

**Preparation of Cluster Completion Report for all Clusters  
Implemented in 12 project Districts under the Agriculture Sector  
Modernization Project Ministry of Agriculture, funded by the World  
Bank (IDA fund and EU grant)**

**Procurement No: LK-MOA-PMU- 456007-CS-INDV**

# **Cluster Completion Report – Northern Province**

December 2024

**SUBMITTED BY:**  
**J.A.P. JAYAWEERA**  
**CONSULTANT**

### **List of Abbreviations**

ASMP	Agriculture Sector Modernization Project
ATDP	Agriculture Technology Demonstration Park
CBO	Community Based Organization
CDP	Cluster Development Plan
DSD	Divisional Secretary Division
FBS	Farmer Business School
FD	Forest Department
DS	Divisional Secretary
EU	European Union
GN	Grama Niladhari
GoSL	Government of Sri Lanka
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
IDA	International Development Association
IPM	Integrated Pest Management
LA	Local Authority
MOA	Ministry of Agriculture
NGO	Non-Governmental Organization
PMU	Project Monitoring Unit
PPE	Personal Protective Equipment
PPMU	Provincial Project Management Units
PS	Pradeshiya Shaba
PUC	Public Unlisted Company
SMP	Social Management Plan
WB	World Bank

## Table of Contents

<b>CHAPTER 01: INTRODUCTION .....</b>	<b>4</b>
<b>1.1 Project background .....</b>	<b>4</b>
<b>1.2 BRIEF DESCRIPTION OF THE PROJECT .....</b>	<b>5</b>
<b>1.3 THE NEED FOR CLUSTER COMPLETION REPORTS .....</b>	<b>6</b>
<b>1.4 SCOPE OF THE WORK .....</b>	<b>8</b>
<b>1.5 Basic Data: .....</b>	<b>10</b>
<b>CHAPTER 02: CLUSTER DEVELOPMENT PLAN AND IMPLEMENTATION .....</b>	<b>11</b>
2.1 Project Implementation .....	11
<b>CHAPTER 03: OBJECTIVES AND METHODOLOGY .....</b>	<b>13</b>
3.1 Specific Tasks .....	13
3.2 Methodology .....	13
<b>CHAPTER 04: FINDINGS AT COMPLETION IN NORTHERN PROVINCE .....</b>	<b>14</b>
4.1 OVERALL PROJECT COST .....	14
4.2 CDPs, IMPLEMENTATION AND OUTPUTS .....	14
4.3 Production and Market Infrastructure .....	16
<b>4.3.1 Expenditure on Production and Market Infrastructure .....</b>	<b>18</b>
4.4 ATDP Development .....	21
<b>4.4.1 Production Data of ATDPs .....</b>	<b>22</b>
<b>4.4.2 Exported Volumes of ATDPs .....</b>	<b>25</b>
4.5 Status of PUC Establishment .....	26
4.6 Training and Capacity Building of Beneficiaries .....	28
4.7 Sustainability Initiatives .....	29
<b>CHAPTER 05: CONCLUDING REMARKS .....</b>	<b>31</b>
<b>Annex 1: Infrastructure Details .....</b>	<b>33</b>
<b>Annex 2: ATDP Farmer Inputs .....</b>	<b>41</b>
<b>Annex 3: PUC Assets .....</b>	<b>46</b>

## CHAPTER 01: INTRODUCTION

### 1.1 Project background

The Sri Lankan agriculture sector plays a crucial role in the rural labor market. However, its contribution to the country's GDP has declined from over 40% to less than 10% over several decades. Despite this long-term decline, the sector experienced a 3.6% growth in 2023, increasing its contribution to GDP to 10.7% (DCS, 2023). Nationally, about 26.5% of the employed population works in agriculture. Around 1.65 million smallholder farmers operate less than 2ha of land and contributes 80% to the total agricultural production. Nonetheless, the sector has faced numerous challenges over the years. Among these challenges, factors such as low productivity and profitability, limited adoption of mechanized farming, inadequate private investment, restricted market access, insufficient credit and financial services, poor infrastructure, poor pest and disease management practices, and the impacts of climate change have all hindered the sector's performance. With this background, The Agriculture Sector Modernization Project (ASMP) was launched with the aim of enhancing agricultural livelihoods by improving productivity, targeting market-oriented production, especially for export, upgrading value chains, and bolstering production and market infrastructure and capacity. The project was funded with a credit of US\$ 58.63 million from the World Bank through the International Development Association (IDA) and a grant of US\$ 28 million from the European Union (EU). It comprises three key components:

1. Agricultural Value Chain Development: Promoting commercial and export-oriented agriculture.
2. Productivity Enhancement and Diversification Demonstration: Supporting smallholder farmers to produce competitive and marketable commodities, improve their market responsiveness, and increase commercialization.
3. Human Resources Management and Capacity Building: Focusing on logistics, monitoring and evaluation, communication, and overall project coordination.

The ASMP expected to improve small-scale farmers' living standards by boosting productivity and competitiveness through new technologies and management practices. It introduced high-value, export-oriented crops, helped establish market linkages, scaled up production using the cluster concept, and enhanced value addition. By adopting cluster concepts with Cluster Development Plans (CDPs), farmers cultivate high valued crops using, the given technologies, knowhow, improved infrastructure facilities, machineries and farming tools and equipment. Seventy-two clusters were formed with the expectation that farmers in these clusters would establish farmer companies known as Public Unlisted Companies (PUCs). These PUCs help mitigate issues related to traditional fragmentation in the sector. They also enhance farmers' collective bargaining power while allowing them to make independent decisions on product supply, quality, profitability, and sustainability. As these companies mature, they are expected to create their own business environments. PUCs play a crucial role in ensuring that farmers are both contributors to and beneficiaries of the agricultural value chain. These Farmer Companies are distributed strategically across 12 districts [7 districts under World Bank (WB) and 5 districts under European Union (EU)] to maximize their impact on regional agricultural development and the assistance provided by the project was directed towards individual farmers and PUCs. The investment made by the ASMP for one Cluster, which produces at least one PUC, is more than 360 million rupees. The investment covers costs for Irrigation systems, land preparation implements, some inputs such as insect proof nets, poly mulch, fertilizers, seeds, poly tunnels in some clusters, processing facilities and equipment, construction of agro-wells, access roads, establishment of PUCs, farmer training and capacity building etc.

## 1.2 BRIEF DESCRIPTION OF THE PROJECT

The Agriculture Sector Modernization Project (ASMP) is comprised of three components. The Component-1, Agriculture Value Chain Development, seeks to promote commercial and export-oriented agriculture and this component is implemented by the Ministry of Plantation Industries (MOPI). The Component-2, Productivity Enhancement and Diversification Demonstration (this particular assignment relates to the Component-2) is implemented by the Ministry of Agriculture (MOA). The Component-2 aims to support smallholder farmers to produce competitive and marketable commodities, improve their ability to respond to market requirements and move towards increase commercialization. The Component-3 focuses on human resource management, and capacity building, logistic requirements, monitoring and evaluation, communication, and coordination of the overall Project.

The listed below are the sub-components of the Component-2 of the ASMP implemented under the MOA:

- a. **Farmer Training and Capacity Building:** Under this Sub-component, all the non-technical farmer trainings (mainly through **Farmer Business School – FBS**) are provided to all the member farmers of the **Farmer Companies (FCs)** as well as to the selected non-member farmers living around the cluster areas with the aim of improving their soft skills (referring farming as a business), carry out related awareness and exposure visits (local as well as foreign), empowering Farmer Companies providing the related trainings to the lead farmers as well as to the potential second generation young farmers, and providing all the assets needed to operate the Farmer Companies.  
All related institutional capacity building activities are carried out under this sub-component in order to establish and empower the Farmer Companies.
- b. **Modern Agriculture Technology Parks (ATDPs):** This is the main Sub-component the Component-2 of ASMP. All the crop cluster selection, design, establishment, and continuity of crop clusters is ensured under this sub-component. Each individual member farmer of the FC will receive a technology package as a grant under this Sub-component. In addition, farming related collective assets, cluster specific common **Agro Processing Hubs - APHs** (mostly one per each cluster), and common **Urban Marketing Centers - UMCs** (mostly one per each District), certain technical exposure visits, trainings and awareness, specific technical consultancies will be delivered under this Sub-component.
- c. **Production and Market Infrastructure:** Under this Sub-component, Cluster / ATDP specific market infrastructures (Eg. Common APHs, UMCs, **Compost Making Units - CMUs**), required irrigation infrastructures, identified market access roads and any other specific supportive infrastructures will be established. In addition, the consultancy assignments related to Engineering Designing and Establishments will be carried out under this sub-component.
- d. **Analytical and Policy Advisory Support:** Related Policy Studies as well as required Analytical Studies are carried out under this particular Sub-component. In addition, conducting certain related assessments / evaluations, organizing **Techno Forums, Policy Forums**, formulation Policy / Strategy briefs / guidelines are carried out.

**Project Management Unit (PMU)** of the ASMP together with the **Provincial Project Management Units (PPMUs)** implement the project activities with the support and the guidance of the Ministry of Agriculture mainly through its Project Management Unit, the Provincial Ministries of Agriculture and other relevant stakeholders.

The Democratic Socialist Republic of Sri Lanka has obtained a Credit of US\$ 58.63 Million from the World Bank through the International Development Association (IDA) and received Grant of US\$ 26 Million from the European Union (EU) for the ASMP of the Ministry of Agriculture.

### 1.3 THE NEED FOR CLUSTER COMPLETION REPORTS

All project activities funded under the Agriculture Sector Modernization Project (ASMP) are about to be completed at the end of December 2024. As a result, it is the obligation of the project to the World Bank and The European Union that an evaluation of the implementation of CDPs, establishment of PUCs, development and improvement of proposed market, processing and other infrastructure facilities and training and capacity building is needed to be done prior to completion of the project. Hence, this report would cover an evaluation of actual status of the project interventions against CDPs and initially proposed activities of the project. Specifically, the completion status of each component covering all activities related to agriculture productivity enhancement, market infrastructure development, institutional development and asset transferring, safeguards, farmer training, and capacity building, collecting and post-harvest processing centers, inputs distribution as per the introduced new technologies etc. were identified while giving emphasis on activities which are yet to be completed. It is also a fact that understanding sustainability measures adopted by PUCs would provide insights into how the PUCs will function without any issue in the future. An evaluation was conducted to assess the progress in achieving the Result Framework Indicators outlined in the Project Appraisal Documents. This included identifying unexpected impacts and risks, such as environmental challenges and market fluctuations, and how these were addressed through adaptive measures like enhanced risk management strategies and stakeholder consultations. Key lessons learned from cluster implementation were also identified.

