Digital Geo-Spatial Survey of Plantations

The Plantation Directorate was constituted under the Department of Industries and Commerce during the year 2022–23 with the objective of promoting the plantation sector and ensuring its long-term sustainability and profitability through appropriate government interventions.

At present, the Directorate primarily depends on limited data sourced from the Labour Department, which does not sufficiently capture the comprehensive information required for effective planning, monitoring, and policy formulation for the plantation sector.

To address this data gap and to develop a comprehensive, accurate, and up-to-date plantation database, the Directorate proposes to undertake a State-wide digital survey covering all major plantations. A detailed Data Collection Proforma has already been developed to guide the survey process.

Further, it has been decided to conduct a detailed geo-spatial survey, including geo-mapping of plantation areas and labour line houses, to enable spatial analysis and evidence-based decision-making.

In this context, the Directorate proposes to engage a competent Startup with demonstrated expertise in geo-spatial technologies, digital data collection, and platform/application development to design and implement the survey in a technologically robust, scalable, and efficient manner.

DATA COLLECTION PROFORMA - PLATATIONS OF KERALA

Details of the Plantation

1. Name of Plantation :
2. Registration No :
3. Registered Address :
4. Type of Land Holding : Ownership / Lease / Other
5. Specify if Other :
6. Type of Management : Proprietorship / Partnership / Public Ltd / Private Ltd / Society / LLP / Government Undertaking
7. Details of the Major Stakeholders

Name			
Address			
Email id			
Contact No			

Estate Details

Basic Details

1. District :
2. Taluk :
3. Local Body/Bodies :
4. Type of Local Body : (Panchayat / Municipality / M. Corporation)
5. Legislative Constituency :
6. Parliament Constituency :
7. Plantation Inspector Office :
8. Name of the Estate Manager :
9. Email id of Estate Manager :
10. Contact Number of Estate Manager :

Land Details

1. Village/Villages :
2. Survey Number/Survey Numbers :
3. Total Land Area :
4. Area under cultivation :
5. Have you availed the 5% exemption :
6. If No, why? :
7. Residential Area
   a. Labour lines :
   b. Bunglows and other residential buildings :
   c. Guest Houses :
8. Area for processing units, factories, packing units etc :

9. Area for amenities (education, healthcare etc), if any :
10. Area of forested land :
11. Area of land left fallow :
12. Area for tourism activities, if any :
13. Area used for other non-plantation activities :

Crop Details

Name of the Crop	Tea	Rubber	Coffee	Cardamom	Cocoa	Cinnamon	Pepper
Area under cultivation (Hectares)							
Average Annual Production (Tons) (last 3 years)							
Average investment excluding land cost for one crop life cycle (in lakhs)							
Average crop life (Years)							
Replantation due (month/Year)							
Average replantation Expenses (per hectare)							
Specify any Hi-Tech farming methodologies implemented							

Irrigation Details

1. Sources of irrigation : (Well/ Government Canal/ Private Canal/ Tanks/ River/ Pond/ Lakes/ Borewell/ other sources)
2. Type of irrigation methods used : (Surface Irrigation/ Localized Irrigation/ Drip Irrigation/ Manual Irrigation/ Sprinkler Irrigation/ Center Pivot Irrigation/ Lateral Move Irrigation/ Sub-Irrigation)
3. Quantity of water used per month (KL) :

Other Revenue Generation Activities

1. Are there any additional revenue generation activities : Yes / No
2. If Yes, Please specify the kind of such activities : (Agricultural crops / Diary / Tourism / Others)

3. Details of other revenue generation activities :

4. Percentage revenue from such activities :

Employment

1. Total no of Laboures in the plantation :
2. Total male Laboures in the plantation :
3. Total female Laboures   in the plantation :
4. Number of supervisory staff :
5. Total no male staff in production facility or other activities :
6. Total no female staff in production facility or other activities :

Processing / Value Addition

1. Is there any value addition/ processing facility within the estate : Yes / no
2. If yes, specify the value addition activities :
3. List down the value added goods/ commodities produced :
4. Annual production (Average of last 3 years) (Tonnes) :
5. Maximum production Capacity (Tonnes) :
6. Annual turnover from value added products (Avg of last 3 years) :
7. Does the plantation Operate in Profit : Yes / No
8. Average Annual P/L (Avg of last 3 years) :

