoke house.
   (i) Owned smoke house
   (ii) Leased smoke house
   (iii) Hired smoke house

23.7 If you dry through other smokehouses, state the cost per sheet?
   (i) For smoking
   (ii) For machine

23.8 Do you have storage facilities?
   Yes ☐ / No ☐

23.9 How many days it does take to get the sheets ready for sale?
### 24.0 Labourers employed:

<table>
<thead>
<tr>
<th>Type of work</th>
<th>I Year</th>
<th>II Year</th>
<th>III Year</th>
<th>IV Year</th>
<th>V Year</th>
<th>VI Year</th>
<th>VII Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Own</td>
<td>Hire</td>
<td>Own</td>
<td>Hire</td>
<td>Own</td>
<td>Hire</td>
<td>Own</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Preparing land</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terracing, Lining and pitting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filling and Planting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manures and Fertilizers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mulching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant protecting chemicals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cover crop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rain guard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drainage and other misc. work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boundary protection and foot path</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watchman</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tapping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvesting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

24.1 On what basis, are the workers employed at the time of tapping.

24.2 Rate of wages

   Male : Rs .............. per day
   Female : Rs .............. per day
24.3 Basis for payment: (a) On the basis of the number of trees
(b) On the basis of tapping area
(c) Lump sum.

25.0 Source of finance:
   - Own fund
   - Borrowed fund
   - Both

25.1 If borrowed funds mention the sources:

<table>
<thead>
<tr>
<th>Sources</th>
<th>Purpose</th>
<th>Amount borrowed</th>
<th>Duration</th>
<th>Rate of Interest</th>
<th>Penalty or other charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Village traders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Commission agents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Money lenders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Friends &amp; relatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Others (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

25.5 Interest on working capital:

25.6 Interest on fixed capital:

26.0 In what form do you market?

26.1 Periodicity of the marketing of sheet:
   - Monthly
   - Weekly
   - Daily
26.2 If you market daily state the reasons.
   a) To meet regular family expenses
   b) To clear debts
   c) No storage facilities
   d) Other reasons (specify)

26.3 Quantity retained

26.4 Quantity for sales

26.5 Through whom do you market the rubber (If more than one trader state the proportion)
   a) Village traders
   b) Commission agents
   c) Wholesalers
   d) Retailers
   e) Directly to small scale industries
   f) Directly to large scale industries

26.6 If sales to village traders, state the reasons

26.7 If sales to commission agents, state the reasons?
   a) Higher prices
   b) Spot payment
   c) Transport facilities made available
   d) Storage facilities
   e) Long term practice

27.0 Cost incurred in marketing per month
   a) Transportation
   b) Storage
   c) Loading and unloading
   d) Commission charges
   e) Incidental charges
   f) Pilferage
   g) Tax
   h) Sample waste rejection
28.0 Do you store rubber to avail price like?

Yes / No

28.1 If yes where do you store rubber?
   a) Own storage facilities
   b) Regulated market godown
   c) Co-operative market society
   d) Any other (specify)

28.2 How long on an average do you store your produce before sale?

a) Less then 30 days
b) 30 days to 60 days
c) 60 days to 90 days
d) 90 days and above

28.3 If storing, does it affect quality?

Yes / No

28.4 If storing, does it result in waste?

Yes / No

Average loss ...................... quality

28.5 Are you aware of the price prevailing for rubber in the local and international markets?

Yes / No

28.6 If yes, what is your source of such information?

a) Friends and relatives
b) Newspaper
c) Village traders
d) Commission Agents
e) Any other source (specify)
28.7 What was the price realized by you during the past three years?

<table>
<thead>
<tr>
<th>Year</th>
<th>Price / kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

29.0 Whether grading is done at the time of sales?

Yes / No

29.1 If yes what is the percentage of each grade of sheets obtained.

30.0 Do you face any problem while marketing your rubber?

Yes / No

30.1 Problems in marketing of Rubber (Rank)

1. Price fluctuation

2. Inadequate storage facilities

3. Absence of grading

4. Changes in the policy of the government

5. Delay in payment

6. Traders offer low price

31. Net income per acre

32. Give your suggestions for improving the profitability of rubber cultivation.