#	Province	District	Cluster	Cluster type
1	central	Matale	1. Passion fruits production	Pilot
2			2. Onion seed production	Pilot
3			3. Hybrid Chili seed production	Pilot
4			4. TEJC Mango production	Pilot +ISP
5			5. Guava Production Cluster	ISP
6			6. TJC Mango instead of MD2 pine apple	ISP
7		Kandy	1. Dry Chili Production (2021)	Pilot+EU
8			2. Hass Avocado production Cluster	EU
9			3. Vegetable seed production	EU
10			4. Ambul Banana	EU
11	Northern	Jaffna	1. Chilli production	pilot
12			2. TJC Mango production/ chili	ISP+pilot
13			3. Potato Red onion Production Cluster	ISP
14			4. Organic Small Banana Production	ISP
15		Mullaitivu	1. Ground Nut production	pilot
16			2. Passion fruit Production	pilot
17			3. Kolikuttu Banana/Chilli Production	ISP
18			4. Pomegranate/Chilli Production Cluster	ISP
19			5. Papaya/Chilli Production Cluster	ISP
20			6. Dry chili cluster	Pilot
21		Kilinochchi	1. Jumbo peanut production cluster	EU + pilot
22			2. Passionfruit production cluster	EU + pilot
23			3. Chili Production cluster	EU

## Cluster Completion Report – Northern Province - ASMP

24			<b>4. Pomegranate Cluster</b>	<b>EU</b>
25				
26				
27		<b>Vavuniya</b>	<b>1. Dried Chilli Production</b>	<b>EU</b>
28			<b>2. Maize seed production</b>	<b>EU</b>
29			<b>3. TJC Mango</b>	<b>EU</b>
			<b>4. Papaya Production</b>	<b>EU + pilot</b>
			<b>5. Cassava Production cluster</b>	<b>pilot</b>
30				
31			1. Passionfruit production	pilot
32			2. Pineapple production	pilot
33			3. TEJC Mango production	pilot+ISP
34			4. Moringa Leaves Production	pilot
35			5. Bee keeping	pilot
36			6. Cavendish Banana Production Cluster	ISP
37			7. Cavendish Banana instead of MD2 pine apple	ISP
			8. Chilli Production	pilot
38				
39			1. Avocado Cluster	EU
40			2. Dry Chili Production Cluster	EU
41			3. Seed Potato Cultivation -	EU +Pilot
42			4. Vegetable production cluster	EU
43			5. Passionfruit production cluster	pilot
44			6. Mandarin Production	pilot
			7. Soursop Production	pilot
45				
46			1. Cucumber Production	pilot
47			2. Green chilli Production Kaluthavalai	pilot
48			3. Dry chili production	pilot
49			4. Ground Nut Production Kathiravelai	pilot
50			5. Ground Nut Production Karadiyanaru	pilot
51			6. Cavendish Banana production	ISP
52			7. Pomegranate Production Kaluwanchikudy	ISP
			8. Pomegranate Production	ISP
53				
54			1. Dry Chili Production Cluster	EU
55			2. Jumbo peanut Production (pilot cassava 100)	EU + pilot
56			3. Maize seed production Cluster	EU
			4. Soursop Production Cluster	EU+pilot
57				
58			1 Green chilli production	pilot
59			2 Bitter gourd Production	pilot
60			3 Mushroom production	pilot
61			4. Aloe Vera Production	pilot
			5. Moringa Leaves production	pilot

## Cluster Completion Report – Northern Province - ASMP

62			6. Maize seed Production	pilot
63			7. Small Banana Production Cluster	ISP
64			8. Dry Chili Production Cluster	ISP
65			9. Guava Production Cluster	ISP+pilot
66			1. Green chilli production	pilot
67			2. Bitter gourd Production	pilot
68			3. Mushroom production	pilot
69		Polonnaruwa	4. Aloe Vera cultivation	pilot
70			5. Dry Chili Production Cluster	ISP
71			6. Papaya Production Cluster	ISP+pilot
72			7. Vegetable Production Cluster	ISP
			<b>Total Entire project</b>	

### 1.4 SCOPE OF THE WORK

Cluster completion Report should comprise of followings:

- Matrix indicating all the activities
- Cluster Completion Report

A Cluster completion report should include:

1.	<b>Project background/objectives</b>	<ul style="list-style-type: none"> <li>o Brief description of the implemented sub-project components comparing with the Cluster Developments Plans and Project Proposals indicating all planned activities</li> <li>o Summary of Project Implementation <ul style="list-style-type: none"> <li>• Sub-project Documentation (Date of submission / approval, Date of Sub-project Implementation; Date of completion)</li> <li>• Cluster cultivation activities and their details (date of cluster cultivation started, date of completion,</li> <li>• Sub-Contract Details for infrastructure activities (i.e., how many infrastructure activities started, how many completed, physical progress, financial progress, status of handing over, etc)</li> <li>• Description of each input package given to farmers (new, existing, other)</li> <li>• Cost of each input package (new, existing, other)</li> <li>• How many farmers received each package (new, existing, other)</li> </ul> </li> </ul>
2.	<b>Agriculture Productivity Improvement Activities (Cultivation activities)</b>	<ul style="list-style-type: none"> <li>- Details of crop clusters by each district indicating the crops, no of farmers planned/selected, land extent (Acres/Ha), no of farmers started/extent in Ha, no of farmers harvested/extend in Ha, no of farmlands abandoned/extent in Ha, etc</li> <li>- Clusters not started harvesting yet, details such as expected timeline of yield with forecasted yield for year 1, 2, 3, 4, or more years until full maturity as appropriate</li> <li>- Details of inputs provided (irrigation systems established, purchased, functioning, abandoned, planting/seeding materials, fertilizer, land preparation inputs, machineries &amp; equipment provided such as tractors, tillers, bed makers, operational mechanism of such inputs, etc)</li> <li>- Cost of production for each crop based on the available data</li> <li>- Details of harvest (quantity of harvest expected, quantity of harvested, quantity of harvest sold, income including foreign exchange earnings, etc)</li> </ul>



# Cluster Completion Report – Northern Province - ASMP

		<ul style="list-style-type: none"> <li>- Description of any backward linkages to local services providers</li> <li>- Details of IPM practices implemented in each crop cluster in each stage</li> <li>- Details of trainings/awareness conducted (no of trainings conducted, direct and indirect beneficiaries of training, photos of such trainings, etc)</li> </ul>
3.	<b>Production and Market Infrastructure Developments</b>	<ul style="list-style-type: none"> <li>- List of infrastructures identified, selected and implemented under each cluster by districts such as roads, culverts, canals,</li> <li>- Status of implementation (physical and financial progress of each activity, handing over status, etc)</li> <li>- Details of common infrastructures such as Agro-wells and Solar powered systems and uses</li> <li>- Operations and maintenance plans for each infrastructure</li> <li>- Sustainability measures for each infrastructure activity</li> <li>- Status of Collecting Centre /Processing Centre &amp; equipment including how much was spent on the PUC post-harvest center including building construction and rehabilitation, PUC office facilities, PUC office equipment, and so on</li> <li>- Completion certificates/taking over certificates</li> </ul>
4.	<b>Farmer training and Institutional Development Activities</b>	<ul style="list-style-type: none"> <li>- Details of institutional set-ups established (FOs/PUCs established, Registered, in-operations, pending, no of clusters covered)</li> <li>- No of farmers in each institutional set-up (FO/PUC) and no of shareholders of each PUCs</li> <li>- Share capital collected in each cluster/PUC and status of the capital investment</li> <li>- sustainability mechanism of Processing facilities</li> <li>- Training/Awareness conducted for each cluster including business management (FBS &amp; PUC training)</li> <li>- Status of Business Plans for each cluster</li> <li>- Status of marketing of production (market linkages)</li> </ul>
5.	<b>Financial Status</b>	<ul style="list-style-type: none"> <li>- Details of expenditure Planned under each cluster (expenditure planned under each intervention such as crop establishment, irrigation establishments, infrastructure developments, the establishment of processing centers, establishment of PUCs, etc)</li> <li>- Details of expenditure incurred under each cluster (expenditure incurred under each intervention such as crop establishment, irrigation establishments, infrastructure developments, the establishment of processing centers, establishment of PUCs, etc) (Expenditure on each beneficiary?)</li> <li>- Details of beneficiary contribution in each cluster</li> <li>- Financial progress including due payments</li> <li>- Plan for Expenses under each cluster by December 2024</li> </ul>
6.	<b>Indicator achievements</b>	<ul style="list-style-type: none"> <li>- As per the result- framework (Existing status of PDOs 1-7/Progress and 18 IRs)</li> <li>- No of jobs created through the cluster initiatives</li> </ul>
7.	<b>Best practices implemented</b>	<ul style="list-style-type: none"> <li>- Document all best practices implemented under each cluster</li> </ul>
8.	<b>Information Dissemination</b>	<ul style="list-style-type: none"> <li>- <b>Transferring of technology</b> – technology transfer to implementing agencies such as DOA, PDOA, MASL, PUC, etc</li> <li>- <b>Information Dissemination Channels:</b> This focuses on the communication methods used to spread information within communities.</li> <li>- <b>Timely Access to Information:</b> This highlights the importance of receiving information promptly.</li> </ul>

		<ul style="list-style-type: none"> <li>- <b>Information Availability:</b> This emphasizes that the information needed is readily accessible. (Documents, VIDEOS etc.)</li> <li>- <b>Sharing information:</b> To a more interactive process of including relevant parties in the information exchange.</li> </ul>
--	--	--

### 1.5 Basic Data:

<b>Project Implementation Start Date</b>	<b>Project Implementation End Date</b>
15.12.2016	31.10.2021
<b>Expected Effective Date</b>	<b>Expected Closing Date</b>
30.09.2016	31.12.2021

<b>Project Component - 2</b>	58.63 US\$ million (WB)+28 US\$ million (EU)
<b>Farmer Training and Capacity Building</b>	6.20 US\$ million
<b>ATDP</b>	33.44 US\$ million (WB)+28 US\$ million (EU)
<b>Production and Market infrastructure</b>	14.71 US\$ million
<b>Analytical and Policy Support</b>	4.28 US\$ million

<b>Project Financing (WB)</b>	Credit
<b>Total World Bank Financing/ IDA</b>	125 US\$ million
<b>Borrower/ Recipient</b>	0.74 US\$ million
<b>Local Community</b>	0.00 US\$ million
<b>Local Farmer Organizations</b>	44.10 US\$ million
<b>Total Project Cost</b>	169.84 US\$ million

## CHAPTER 02: CLUSTER DEVELOPMENT PLAN AND IMPLEMENTATION

Formulation of CDPs comes under the component-02 of ASMP, where it aims to support smallholder farmers to produce competitive and marketable commodities, improve their ability to respond to market requirements and move towards increase commercialization. Farmer Training and Capacity Building, Development of Modern Agriculture Technology Parks (ATDPs), Development of Production and Market Infrastructure and Analytical and Policy Advisory Support are the main subcomponents implemented by the ASMP under the main component-02. Farmer training and capacity building was mainly implemented through the concept of Farmer Business School where members of the PUC and non-members received the training and awareness of different aspects of crop management, business management, cultural practices, new technologies etc. The selection, design, establishment, and continuity of all crop clusters were ensured under sub-component of development of ATDPs. Furthermore, Agriculture Technology Demonstration Parks (ATDPs) supported farmers in several key areas:

- Developing professional producer associations.
- Improved production capacity and input supply/management.
- Achieving economies of scale in production and exports.
- Improved market linkages and opportunities for value addition.
- Enhancing efficiency in providing technical and other support services.
- Better and more efficient technologies for production and postharvest processes.
- Capacity building through farmer business and marketing training.

Each individual member farmer of the Farmer Company (FC) received a technology package as a grant through this sub-component. Under the subcomponent of developing production and market infrastructure, specific market infrastructures for clusters/ATDPs, necessary irrigation systems, identified market access roads, and other supportive infrastructures were established. Additionally, consultancy assignments related to engineering design and establishment were carried out.

### 2.1 Project Implementation

	Cluster	Abbr.	No of farmers Target	No of Farmers	Extent (Acre)	Start Year
Jaffna	1. Chilli production	JFN-DCL	208	147	96.5	2024 Maha
	2. TJC Mango production/ chili	JFN-TJC	200	378	101	2019
	3. Potato Red onion Production Cluster	JFN-PTRO	500	500	254.5	2022
	4. Organic Small Banana Production	JFN-SBNA	500	588	289	2022
Mullaitivu	1. Ground Nut production	MUL-GNT	300	300	200	2018
	2. Passion fruit Production	MUL-PSNFT	220	220	25	2019
	3. Kolikuttu Banana/Chilli Production	MUL-KBNA	300	300	58	2023
	4. Pomegranate/Chilli Production Cluster	MUL-PMGT	150	150	35	2022
	5. Papaya/Chilli Production Cluster	MUL-PPA	400	300	100	2022
	6. Dry chili cluster	MUL-DCL	300	129	46.5	2022

Cluster Completion Report – Northern Province - ASMP

<b>Kilinochchi</b>	1. Jumbo peanut production cluster	KIL-JPN	530	530	265	2020
	2. Passionfruit production cluster	KIL-PSNFT	100	200	100	2022
	3. Chili Production cluster	KIL-DCL	300	300	115	2023
	4. Pomegranate Cluster	KIL-PMGT	150	150	29.5	2024
<b>Vavuniya</b>	1. Dried Chilli Production	VAV-DCL	247	300	150	2021
	2. Maize seed production	VAV-MZD	400	400	200	2022
	3. TJC Mango	VAV-TJC	300	200	100	2023
	4. Papaya Production	VAV-PPA	550	414	207	2020
	5. Cassava Production cluster	VAV-CSV	100	100	50	2021

## CHAPTER 03: OBJECTIVES AND METHODOLOGY

The primary objective of this assignment is to prepare Cluster Completion Reports for all 72 clusters (including total number of direct project beneficiary achievement, production and market infrastructure developments, processing and collecting centre facilities, Institutional development and individual capacity building of beneficiaries, inputs distribution under new technology packages, and Farmer Contribution) implemented in 12 project districts under five provinces (NP, CP, NCP, UP, EP) using IDA and EU funds.