Marketing

1. Does the plantation market its product under a Brand Name : Yes / No
2. Specify Brand Name(s) :
3. Product(s) marketed under the Brand :
4. Specify the market segment(s) (B2B, B2C, etc) :
5. Is there any involvement of market intermediaries : Yes / No
6. If Yes, are you satisfied with the service of intermediaries : Yes / No
7. Does the plantation make use of any e-commerce portal : Yes / No
8. If Yes, specify the portals on which the produces are available :

9. Are the produces exported :
10. If yes, specify the countries to which exported :

11. What percentage of annual turnover is from export business   :

Prices for the produces

Name of the product					
Wholesale price (Rs/Kg)					
Consumer Price(Rs/Kg)					
Export Price (Rs/Kg)					

Infrastructure, Technology, Finance

1. Are enough storage facilities available for plantation produce   : Yes / No
2. What are the methods adopted to preserve crops during inventory:

3. Total storage area Available (Sq ft)   :
4. Is automation deployed at any of the processes   :
5. If Yes, provide details of the process and technology used

6. Total investment in technology in the past 5 years (Rs Lakhs)   :
7. Are there plans for further technology integration   : Yes / No
8. If yes, Please provide the details   :

9. Estimated cost for technology integration (Rs Lakhs)   :
10. Beneficiary of any govt grant/subsidy/scheme(state/central)   : Yes/No
11. If Yes, Name of Dept / Agency from which assistance received   :
12. Name of the Scheme   :
13. Amount received as grant/subsidy/other benefit (Rs)   :
14. Is the plantation bank linked (Currently availed loan from Bank) : Yes/No
15. If No, Reason for not availing bank loans   :

Rural Infrastructure and Services

Facility	Distance (In Km)
Market	
Rural road	
Railways	
Banking & Insurance	
Hospital	

Fire force	

Labourer Amenities

1. No of labour lines   :
2. Capacity of a single unit in a labour line   :
3. Total number of units in a labour line   :
4. No of labourers living in labour lines   :
5. Average age of the labour lines (Years)   :
6. No of labour lines which require immediate upgradation   :
7. No of primary (LP/UP) schools in the region   :
8. No of students from labour lines enrolled in the primary schools :
9. No of high schools in the region   :
10. No of students from labour lines enrolled in the high schools   :
11. Nearest Higher Secondary school(s)   :
12. Nearest Poly technics / it is   :
13. Nearest Arts & Science College   :
14. Nearest Professional College   :
15. List down the nearby primary health care facilities   :
16. Nearest hospital with IP facilities   :

Challenges faced by the plantations
Crop Related
1. Does the current crop variety yield desired output every year   : Yes / No
2. Is there attack by pests and rodents beyond control   : Yes / No
3. Are the crop prone to regular diseases   : Yes / No
4. Is climate change affecting the crop yield   : Yes / No
5. Are new crop varieties with better yield available in market   : Yes / No
6. If yes, are there plans of planting the better yielding variety   : Yes / No
7. Was there any crop loss due to natural calamities in last 3 years   : Yes / No
8. Are the crops insured   : Yes / No
9. Crop specific challenges, if any   :

Labour related
10. Do you have enough skilled labour supply?   : Yes/No
11. Do you provide any training to the labourers   : Yes/No
12. If yes, when was the last training program organized (mm /yyyy) :
13. Are there any govt training programs specific to plantations   : Yes / No / Not aware
14. Are there frequent labour strikes   : Yes / No
15. Is there labour resistance to mechanization/modernization   : Yes / No

Man Animal Conflicts

1. Were any incidents of man-animal conflict reported in last 3 years: Yes / No
2. What are the animals possessing challenges to the plantation   :

3. Estimated amount of loss in previous FY by animal attacks (Rs) :
4. Any mechanism deployed to prevent animals entering plantations: Yes / No
5. If yes, Please provide details   :

Other Challenges faced by Plantations

What are the challenges faced in sustaining the profitability of Plantation?

Government Support Expected

What support are solicited from the government for improvement in the Plantation sector?