### 3.1 Specific Tasks

- Establish actual status for all project interventions against Cluster development plans and project proposals
- Identify the completion status of each component covering all agriculture productivity enhancement, production, and market infrastructure development, direct project beneficiaries, institutional development and asset transferring, farmer training, and capacity building, collecting and post-harvest processing centers, inputs distribution as per the introduced new technologies etc
- Identify interventions which are yet to be completed and action plan for those activities with responsibilities
- Sustainability measures taken for each and every cluster intervention including PUC Operations
- Status of achieving (Progress) Result Framework Indicators as per the Project Appraisal Documents
- Status of handing over project activities to respective implementation agencies identified by the ASMP such as PDOA, MASL, etc

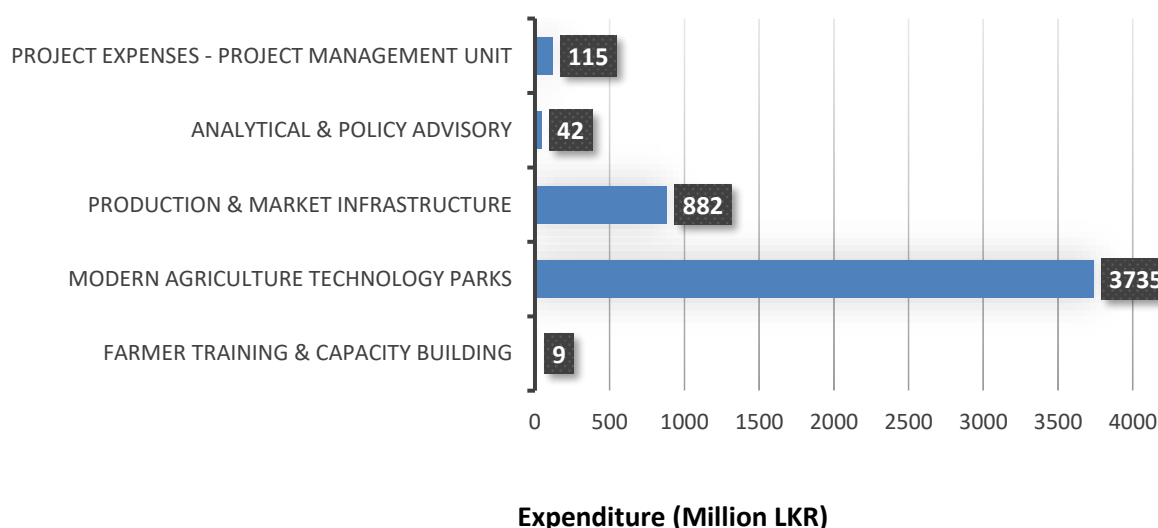
### 3.2 Methodology

All project activities funded under the Agriculture Sector Modernization Project (ASMP) are about to be completed at the end of December 2024. As a result, it is the obligation of the project to the World Bank and The European Union that an evaluation of the implementation of CDPs, establishment of PUCs, development and improvement of proposed market, processing and other infrastructure facilities and training and capacity building is needed to be done prior to completion of the project. Hence, this report would cover an evaluation of actual status of the project interventions against CDPs and initially proposed activities of the project. Specifically, the completion status of each component covering all activities related to agriculture productivity enhancement, market infrastructure development, institutional development and asset transferring, safeguards, farmer training, and capacity building, collecting and post-harvest processing centers, inputs distribution as per the introduced new technologies etc. were identified while giving emphasis on activities which are yet to be completed. It is also a fact that understanding sustainability measures adopted by PUCs would provide insights into how the PUCs will function without any issue in the future.

## CHAPTER 04: FINDINGS AT COMPLETION IN NORTHERN PROVINCE

### 4.1 OVERALL PROJECT COST

Activity	Expenditure (Million LKR)	% of Expenditure
Farmer Training & capacity Building	9.18	0.19
Modern Agriculture Technology parks	3,734.70	78.10
Production & Market infrastructure	882.05	18.44
Analytical & Policy Advisory support	41.65	0.87
Project Expenses - Project Management Unit	114.58	2.40
<b>Total Expenditure</b>	<b>4,782.16</b>	<b>100.00</b>



### 4.2 CDPs, IMPLEMENTATION AND OUTPUTS

identified to ensure comprehensive growth and sustainability. These components encompassed various aspects of the ASMP, from training and infrastructure to policy support and project management.

1. Farmer Training & capacity Building
2. Modern Agriculture Technology parks
3. Production & Market infrastructure
4. Analytical and policy Advisory Support
5. Project Management ,Monitoring and Evaluation

#### Farmer Training & Capacity Building

This component focused on enhancing the skills and knowledge of farmers through targeted training programs, awareness sessions and workshops. It included PUC training, FBS training and FPO/ technical training. Capacity building initiatives aimed to empower farmers with the latest agricultural

practices, technologies, and management techniques. This includes training on sustainable farming, crop management, pest control, and the use of modern equipment, ultimately improving productivity and profitability.

### **Modern Agriculture Technology Parks**

These parks serve as hubs for innovation and demonstration of advanced agricultural technologies. They provide farmers with access to state-of-the-art facilities and equipment, enabling them to experiment with new techniques and practices. This is the place where non-beneficiaries of the project can experience the technologies and new cultural & management practices.

### **Production & Market Infrastructure**

This component involved the development of essential infrastructure to support agricultural production and market access. It includes the construction of processing centers, storage facilities, irrigation systems, and construction & rehabilitation of some roads to facilitate agricultural activities. By enhancing production and market infrastructure, farmers are expected to improve their efficiency, reduce post-harvest losses, and gain better access to markets.

### **Analytical and Policy Advisory Support**

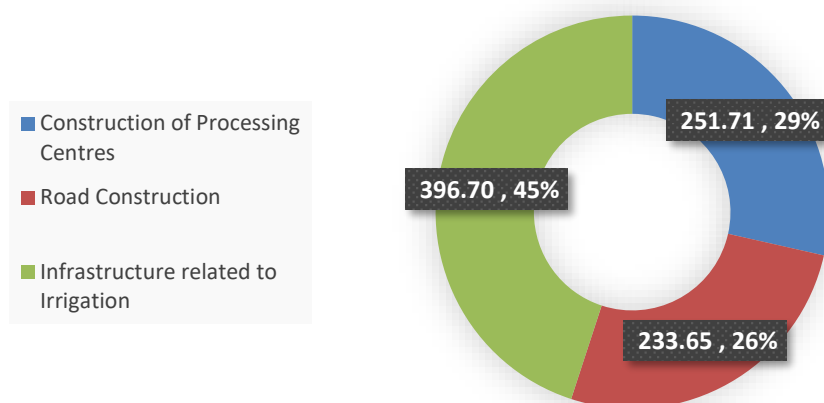
Providing analytical and policy advisory support is crucial for informed decision-making and strategic planning. This component included conducting market analysis, policy research, and impact assessments to guide the development of effective agricultural policies and programs. Advisory support ensured that interventions were data-driven and aligned with the needs of the farming community.

### **Project Management, Monitoring, and Evaluation**

Effective project management, monitoring, and evaluation are vital for the successful implementation of agricultural initiatives. This component focused on establishing robust frameworks and systems to oversee project activities, track progress, and assess outcomes. Regular monitoring and evaluation helped identify challenges, measure impact, and make necessary adjustments to achieve desired results.

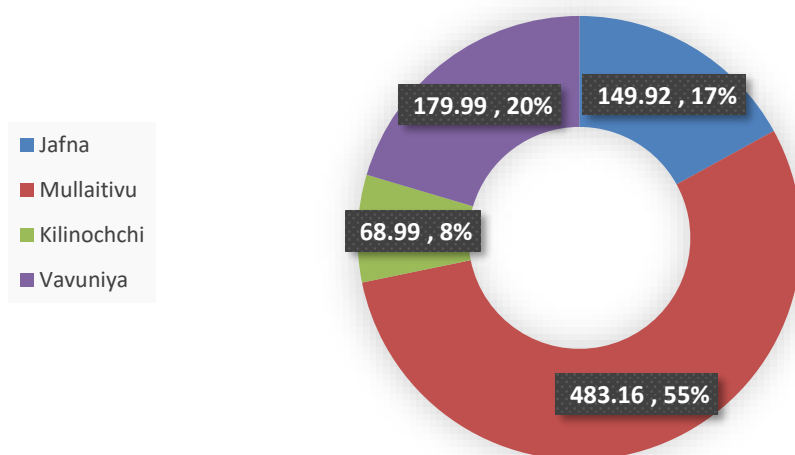
### 4.3 Production and Market Infrastructure

**Expenditure Breakdown - Infrastructure Category Wise**



The above figure shows the financial distribution and percentage allocation of investments in three major infrastructure development activities: construction of processing centers, road construction, and infrastructure development related to irrigation. Processing centers represent nearly a third (29%) of the total investment, emphasizing the importance of value addition and post-harvest processing capabilities in crop clusters. Over a quarter (26%) of the investment is allocated to improving road infrastructure, which is critical for transportation and market access for agricultural produce. Nearly half (45%) of the total funds are directed toward irrigation infrastructure, highlighting its critical role in enhancing agricultural productivity and ensuring water security. Irrigation infrastructure receives the highest allocation, which aligns with the objective of improving agricultural sustainability and addressing water management challenges. The distribution of funds reflects a balanced approach, with substantial focus on both production-related (irrigation) and market-access-related (processing centers and roads) infrastructure. Investments in processing centers and roads are essential to reduce post-harvest losses, improve supply chain efficiency, and connect rural production areas to markets.

**Expenditure Breakdown - District Wise**





The figure depicts actual expenditure on infrastructure development activities on four districts; Jaffna, Mullaitivu, Kilinochchi, and Vavuniya in northern province. Jaffna received a moderate share of the total investment expenditure. Mullaitivu received the majority share of investments, over half of the total allocation. Actual expenditure related to infrastructure development activities in Kilinochchi is the lowest while Vavuniya has received a significant amount of investment in developing infrastructure related to crop clusters. Much of the investment expenditure has been directed to Mullaitivu district where many poor people live and due to higher socio-economic needs.

## 4.3.1 Expenditure on Production and Market Infrastructure

Cluster	Construction of Processing Centers (Million LKR) (1)		Road Construction (Million LKR) (2)		Infrastructure related to Irrigation (Million LKR) (3)		Total (Million LKR)		Financial Progress as at Mid November 2024		
	Awarded Value	Actual value	Awarded Value	Actual value	Awarded Value	Actual value	Awarded Value	Actual value	(1)	(2)	(3)
JFN-DCL	2.18	-	-	-	-	-	2.18	-	-		
JFN-TJC	-	-	73.31	73.96	-	-	73.31	73.96		100.88	
JFN-PTRO	20.29	13.69	14.56	14.20	-	-	34.85	27.90	67.48	97.54	
JFN-SBNA	77.11	48.07	-	-	-	-	77.11	48.07	62.34		
MUL-GNT	34.68	28.76	126.92	119.46	258.85	219.70	420.44	367.92	82.95	94.12	84.87
MUL-KBNA	26.71	15.21	-	-	-	-	26.71	15.21	56.95		
MUL-PMGT	30.39	7.02	28.28	26.03	-	-	58.67	33.04	23.09	92.04	
MUL-PPA	35.92	18.71	-	-	48.27	48.27	84.19	66.98	52.09		100.00
KIL-JPN	82.79	34.38	-	-	-	-	82.79	34.38	41.53		
KIL-PSNFT	21.69	27.11	-	-	-	-	21.69	27.11	125.02		
KIL-PMGT	28.91	7.49	-	-	-	-	28.91	7.49	25.91		
VAV-DCL	27.88	11.59	-	-	-	-	27.88	11.59	41.59		
VAV-MZD	37.46	36.66	-	-	70.21	70.21	107.68	106.88	97.87		100.00
VAV-TJC	27.19	3.00	-	-	58.51	58.51	85.70	61.51	11.03		100.00
<b>Total</b>	<b>453.19</b>	<b>251.71</b>	<b>243.07</b>	<b>233.65</b>	<b>435.85</b>	<b>396.70</b>	<b>1,132.11</b>	<b>882.05</b>			

Many clusters, such as JFN-SBNA, MUL-KBNA, MUL-PMGT, and VAV-TJC, show significantly lower actual expenditures compared to awarded values. This indicates potential unclaimed funds by contractors. The KIL-PSNFT cluster exceeds its awarded value, indicating additional costs incurred. The financial progress for the construction of processing centers varies significantly across different clusters. While some clusters have effectively utilized their funds, others show considerable differences between awarded and actual values indicating that contractors are still to claim the funds before 31st December 2024. The financial progress for road construction projects shows varying outcomes across different clusters. While some clusters have managed their budgets efficiently, others have slightly exceeded their allocations. The total awarded value for road construction activities is LKR 243.07 million, while the actual expenditure is LKR 233.65 million. In JFN-TJC cluster, the actual expenditure (LKR 73.96M) has slightly exceeded the awarded value (LKR 73.31M) by 0.89%,

suggesting a minor budget overrun. Except for MUL-GNT, Irrigation-related infrastructure development activities have largely demonstrated that awarded values and actual expenditure is equal indicating that all the funds have been utilized properly and they are 100% complete.

#### 4.3.2 Status of Completion of production and Market Infrastructure

	Type of Infrastructure	Completed and Functioning	Expected to be completed by 31 <sup>st</sup> December 2024
Processing Centers	Building rehabilitation and renovation	VAV-MZD VAV-DCL JFN-PTRO	VAV-TJC JFN-SBNA MUL-KBNA MUL-PPA
	New building construction	MUL-GNT JFN-DCL VAV-MZD KIL-PSNFT	KIL-DCL KIL-JPN KIL-PMGT MUL-PMGT MUL-GNT MUL-DCL
Roads	Rehabilitation of roads	JFN-TJC JFN-PTRO MUL-DCL MUL-GNT MUL-PMGT	
	Reconstruction of roads	MUL-GNT	
	New construction of roads	MUL-GNT	
Irrigation	Reconstruction of irrigation Canal	MUL-GNT	
	Rehabilitation of irrigation pumps	MUL-GNT	MUL-GNT MUL-DCL
	Construction of irrigation channels	MUL-GNT MUL-DCL	

## Cluster Completion Report – Northern Province - ASMP

	Pump house construction	JFN-DCL	
	Pump house repair	MUL-GNT	
	Pipe laying	MUL-GNT	

Significant progress has been made in processing centers and irrigation infrastructure, with several clusters already operational and others nearing completion by the end of 2024. Building rehabilitation and renovation is still being continued in clusters such as VAV-TJC, JFN-SBNA, MUL-KBNA & MUL-PPA and they are expected to be completed on or before 31<sup>st</sup> December 2024. New buildings in improving processing infrastructure are under construction in KIL-DCL, KIL-JPN, KIL-PMGT, MUL-PMGT, MUL-GNT & MUL-DCL clusters. They are also to be completed by 31<sup>st</sup> December 2024. Some irrigation pumps are being rehabilitated in MUL-GNT and MUL-DCL and they are expected to well function soon.

#### 4.4 ATDP Development

	Cluster	Abbreviation	ATDP Investment (Million LKR)
Jaffna	Off season Green Chili Production	JFN-DCL	130.54
	TJC Mango Production / Chili	JFN-TJC	397.84
	Potato Red Onion Production	JFN-PTRO	353.14
	Organic Small Banana Production	JFN-SBNA	120.26
Mullaitivu	Ground Nut Production	MUL-GNT	145.95
	Passion Fruit Production	MUL-PSNFT	88.70
	Kolikuttu Banana / Chili Production	MUL-KBNA	77.20
	Pomegranate / Chili Production	MUL-PMGT	199.67
	Papaya / Chili Production	MUL-PPA	65.04
	Dry Chili	MUL-DCL	56.35
Killinochchi	Jumbo Peanut Production	KIL-JPN	195.88
	Passion Fruit Production	KIL-PSNFT	228.84
	Dry Chili Production	KIL-DCL	328.14
	Pomegranate Production	KIL-PMGT	54.27
Vavuniya	Dry Chili Production	VAV-DCL	292.52
	Maize seed Production	VAV-MZD	173.59
	TJC Mango	VAV-TJC	253.28
	Papaya Production	VAV-PPA	479.04
	Cassava Production	VAV-CSV	94.46
<b>Grand Total</b>			<b>3,734.70</b>

This table provides an analysis of the Agricultural Technology Development Park (ATDP) investments across various production clusters in the districts of Jaffna, Mullaitivu, Killinochchi, and Vavuniya. The data includes the allocation of funds in Million LKR for each cluster, with a total investment summary for each district and an overall grand total. The overall ATDP investment across all clusters in the districts of Jaffna, Mullaitivu, Killinochchi, and Vavuniya amounts

to 3,734.70 Million LKR. The TJC Mango Production / Chili cluster has received the highest investment (397.84 Million LKR), indicating a strong focus on enhancing mango and chili production in Jafna district. Other significant investments include Potato Red Onion Production (353.14 Million LKR) and Off season Green Chili Production (130.54 Million LKR). The largest investments in Mullaitivu are directed towards Pomegranate / Chili Production (199.67 Million LKR) and Ground Nut Production (145.95 Million LKR). The Dry Chili Production cluster in Kilinochchi leads with an investment of 328.14 Million LKR, showcasing a strong emphasis on chili production. Passion Fruit Production (228.84 Million LKR) and Jumbo Peanut Production (195.88 Million LKR) are also significant. The largest investment in Vavuniya district is directed towards Papaya Production (479.04 Million LKR), reflecting a strategic focus on this high-value crop. Other notable investments include Dry Chili Production (292.52 Million LKR) and TJC Mango (253.28 Million LKR). The emphasis on high-value crops such as mango, chili, and papaya is a notable feature in these districts.

#### 4.4.1 Production Data of ATDPs

Cluster	Expected Yield (Mt/Ac/Yr)	Actual Yield (Mt/Ac/Yr)	COP (Rs/kg)	Price (Rs/kg)	Existence of an agreement with a buyer	Buyers	Marketing channel	Remarks
JFN-DCL	32	32	100-150 (green chili)	100-1000 (green chili)	N/A	N/A	Middle men and local market	Green chili is mainly produced
JFN-TJC	50	14.7	50-140	300-500	Draft prepared	Jaffna Horticulture (pvt) Ltd	Sold a portion to predetermined buyer for export purposes	
JFN-PTRO	25.8	59	56-90	300	No	Local market	Middle men and local market	
JFN-SBNA	20	12	30-60	80-150	No	Dole Lanka Ceylonese Trader Import and Export (pvt) Ltd	Middle men and local market Predetermined buyer for export purpose	
MUL-GNT	1.1	0.9	430	400-700	Yes	David Gram and Amal Gram	80% of the production is marketed through PUC	Buyer Agreement expired

## Cluster Completion Report – Northern Province - ASMP

MUL-PSNFT	32	9	60	250	Draft prepared	Great Frozen pvt Ltd	Middle men and local market	
MUL-KBNA	20	18	70	250	No	Not Available	Middle men and local market	
MUL-PMGT	18	Not harvested	Not harvested	Not harvested	No	Not Available	Not harvested	Not harvested
MUL-PPA	45	24	35	20-120	Draft prepared	CR Exports		
MUL-DCL	15	15	62	70-600	No	Local market	Middle men and local market	Only green chili is produced
KIL-JPN	8	0.9	450	750	Yes	C.W. Mackie PLC	Through PUC	
KIL-PSNFT	6	8	292	450	Yes	Great Frozen pvt Ltd	Through PUC	
KIL-DCL	32	9	44	250	No	Local market	Middle men and local market	Only green chili is produced. Farmers are waiting for the dryer to construct
KIL-PMGT	18	Not harvested	Not harvested	Not harvested	No	Local market	Not harvested	Not harvested
VAV-DCL	15	8	151 (Green Chili) 660 (Dry Chili)	100-1000	Yes	Cargills	Through PUC, Middle men and local market	Agreement in-process
VAV-MZD	0.4	0.21	1025	1400	Yes	CIC	DOA, Middle men and local market	
VAV-TJC	50	Not harvested	Not harvested	Not harvested	No		Not harvested	

VAV-PPA	45	Just started harvesting	24.77	40	No	CR Exports, Serendib Global, Cargills	Middle men and super market channel (these super markets expected to export the product)	1st harvest started Oct 2024 (EU)
VAV-CSV	73	11	15	50			Middle men and local market	

The table provides an overview of agricultural clusters, their expected and actual yields, costs of production (COP), prices, marketing channels, and buyer agreements. The observations highlight significant variations in production efficiency, market engagement, and profitability.

Most clusters show a significant gap between expected and actual yields, indicating challenges in achieving optimal production. Clusters like JFN-PTRO surpassed expected yields (59 Mt/Ac/Yr vs. 25.8 Mt/Ac/Yr), while JFN-TJC and MUL-PSNFT exhibit much lower actual yields (14.7 and 9 Mt/Ac/Yr respectively). Several clusters (JFN-TJC, MUL-PPA, VAV-DCL) have drafted buyer agreements, showing potential for structured market access. Others like MUL-GNT, KIL-JPN, and VAV-MZD have active agreements, enhancing market security. However, MUL-GNT's agreement expired, posing risks to its marketing stability.

Predominantly, middlemen and local markets dominate the marketing channels. Clusters like KIL-JPN and VAV-DCL market their products through PUCs. Export-oriented clusters, such as JFN-TJC and VAV-PPA, emphasize partnerships with buyers like Jaffna Horticulture and CR Exports for international markets. Chili clusters appear as a prominent crop for clusters like JFN-DCL, MUL-DCL, and KIL-DCL, yet they rely heavily on middlemen due to limited buyer agreements. Several clusters (MUL-PMGT, KIL-PMGT, and VAV-TJC) reported no harvests as they are in the vegetative stage. It is highly recommended to prioritize formalizing draft agreements and renewing expired ones to secure market access and stabilize income and leverage existing partnerships (e.g., CR Exports, Serendib Global) to enhance export potential. It is highly encourage the formation of cooperative marketing structures or partnerships with supermarkets/exporters to reduce dependence on middlemen.



#### 4.4.2 Exported Volumes of ATDPs

Cluster	Product	Exporters	Purchase Volume (kg)	Purchased price (Rs/Kg)	Export destination	# of shipments	Export Income US\$/year
JFN-SBNA	Ambul Banana	Anbujan	110.00	250.00	Switzerland	1	968.00
		Dole Lanka	1600.00	130.00	Dubai	1	14,080.00
		Fresh field Lanka	687.50	180.00	Dubai	1	6,050.00
JFN-TJC	TJC Mango	Jaffna horticulture	4856.00	450-500.00			24,280.00
VAV-PPA	Papaya	Serandip Global pvt	73.00*	80.00			365.00
		Cargills	3727.00*	45.00			18,635.00
		Nisal Vegetable Lanka	15111.00*	25.00			75,555.00
		CR Export	5152.00*	58.00			25,760.00

\*Exported by the company once purchased without an agreement

The table includes details on exporters, purchase volumes, purchased prices, export destinations, number of shipments, and annual export income. The major exporters of Ambul Banana include Anbujan, Dole Lanka, and Fresh Field Lanka, with significant volumes shipped to Switzerland and Dubai. Dole Lanka has the highest purchase volume at 1600 kg, reflecting a strong export presence in Dubai. Jaffna Horticulture is the sole exporter of TJC Mango, with a substantial purchase volume of 4856 kg and a variable purchased price range of 450-500 Rs/Kg, indicating a strong export potential. Multiple exporters are involved in papaya exports, with Nisal Vegetable Lanka leading in purchase volume at 15111 kg. The purchased prices vary, with the highest at 80 Rs/Kg by Serandip Global Pvt and the lowest at 25 Rs/Kg by Nisal Vegetable Lanka. This suggests a diverse market for papaya exports. The focus on key products like Ambul Banana, TJC Mango, and Papaya underscores the potential for growth in these sectors. Strengthening export agreements and exploring new markets could further enhance the profitability and sustainability of these agricultural clusters.

## 4.5 Status of PUC Establishment

Abbr.	Name of PUC	Registered Date	Number of farmers	Number of Shareholders	% of farmer shareholders	Share Capital Raised	Income of the PUC (Rs.) - as at 15 Nov 2024	Remarks
JFN-DCL	Yarl Agro Products Limited	N/A	166	N/A	N/A	N/A	N/A	PUC not registered
JFN-TJC	Jaffna Mango Queen Farmers Ltd	2023.03.21	402	54	13%	4,020,000.00	391,177.00	
JFN-PTRO	Ceylon Smart Potato Farmers Company Limited	2022.03.15	509	271	53%	25,450,000.00	Not available	
JFN-SBNA	Jaffna Organics Farmers Company Ltd	2023.03.15	588	296	50%	2,940,000.00	763,708.00	
MUL-GNT	Mullai Agribusiness Ltd	2023.02.01	550	368	67%	1,840,000.00	44,703,763.00	
MUL-PSNFT	Marutham Smart Agro Limited	2023.02.01	220	163	74%	815,000.00	3,200,000.00	
MUL-KBNA	Vanni Fresh Fruit Farmers Company Ltd	2022.12.27	300	97	32%	600,000.00	437,500.00	
MUL-PMGT	Lankan red gems farmers company	2023.05.18	150	25	17%	250,000.00	375,000.00	
MUL-PPA	Golden Papaya Farmers Ltd	2023.07.17	350	220	63%	2,200,000.00	56,000.00	
MUL-DCL	Mullativu - Dry Chili	N/A	93					Merged with MUL-GNT
KIL-JPN	2K Agro Products Limited	2023.11.15	530	258	49%	1,350,000.00	12,005,215.18	
KIL-PSNFT	Mak Agro Products Limited	2023.12.10	200	125	63%	620,000.00	1,124,687.50	
KIL-DCL	Thayagam Agro Limited	2023.11.27	300	296	100%	1,485,000.00	8,068,079.00	
KIL-PMGT	Red angel agro limited	2024.03.14	150	78	52%	445,500.00	161,932.00	

## Cluster Completion Report – Northern Province - ASMP

VAV-DCL	Living Agro Producers Limited	2023.12.23	300	186	62%	1,580,000.00	2,204,950.00	
VAV-MZD	Ensured Seeds Economical Development Ltd	2023.10.26	400	330	83%	1,575,000.00	1,105,000.00	
VAV-TJC	Shakthi Agro Producers Limited	2023.11.23	200	173	87%	750,000.00	3,430,661.00	
VAV-PPA	Pasumai Agro Products Limited	2023.02.01	414	383	93%	2,774,461.27	10,365,329.00	
VAV-CSV	Vavuniya – Cassava	N/A	100			-		Planning to merge with VAV-PPA

Most PUCs have been registered in 2022–2024 while some PUCs, such as JFN-DCL and VAV-CSV, remain unregistered. Shareholder representation as a percentage of total farmers varies, with some PUCs like KIL-DCL achieving 100% participation, while others, like JFN-TJC and MUL-PMGT, remain below 20%. There is significant variation in share capital raised, with JFN-PTRO leading at Rs. 25,450,000.00, while PUCs like MUL-PMGT raised only Rs. 250,000.00. The income of PUCs varies dramatically, with MUL-GNT generating the highest revenue (Rs. 44,703,763.00) and others, such as MUL-PPA and MUL-KBNA, reporting modest incomes. 93% of farmers of VAV-PPA cluster, 87% of farmers of VAV-TJC cluster, and 83% farmers of VAV-MZD have obtained shares. JFN-PTRO cluster leads in capital raised, demonstrating strong farmer engagement in buying shares. PUCs like MUL-PMGT and MUL-KBNA have relatively low share capital. MUL-GNT cluster (Rs. 44,703,763.00) and VAV-PPA cluster (Rs. 10,365,329.00) show strong financial performance. PUCs like KIL-JPN and KIL-DCL are also demonstrating promising results. Clusters like MUL-PMGT and MUL-KBNA exhibit low incomes relative to their potential. PUCs such as KIL-PSNFT, KIL-DCL, and VAV-TJC have started to generate income, but long-term sustainability will depend on securing markets and increasing farmer participation. Some clusters like MUL-PPA and MUL-KBNA should focus on developing marketing strategies and securing buyer agreements as their generated income is low.

## 4.6 Training and Capacity Building of Beneficiaries

Cluster	GAP		FPO/ Technical Training		PUC training		FBS Training*		
	# of Trainings	# of Beneficiaries	# of Trainings	# of Beneficiaries	# of Trainings	# of Beneficiaries	# of sessions	# of Beneficiaries	% of participation
JFN-DCL							nil		
JFN-TJC			3	65	1	18	36	154	56%
JFN-PTRO			1				132	500	64%
JFN-SBNA			3	51			93	500	49%
MUL-GNT					4	126	nil		
MUL-PSNFT			1	23	2	49	nil		
MUL-KBNA	1	34	2	54	2	41	48	260	56%
MUL-PMGT			2	38	2	31	36	150	50%
MUL-PPA	1	28	2	52	2	46	60	200	83%
MUL-DCL					Conducted with MUL-GNT		nil		
KIL-JPN			15	530			81	530	34%
KIL-PSNFT			10	200			50	200	49%
KIL-DCL			10	140			37	210	35%
KIL-PMGT			10	100			19	72	52%
VAV-DCL							68	300	55%
VAV-MZD			4		4	46	57	300	40%
VAV-TJC			5	534	6	172	36	158	80%
VAV-PPA	3		3	111			30	259	26%
VAV-CSV			4	185			nil		

Training programs like GAP (Good Agricultural Practices), FPO/Technical, PUC, and FBS have been conducted across several clusters, but participation rates vary significantly. Some clusters, such as JFN-DCL, have no recorded training activities. Limited GAP training has been conducted, with only a few clusters participating (MUL-KBNA, MUL-PPA, and VAV-PPA). The number of beneficiaries per training was relatively low, ranging from 28 to 34 participants. Clusters like JFN-TJC, JFN-SBNA, and KIL-JPN showed higher participation in FPO/Technical training, with KIL-JPN conducting 15 sessions benefitting 530 individuals. Other clusters such as JFN-PTRO, VAV-MZD, and VAV-CSV had limited or no FPO/Technical sessions. Participation in PUC training is inconsistent, with clusters such as JFN-PTRO, MUL-DCL, and KIL-PMGT not reporting any sessions. Clusters like VAV-TJC and VAV-PPA demonstrated higher participation, with 534 and 111 beneficiaries, respectively. FBS training had relatively broad coverage, with notable participation in clusters such as MUL-KBNA (260 beneficiaries) and JFN-PTRO (500 beneficiaries). Participation rates varied significantly, with clusters like MUL-PPA achieving 83%, while others, such as VAV-PPA and KIL-PMGT, had low rates (26% and 35%, respectively). No training programs were conducted in JFN-DCL. Farmers in JFN-TJC cluster have participated in all types of training, achieving moderate participation in FBS training (56%). Four PUC training sessions have been conducted in MUL-GNT cluster benefitting 126 participants but lacked participation in other training types.

#### 4.7 Sustainability Initiatives

Installation of rooftop solar PV system	Vavuniya - Chili	15 kW Solar PV system - installed & connected with nation grid
	Vavuniya - Hybrid Maize Seed	
	Vavuniya - Mango	10 kW Solar PV system - pending installation
	Kilinochchi - Passion Fruit	7 kW Solar PV system - installed & connected with nation grid
	Kilinochchi - Chili & JPN	15 kW Solar PV system - pending installation
	Jaffna - Potato	15 kW Solar PV system - installed & connected with nation grid
Harnessing solar thermal energy - Solar tunnel dryer	Vavuniya - Hybrid Maize Seed	15 tons maize cobs drying solar tunnel dryer - completed & functioning.
Compost making	Vavuniya - Chili	Machineries were provided.
	Vavuniya - Hybrid Maize Seed	
	Kilinochchi - JPN	
	Mullaitivu - Papaya	
	Jaffna - Potato & Onion	
	Jaffna - Mango & Banana	
Cold Rooms	Kilinochchi - JPN	15 tons cold storing capacity was provided.

The installation of solar PV systems, solar thermal energy systems, and the provision of compost-making machinery and cold storage solutions will significantly contribute to improving the sustainability and productivity of agricultural activities in various regions. The ongoing and pending installations will further strengthen the capacity of local farmers to use renewable energy and enhance farm operations.

## CHAPTER 05: CONCLUDING REMARKS

- Over 60% of financial progress has been achieved across four clusters (JFN-PTRO, MUL-GNT, KIL-PSNFT, VAV-MZD) for the construction of processing centers in the Northern Province.
- The financial progress regarding road construction is commendable, exceeding 90%.
- The financial progress in constructing irrigation infrastructure exceeds 80%.
- Most of the infrastructure projects in Mullaitivu have been completed and are now fully operational.
- Delays have been observed in the renovation, rehabilitation, and construction of new buildings.
- However, rate of completion of infrastructure development is satisfactory
- With the exception of a few clusters, all others are performing satisfactorily. Most of their produce is sold through middlemen. Many PUCs have struggled to establish satisfactory linkages with buyers or reputable companies. Only a few companies purchase their products for export purposes without an agreement.
- Almost all the PUCs have completed their registration. Members have purchased shares, with ownership ranging from 16% to 100%.
- Participation of beneficiaries in training programs is not satisfactory in many clusters.
- Implementing sustainable agricultural practices involves several key strategies. Firstly, minimizing the usage of agrochemicals such as weedicides, pesticides, and insecticides helps protect the environment and ensure healthier crops. With the given technology and training, farmers have adopted these sustainable initiatives. Achieving high productivity per acre while avoiding excess fertilizer usage not only maintains soil health but also reduces the risk of pollution. Consequently, farmers have been made aware of the necessity to test their soil for nutrient availability, ensuring that only the required amount of fertilizer is applied. Efficient water management practices are essential, ensuring minimal water waste. This has been achieved through the provision of new irrigation technologies such as drip and sprinkler systems. Promoting composting and its application enriches the soil naturally, enhancing its fertility. Farmers have been encouraged to apply compost as needed to their farmland. Integrated Pest Management (IPM) techniques have been utilized extensively to control pests in an eco-friendly manner. Solar was also harnessed to provide a renewable and clean power source, further supporting the sustainability of agricultural operations. These combined efforts contribute to a more sustainable and productive farming system in ASMP.
- Overall, In conclusion, the allocation of funds for infrastructure development across the districts of Mullaitivu, Kilinochchi, and Vavuniya demonstrates a strategic focus on enhancing agricultural productivity, market access, and water management. Irrigation infrastructure, accounting for 45% of the total investment, highlights its critical role in ensuring sustainable agriculture and addressing water security challenges. Processing centers, representing 29% of the allocation, emphasize the importance of value addition and post-harvest processing capabilities, while road infrastructure (26%) plays a key role in improving transportation and market connectivity. The majority of investments have been directed toward Mullaitivu, reflecting the district's higher socio-economic needs and its potential for agricultural development. Vavuniya has also received substantial investment, while Kilinochchi's relatively lower expenditure. Financial progress varies significantly across clusters. While many clusters

have efficiently utilized their funds, others display discrepancies between awarded and actual expenditures. This indicates delays in contractor claims, with pending funds expected to be settled by December 31, 2024. Significant advancements have been made in processing centers and irrigation infrastructure, with several clusters already operational and others nearing completion. The rehabilitation of irrigation pumps and new building constructions in various clusters are on track to enhance functionality and capacity. The emphasis on high-value crops such as mango, chili, and papaya across these four districts or north province underscores a targeted approach to enhance agricultural productivity and market readiness. The significant investments in these clusters aim to boost yields, improve quality, and ensure sustainable farming practices. Middlemen and local markets predominantly dominate the marketing channels. Export-oriented clusters emphasize partnerships with buyers like Jaffna Horticulture and CR Exports for international markets. It is highly recommended to prioritize formalizing draft agreements and renewing expired ones to secure market access and stabilize income. Leveraging existing partnerships (e.g., CR Exports, Serendib Global) can enhance export potential. Strengthening export agreements and exploring new markets will enhance the profitability and sustainability of these agricultural clusters. Most PUCs have been registered. Shareholder representation varies widely from below 20% to 100%. Participation rates in training programs vary significantly. It is highly recommended to prioritize formalizing draft agreements and renewing expired ones to secure market access and stabilize income.



## Annex 1: Infrastructure Details

Province	District	Cluster	Type of Infrastructure	Direct Beneficiaries	Location	Proposed		Actual		Construction Stage	Estimated Value (with Tax)	Awarded Value (with Tax)	Actual Value (with Tax)	Deviations	Remarks
						Start Date	Completion Date	Start date	Completion Date						
NP	Vavuniya	Dry Chili	<b>Processing centre</b> - Building renovation (Agrarian Service Department)	300	Palamoddai	18-Sep-23	18-Jan-24	18-Sep-23	13-Jun-24	Completed	31,395,000.00	27,878,061.78	11,594,942.13	Fixing Aluminum sheet, Fixing steel truss and Aluminium grill work	15 kW rooftop Solar PV system - installed & connected with national grid
		Hybrid Maize Seed	<b>Processing centre</b> - Building renovation (Agrarian Service Department)	400	Nelukkulam	18-Sep-23	18-Dec-23	18-Sep-23	06-Aug-24	Completed	21,919,000	20,628,312.62	18,861,490.06	Special upper class timber, installing ceiling system, Ladder using boxbar, Electrical work, Fencing work and Floor concrete	15 kW rooftop Solar PV system - installed & connected with national grid
			<b>Processing Centre</b> - Construction of Polytunnel Dryer	400	Nelukkulam	11-Sep-23	11-Dec-23	11-Sep-23	16-Jan-24	Completed	21,045,000	16,832,406.25	17,802,893.77	Supply and Installation of Powder coated Aluminium Racks and polycarbonate wall	
			<b>Irrigation</b> - Solar Irrigation establishments - 48 nos	148	Entire cluster area	07-Nov-23		07-Nov-23	01-Nov-24	Functioning		70,214,400.00	70,214,400.00	No deviations	
		TJC Mango	<b>Processing centre</b> - Building renovation (Mahaweli Authority)	300	Welioya	22-Jul-24	19-Nov-24	03-Sep-24	30-Dec-24	On going	32,096,000	27,187,677.12	3,000,000		

		<b>Irrigation</b> - Solar Irrigation establishments - 40 nos	125	Welioya	07-Nov-23		07-Nov-23	30-Nov-24	On - going		58,512,000.00	58,512,000		
Kilinochchi	24	<b>Processing centre</b> - Building construction.	600	Kandavalai	25-Jun-24	27-Dec-24	25-Jun-24	27-Dec-24	On going	81,420,000	57,507,029.57	24,050,973.84	Casting 125mm concrete Block, Block masonry work	21% financial Progression
	JPN	<b>Processing centre</b> - Building construction.	230	Karachchi	22-Jan-24	21-May-24	11-Mar-24	30-Dec-24	On going	34,338,000	25,285,758.99	10,333,424.91	Plastering, Carpentry, Painting, Doors, Windows, Plumbing, Drainage, Electrical, Partitioning	41% financial progression
	Pomegranate	Common Processing centre (Pomegranate & Jaffna district dry chili) - New Building construction.	150	Pachchilaipalli	22-Jul-24	19-Nov-24	14-Aug-24	31-Dec-24	On going	34,456,000	28,910,000.00	7,490,117.48	Barbed wire fence, Steel sheet fixing to fence, Site office for Engineer, Cutting trees & 125 mm Concrete block work	Common Processing Centre with Chili cluster - Jaffna. 26% financial progress
	Passion Fruit	Processing centre - New Building construction.	200	Akkarayankulam					Completed		21,689,000.00	27,114,564.14		5 kW rooftop Solar PV sysetm - installed & connect ed with national grid
Jaffna	Mango	<b>Road</b> - Rehabilitation of Padithamakalir Road (1.5 km) at Mirusuvil North in Jaffna District	53	Mirusuvil North	27-Dec-23	25-Apr-24	27-Dec-23	17-May-24	Functioning	30,705,000	21,528,000.00	19,942,308.71		

		Road - Rehabilitation of Vidaththalpalai kilali Connecting Road	102	Vidaththalpalai	04-Oct-18	04-Apr-19	04-Oct-18	28-Feb-20	Functioning	23,000,000	19,550,000.00	19,424,327.97	Additional length was constructed.	
		Road - Rehabilitation of Field Access Road at Ketpely Jaffna	102	Ketpely	24-May-19	25-Nov-19	21-May-19	25-Nov-19	Completed	32,621,400	32,235,572.55	34,590,113.67		
	Banana	Processing Centre - Renovation of Banana Collection and Processing Centre	588		20-Sep-23	18-Jan-24	20-Sep-23	30-Nov-24	On-going	106,030,000	77,109,916.02	48,071,506.57		45% financial progression
	Chili	Construction of 4 nos Protected Net Houses in Jaffna District	4		19-Jul-19	18-Oct-19	14-Nov-19	03-Sep-20	Completed	1,775,520	2,180,000.00			
	Potato & Onion	Processing Centre - Renovation of Potato & Onion Collection and Processing Centre in Jaffna District	562		04-Dec-23	03-Mar-24	04-Dec-23	27-Jun-24	Completed	22,310,000	20,288,218.01	13,690,952.42	Plastering of External wall and column, Demolition of boundary wall, Construction of boundary wall and Sill beam construction	67% financial Progress . 15 kW rooftop Solar PV system - installed & connected with national grid
		Road - Rehabilitation of Mylankadu east Ghanaviravar Veethy - 220 m	38	Mylankadu east	27-Nov-23	19-Feb-24	27-Nov-23	06-Feb-24	Completed	2,980,800	3,395,880.00	3,473,322.68		
	Potato	Road - Rehabilitation of Nawatgiri GN Division with an ABC paved carriage way in Potato Cluster	54	Kathirana	23-Aug-23	22-Dec-23	23-Aug-23	16-Dec-23	Completed	15,295,000	11,166,666.06	10,731,364.68	Existing palmyrah trees remove with uprooting, Rock excavation	96% financial Progress
	Mullaitivu	Processing Centre - Rehabilitation of Existing Building	160		22-Jan-24	21-May-24	22-Jan-24	30-Nov-24	On-going		26,705,055.36	15,209,821.10	Rubble works and Tube well construction	Original location was changed

		as the Cluster Processing Centre of Kolikuttu Banana											on, building renovation , roof sheets, Fencing	
	Papaya	<b>Processing Centre -</b> Rehabilitation of Existing Building at Palampasi as the Cluster Processing Centre of Papaya	950	Palampaasi	05-Apr-24	05-Sep-24	05-Apr-24	30-Nov-24	Completed	33,748,000	35,922,288.89	18,711,470.23	Demolition work, Boundary wall, Electrical repairing, Al Door and window work, Machinery moving and Skirting removal	Common Processing Centre with Papaya cluster - Vavuniya
		<b>Irrigation -</b> Solar Irrigation establishments - 33 nos	102	Vavuniya (31 nos.) & Mullaitivu (2 nos.)	07-Nov-23		07-Nov-23	30-Nov-24	On - going		48,272,400.00	48,272,400.00		
	Chili	<b>Irrigation Channel -</b> Supplying and pipe laying at Poovarassankulam, Vavunikulam in mullativu District		Poovarassankulam, Vavunikulam	02-Mar-19	02-Sep-19	02-Mar-19	03-Oct-19	Completed	40,984,704	36,713,759.22	34,034,406.36		
		<b>Irrigation - Pump House -</b> Construction of Pump house and instllation of 2 Nos Pump at Poovarasankulam		Poovarassankulam	21-Feb-19	21-Aug-19	21-Feb-19	23-Oct-20	Functioning	13,500,000	12,435,444.89	13,609,747.49		
		<b>Roads -</b> Rehabilitation of Field Access - LB bund Road-15km, Vavunikulam		Vavunikulam	21-Feb-19	21-Aug-19	21-Feb-19	25-Sep-20	Functioning	16,524,000	15,755,896.59	15,674,133.36		
	Pomegranate	<b>Processing Centre -</b> Construction of Pomegranate Processing	150	Kokilai	01-Apr-24	31-Jul-24	18-Apr-24	30-Dec-24	On - going	31,270,000	30,388,667.90	7,017,401.83	Block casting and block masonrywork	23% financial progress

			Centre at Kokilai in Mullaitivu District - Renovation											
			Road - Rehabilitation of Kumulamunai Telecom Road in Mullaitivu District	150	Kumulamunai	30-Oct-23	27-Feb-24	30-Oct-23	27-May-24	Functioning	29,500,000	28,276,471.63	26,025,958.45	92% financial progress
		Ground Nut	Processing Centre - Construction of Ground Nut Processing Centre Oddusudan at Muththvinayagapuram in Mullaitivu	550	Muththvinayagapuram	24-May-19	23-Nov-19		18-Feb-21	Functioning	14,688,000	14,040,000.00	14,903,750.48	
		Ground Nut & Chili	Irrigation Canal - Reconstruction of Concrete Canal lining (1km) and Canal Structures at RB/Track 3/DC2/FC13-Katchilaimadu in Muthiyankaddu Division in Mullaitivu District		Katchilaimadu	24-May-19	23-Nov-19		20-Nov-20	Functioning	12,960,000	11,822,240.24	7,676,511.92	
			Irrigation Canal - Supplying & Laying of PVC pipes and Construction of pipe lining structures at LB Canal - ID farm lift Irrigation in Muthiyankaddu Division		LB Canal - ID farm	21-Aug-19	21-Jan-19	27-Aug-18	26-Aug-19	Functioning	9,742,541.76	9,742,541.76	9,742,386.14	
			Irrigation Canal - Rehabilitation of Concrete canal lining and canal structures at RB track-3 DC-2 Katchilaimadu, Muthiyankaddu, Mullaitivu District		Katchilaimadu	24-May-19	25-Nov-19	18-Nov-19		Functioning	30,240,000	30,648,555.59	27,301,728.39	

			<b>Irrigation Canal</b> - Construction of canal lining & Canal structures 2.5km at LB Canal, Mannakandal in Muthiyankaddu, Mullaitivu District		Mannakandal	21-Feb-19	21-Aug-19	18-Nov-19		Functioning	13,495,680	12,777,123.60	11,445,053.28		
			<b>Irrigation Canal</b> - Reconstruction of Concrete canal lining at RB Canal Peraru in Muthiyankaddu Division in Mullaitivu District		RB Canal Peraru	04-Oct-18	04-Apr-19	18-Nov-19	21-May-20	Functioning	21,949,920	20,845,680.35	19,929,765.19		
			<b>Irrigation Canal</b> - Reconstruction of concrete canal lining 1.5km and canal structures at RB/track 3/DC1-Katsilaimadu in Muthiyankaddu		Katsilaimadu	24-May-19	23-Nov-19	18-Nov-19	18-Sep-20	Functioning	17,280,000	16,912,795.96	17,976,508.19	Extension of rehabilitation of road length up to 1.3km instead of 300m	
			<b>Irrigation - Pumphouse</b> - Repairing of 2Nos of Pump houses and Supplying & fixing of Pump, one at RB Canal - Pump 8 Ganeshapuram Muthiyankaddu other one at LB Canal-ID Farm in Muthiyankaddu		Ganeshapuram	21-Aug-18	21-Jan-19	27-Aug-18	30-Apr-19	Functioning	8,642,795.04	8,642,795.04	7,971,662.17		
			<b>Irrigation Pumps</b> - Rehabilitation of lift irrigation pumps in (Pump No 4&5)							On - going		48,553,290.00	33,267,740.30		
			<b>Irrigation Pumps</b> - Rehabilitation of lift irrigation pumps in (Pump No 6&7)							On - going		49,757,948.10	36,740,787.30		

		Road - Reconstruction Canal Over Crossing cum Bridge at RB/Track 3 Muthiyankaddu Division in Mullaitivu Distric		Muthiyankaddu	04-Oct-18	04-Apr-19		25-May-20	Functioning	10,973,880	10,072,282.72	9,941,083.37		
		Road - Reconstruction Canal road 0.5km and Road structures at RB/Track 3 Muthiyankaddu Division in Mullaitivu District		Muthiyankaddu	04-Oct-18	04-Apr-19		31-May-20	Functioning	11,518,576	11,430,897.08	11,965,288.72		
		Road - Rehabilitation of canal road and road structures 1.5km at LB Canal-ID farm, Muthiyankaddu in Mullaitivu Distric		LB Canal-ID farm	02-Jan-19	02-Jul-19		28-Jan-20	Functioning	17,815,680	16,149,472.25	13,597,238.08		
		Road - Rehabilitation of canal road & road structures 2km RB canal - Pump 8, Ganeshapuram Muthiyankaddu Division, Mullaitivu		Ganeshapuram	21-Feb-19	02-Jul-19	18-Nov-19	28-Sep-19	Functioning	17,815,680	17,394,130.75	17,483,294.54		
		Road - Construction of canal road 1.5km & Road structures at LB/Track 1 in Muthiyankaddu Division, Mullaitivu District		LB/Track 1	02-Jan-19	02-Jul-19	18-Nov-19	18-Sep-20	Functioning	17,815,680.00	17,173,167.48	13,789,624.10		
		Road - Rehabilitation of concrete canal road 2.5km & Road Structures		RB Canal Peraru	28-Jan-19	28-Jul-19	18-Nov-19	27-May-20	Functioning	29,695,680	29,803,037.40	27,872,220.95		Narration was corrected

			at RB Canal - Peraru											
			<b>Road -</b> Rehabilitation of concrete canal road & road structures 1.5km at RB Canal - Pump 8 - Ganesapuram Muttaiyankaddu		Ganeshapuram	21-Aug-18	21-Jan-19	27-Aug-18	30-Apr-19	Functioning	8,780,384.02	9,136,632.00	9,135,970.79	
			<b>Processing Centre -</b> construction of Groundnut and Dried Chili Stores and Machinery Parking for Oddusudan Groundnut producer society, Muttaiyankaddu		Muttaiyankaddu					On- going		20,635,860.00	13,859,976.54	



## Annex 2: ATDP Farmer Inputs

Province	District	Cluster Name	Items	Targeted units	Units distributed / Present Status July 2023
NP	Vavuniya	VAV-PPA	Papaya Seedlings	16,000 nos	16,000 nos
			Insect-Proof Nets	10,000 nos	10,000 nos
			GI Pipes	2000 nos	2000 nos
			Water Pumps	50 nos	50 nos
			Sprinkler Jet Irrigation Systems	50 nos	50 nos
			Plastic Crates	500 nos	500 nos
			Cowpea Seeds (kg)	80 nos	80 nos
			Cement Bags	200 nos	200 nos
			Inter-Cultivators	2 nos	2 nos
			Hybrid Chilli (MICH-HY1) Seeds		
		VAV-MZD	Seeds		900 kg
			Fertilizer		92 kg of Fertilizer Package (Urea - 30 kg/ac; TSP - 40 kg/ac; MoP - 20 kg/ac)
			Sprinkler Jet Irrigation Systems		150
			Electric Water Pumps		150
		VAV-CSV	Water Pumps	100 nos	99 nos
			Spray Jet Irrigation Systems	100 nos	99 nos
			Wheel Barrow	100 nos	99 nos
			Disk Plough	1 no	1 nos
			Stem Cutters	10 nos	
			Ridgers	4 nos	2 nos
			Small Scale Planting Machine	1 no	
			Machines for Uprooting Tuber	3 nos	
			Tyne Tillers	3 nos	
			Cassava Chip Making Mahines	3 nos	
			Shade Shooter	1 no	1 no
			Inter-Cultivators	2 nos	2 nos
		VAV-DCL	Hybrid Chilli (MICH-HY1) Seeds	24,000 g	24,000 g
			Groundnut Seeds	6000 kg	6,000 kg
			Plastic 100-Holes Nursery Trays	21,000 nos	21,000 nos
			Wheel Burrows	5 nos	
			Compost Mixing Machines	2 nos	
			Bed Machines	2 nos	
			Chilli Grinding Machines	2 nos	
			Portable Bag Closers	2 nos	
			Manual Pallet Trucks	2 nos	
			Dryers	2 nos	
			Chilli Powder Packaging Machines	2 nos	
			Disc Ploughs	2 nos	
			Mixing/Digging Shovels	10 nos	
			Platform Type Electronic Weighing Machines	2 nos	
			Plastic Pallets	30 nos	
			Multi-Chopping Machines	2 nos	
			Disc Harrows	2 nos	
			Packaging Machines	2 nos	
			Compost Shieving Machines	2 nos	
			Pitch Forks	10 nos	
			Compost Digester	1 nos	
			Weighing Machines	2 nos	
			Electric Water Pumps	300 nos	300 nos
			Insect-Proof Nets	60,000 m	60,000 m
			GI Pipes	5,700 nos	5,700 nos
			Poly Mulch	480,000 m	480,000 m
			Drip Tape Irrigation Systems	300 nos	300 nos
			Insect-Proof Fixing Profile	21,600 m	21,600 m
			Fertilizer		276 Nos of 50kg Urea Bags,190 Nos of 50 kg TSP Bags,170 Nos of 50kg bags
			Tractors & Trailers	2 nos	1 no
			Tumer Machines	2 nos	
			Elephant Fence	10 km	
	Kilinochchi	KIL-PSNFT	Passionfrit Seedlings	22,000 nos	22,000 nos

			Groundnut Seeds (kg)	2,000 nos	2,000 nos
			GI Pipes	11,000 nos	11,000 nos
			Water Pumps	100 nos	100 nos
			Iron Wires	4,500 kg	4,500 kg
			Secateurs	100 nos	100 nos
			Drip Irrigation Systems	100 nos	100 nos
			Plastic Crates	100 nos	100 nos
			Intercultivars	4 nos	4 nos
			Seedlings (Horana Gold)		8,000 nos
			Electric Water Pumps	200 nos	100 nos
			Drip Tape Irrigation Systems	200 nos	100 nos
			Liquid Tricoderma Culture		50 L
			GI Pipes		11,000 nos
			GI Wires		4,500 kg
			Fertilizers		Urea - 2,500 kg, TSP - 2,500 kg & MoP - 2,500 kg
		KIL-JPN	Jumbo Peanut Seeds	1,000 kg	580 kg
			Four Wheel Tractor	1 no	
			Ridger	2 nos	
			Gravity Separator	1 no	
			Harvesting Machine	1 no	
			Inter-Cultivator	2 nos	2 nos
			Sprinkler Irrigation Systems	30 nos	30 nos
			Water Pumps	30 nos	30 nos
			Gypsum Fertilizer	400 kg	400 kg
			Jumbo Peanut Seeds		1,348 kg
			Fertilizer		1,100 kg of Urea, 1,100 kg of MoP, & 572 kg of MoP
			Sprinkler Irrigation Systems	500 nos	300 nos
			Bagging Machine		
			4-Wheel Tractor	1 no	
			Seeder cum Fertigator		
			Groundnut Thresher		
			Ridger	2 nos	
			Gypsum Fertilizer	2,000 kg	25 kg
		KIL-DCL	Hybrid Chilli (MICH-HY1) Seeds	24,000 g	11,120 g
			Plastic 100-Holes Nursery Trays	21,000 nos	21,000 nos
			Trip Tape Irrigation Systems	300 nos	300 nos
			Electric Water Pumps	300 nos	300 nos
			Insect-Proof Nets	60,000 m	60,000 m
			GI Pipes	5,700 nos	5,700 nos
			Poly Mulch	480,000 m	480,000 m
			Insect-Proof Fixing Profile	21,600 m	21,600 nos
	Jaffna	Mango Production Cluster (200 Farmers)	Mango Grafted Plants	17,190 nos	14,870 nos
			Groundnut Seeds (kg)	4,000 kg	3,510 kg
			Sprinkler Irrigation Systems	200 nos	180 nos
			Water Pumps (Engine)	3 nos	0
			Water Pumps (Electric)	200 nos	150 nos
			Ladders	5 nos	5 nos
			Chain Saw	5 nos	5 nos
			Pruning Scissors	5 nos	5 nos
			Safety Belts	5 nos	5 nos
			Inter-Cultivators	5 nos	5 nos
			Plastic Crates	400 nos	362 nos
			Secateurs	200 nos	200 nos
			Pruning Saw	200 nos	200 nos
		Off-Season Green Chilli Production Demonstration Cluster (8 Farmers)	Drip Irrigation Systems	4 nos	4 nos
			Polythene Mulch	4 nos	4 nos
			Insect-Proof Nets	4 nos	4 nos
			Protected Net-House	4 nos	4 nos

		Potato/ Red Onion Production Cluster (500 Farmers)	Seeds - Seed Potato (Variety Sassy)	186,600 kg	156,400 kg
			Polythene Mulch Film	500 nos	233 nos
			Drip Tape Irrigation Systems with Fertigation Units	500 nos	500 nos
			Seeds - Red Onion (Variety COON-05)	100 kg	500 kg
			Provision of Tractors and Trailers	2 nos	2 nos
			Provision of Disc Ploughs	2 nos	1 no
			Provision of Disc Harrows	2 nos	0
			Provision of Yellow Sticky Traps	10,000 nos	10,000 nos
			Provision of Bedmakers	2 nos	0
			Provision of Drip Irrigation Systems	100 nos	0
			Provision of Electric Water Pumps	100 nos	0
			Automation for Irrigation Systems	100 nos	0
			Fertilizers (Urea, TSP, & MoP)		Urea - 5,496 kg, TSP - 6,412 kg,
		Organic Small Banana/ Dried Chilli Production Cluster (700 Farmers)	Banana Suckers		430 nos
			Provision of Poly-Bags	25,000 nos	10,000
			Provision of Electric Water Pumps	50 nos	0
			Provision of Micro Sprinkler Irrigation Systems	50 nos	0
			Provision of Drip Irrigation Systems	50 nos	0
			Automation for Irrigation Systems	10 nos	0
			Provision of Hybrid Chilli Seeds	2 kg	0
			Provision of Plastic 100 Holes-Nursery Trays	2,500 nos	0
			Provision of Plastic Crates	500 nos	0
			Installation & Commissioning of Compost Sieving Machine	1 no	0
			Provision of Banana Tree Shredding Machine	1 no	0
			Provision of Platform Type Electronic Weighing Balances	4 nos	0
			Provision of Wheelbarrows	5 nos	0
			Provision of Red Lasoda Seed Potato	61,200 kg	0
			Provision of Tractor and Trailer	1 no	0
			Provision of Weighing Machines	2 nos	0
			Installation & Commissioning of Low-Pressure Mini Sprinkler Irrigation Systems	50 nos	0
			Provision of Compost Mixing Machines	1 no	0
			Installation & Commissioning of Compost Digester	1 no	0
			Provision of Mixing/Digging Shovels	5 nos	0
			Installation & Commissioning of Solar Powered Water Pumps	15 nos	0
			Provision of Adjustable 20 Feet-Aluminum Ladders	1,000 nos	750 nos
			Provision of Pitch Forks	5 nos	0
			Provision of Plastic Pallets	25 nos	0
			Provision of Manual Pallet Trucks	4 nos	0
			Provision of Portable Bag Closers	2 nos	0
			Al Ladders		
		Mango/ Dried Chilli Production Cluster (500 Farmers)	Provision of Electric Water Pumps	200 nos	0
			Provision of Micro Sprinkler Irrigation Systems	200 nos	174 nos
			Provision of Drip Irrigation Systems	200 nos	174 nos
			Provision of Secateurs	200 nos	174 nos
			Provision of Hybrid Chilli Seeds	10 kg	2kg
			Provision of Plastic 100 Holes-Nursery Trays	10,000 nos	0
			Provision of Tom-EJC Grafted Mango Plants	66,250 nos	48,720 nos
	Mullaitivu	Groundnut Production	Sprinkler Systems	200 nos	200
			Electric Water Pumps	200 nos	200
			Gypsum Fertilizer	800 kg	800 kg

		Cluster (200 Farmers)	Groundnut Seeder	1 no	1 no
			Groundnut Thresher	2 nos	2 nos
			Gravity Separator	1 no	1 no
			Intercultivar	35 nos	35 nos
			Seeder/Fertilizer Applicator	1 no	1 no
			Decorticator	2 nos	2 nos
		Groundnut Production Cluster (100 Farmers)	Sprinkler Systems	100	100
			Water Pumps (Engine)	100	100
			Gypsum Fertilizer	5,000 kg	5,000 kg
			Groundnut Seeds	4,000 kg	4,000 kg
			Threshers	2 nos	2 nos
			4W-Tractor	1 no	1 no
		Passionfruit Production Cluster (50 Farmers)	Passionfruit Seedlings	11,000 nos	11,000 nos
			Groundnut Seeds (kg)	2000kg	2000kg
			Drip Irrigation Systems	50 nos	50 nos
			Water Pumps	50 nos	50 nos
			GI Pipes	5,500 nos	5,500 nos
			Iron Wires	2,250 kg	2,250 kg
			Plastic Crates	50 nos	50 nos
			Secateurs	50 nos	50 nos
			Tractor	1 no	1 no
			Thresher	1 no	1 no
			Ridger	1 no	1 no
			Groundnut seeder	2 no	2 no
			Inter cultivator	2 no	2 no
		Dried Chilli Production Cluster (300 Farmers)	Drip Irrigation Systems	300 nos	125 nos
			Chilli Seeds	20 kg	5 kg
			Chilli Seeds	6.5 kg	6.5 kg
			Nursery Trays	21,000 nos	19,250 nos
			Coco Pallets		
			Poly Mulch	200 Rolls	125 nos
			Insect-Proof Nets	10000	25,000 m
			Profiles	1332	1332
			Water Pumps		
			Drip Irrigation Systems		
			GI Pipes	2,000 nos	2375
			Electric Dryer	1	1
		Pomegranate/ Dried Chilli Production Cluster (150 Farmers)	Provision of Micro Sprinkler Irrigation Systems	150 nos	42 nos
			Provision of Drip Irrigation Systems	150 nos	69 nos
			Provision of Bagwan Pomegranate Layered Plants (Scale-Up)	64,500 nos	29,240
			Provision of Plastic 100 Holes-Nursery Trays	7,500 nos	1,500 nos
			Provision of Hybrid Chilli Seeds	6 kg	1.08kg
			Provision of Electric Water Pumps	120 nos	3 nos
			Provision of Kerosene Water Pumps	30 nos	0
			Provision of Phosphoric Acid (H3PO4)	300 L	8 L
			Provision of Secateurs	100 nos	63 nos
			Automation for Irrigation Systems	10 nos	0
			Provision of Fruit Cover Bags	100,000 nos	1000
			Fertilizers (Urea, TSP, & MoP)	Urea - 53 nos of 50 kg-Bags, TSP - 32 nos of 50 kg-Bags, & MoP - 94 nos of 50 kg-Bags	Urea - 20 nos of 50 kg-Bags, TSP - 16.5 nos of 50 kg-Bags, & MoP - 30 nos of 50 kg-Bags
		Kolikkuttu Banana/ Dried Chilli Production Cluster (700)	Provision of Tissue Culture Banana Plants	147000	24,000 nos
			Provision of Electric Water Pumps	300 nos	50 nos
			Provision of Kerosene Water Pumps	0	0

		Farmers - 550 Existing & 150 New Farmers)	Provision of Micro Sprinkler Irrigation Systems	300	0
			Provision of Drip Irrigation Systems	0	0
			Provision of Automation for Irrigation Systems	0	0
			Provision of Phosphoric Acid (H3PO4)	100 L	68 L
			Provision of Hybrid Chilli Seeds	12 kg	7 kg
			Provision of Plastic 100 Holes-Nursery Trays	15950	15590
			Provision of Poly mulch	430	409 units
			Provision of Bunch Cover Bags	2160 unit	2010 units
			Provision of Color Ribbons	25,000 nos	25000 nos
			Fertilizers (Urea, TSP, & MoP)	0	0
			Al Ladders	300	150 nos
		Papaya/ Dried Chilli Production Cluster (600 Farmers)	Provision of Micro Sprinkler Irrigation Systems	400nos	150nos
			Provision of Drip Irrigation Systems	400nos	150
			Provision of Papaya Seeds	32,250 nos	300nos
			Provision of Plastic 100 Holes-Nursery Trays	7,500 nos	5000nos
			Provision of Hybrid Chilli Seeds	6 kg	5
			Provision of Electric Water Pumps	120 nos	72
			Provision of Kerosene Water Pumps	30 nos	0
			Provision of Phosphoric Acid (H3PO4)	150 L	0
			Automation for Irrigation Systems	15 nos	0
			Provision of Fruit Cover Bags	150,000 nos	0
			Provision of Fruit 32 mm-Coco Pellets	1,950,000 nos	0
			Provision of Poly-Mulch	240,000 m	0
			Provision of Plastic Crates	1,500 nos	0
			Provision of Tractors and Trailers	2 nos	0

## Annex 3: PUC Assets

Province	District	Cluster	Processing Machinery		Compost Making		Office Asets			
			Machinery Item	Cost - LKR	Item	Cost - LKR	Asset Item	Cost - LKR		
NP	Vavuniya	Dry Chili - Living Agro Products Ltd	Heat Pump dryer	11,643,750	Compost mixer	299,460.00	Laptop	102,500.00	16,847,146.88	
			Chili grinding machine	675,000	Rotatory Seiver	1,395,900.00	Conference table	156,000.00		
			Chili disk mill machine	575,000			Clerical tables (2 nos.)	32,400.00		
			Chili powder packing machine	1,752,816			Steel Cupboard	35,639.00		
			Weighing scale (300 kg)	24,000			Executive table	21,492.00		
			Weighing scale (10 kg)	2,460			Conference Chair (6 nos)	23,760.00		
			Weighing Scale	3,300			Table	21,830.00		
			Weighing Sacle (15 kg)	15,550			Chair	12,400.00		
							Alumara	32,990.00		
							Calculator	2,700.00		
							Small table	12,200.00		
							Smallchair	6,000.00		
			Total	14,691,876		1,695,360		459,911.00		
		Hybrid Maize Seed - Ensured Seeds Economical Developme nt Ltd	Maize Seed Dryers (2 nos.)	25,515,188	Multichopper (5 nos.)	2,245,500	Conference table	156,000.00	66,329,609.00	
			Maize Seed Grading cum cleaning machines (2 nos.)	31,657,550	Rotary seiving machine	1,395,900	Clerical tables ( 2 nos.)	32,400.00		
			Maize corn thresher machines ( 2 nos.)	3,030,000			Steel cup boards	35,639.00		
			Portable Moisture Meters (12 nos.)	2,089,680			Executive table	21,492.00		
			Weighing scale	24,000			Conference chair (6 nos.)	23,760.00		
								Laptop		102,500.00
			Total	62,316,418.00		3,641,400.00		371,791.00		
		Papaya - Pasumai Agro					Conference table	156,000.00		
							Clerical tables ( 2 nos.)	32,400.00		

	Products Ltd					Steel cup boards	35,639.00	
						Executive table	21,492.00	
						Conference chair (6 nos.)	23,760.00	
						Laptop	102,500.00	
						Printer	41,900.00	
		Total	-		-		413,691.00	413,691.00
	TJC Mango - Shakthi Agro	Conveyor Lines				Laptop	102,500.00	
		Weighing scales	24,000			suggestion box	3950.00	
						Notice board	4750.00	
						chair (6 nos)		
						conference table	156,000	
						office table (2 nos.)	32,400.00	
						management table	16,200.00	
						steel cupboard	35,639.00	
		Total	24,000.00		0		351,439.00	375,439.00
	Kilinochchi	Dry Chili (Kandavalai) - Thayakam Agro Ltd	Heat Pump Dryers	11,643,750		Laptop	102,500.00	
			Weighing Scale	24,000		Clerical Table (2 nos.)	32,400.00	
			Deshelling grading & separation line	1,854,397		Executive table	21,492.00	
						Conference table	156,000.00	
						Chair (6 nos)	23,760.00	
						Steel cupboard	35,639.00	
			Total	13,522,147		0	371,791.00	13,893,938.14
		JPN (Karachchi) - 2K Agro Products Ltd	Heat Pump Dryer	11,643,750	Multichopper	499,100	Laptop	102,500.00
			Weighing balance	125,000	Rotary seiving machine	837,540	Clerical Table (2 nos)	32,400.00
			Cold Room	12,728,963			Executive table	21,492.00
			Deshelling grading & separation line	1,854,397			Conference table	156,000.00
			JPN decorticator machine	1,516,300			chairs (6 nos)	23,760.00

							Steel cupboard	35,639.00	29,742,441.40	
							Printer ( Canon )	41,900.00		
							Suggestion box	3,950.00		
							Notice board	4,750.00		
							Multi media Projector with screen	115,000.00		
			Total	27,868,410		1,336,640		537,391.00		
		Passion Fruit - MAK Agro products Ltd	Pulper machine	1,097,800.00			Laptop	205,000.00		10,932,531.00
			Fruit Pulper Heater	142,000.00			Conference table with chairs (6 nos)	156,600.00		
			Jacket kettle	1,650,000.00			Executive table	21,492.00		
			Freezer Machines ( 2 nos)	826,000.00			Clerical table	32,400.00		
			Pulper remover	1,350,000.00			Steel cupboard	35,639.00		
			Jakettle Machines - 2 nos - new	5,250,000.00			Suggestion Box	3,950.00		
							Notice Board	4,750.00		
							Printer	41,900.00		
							Projector with screen	115,000.00		
			Total	10,315,800.00		0		616,731.00		
		Promegrana te - Red Angel Agro Ltd					Laptop	205,000.00	291,352.00	
							Notice board	4,750.00		
							Suggestion box	3,950.00		
							Clerical Table (2nos)	32,400.00		
							Executive table	21,492.00		
							Conference chairs (6 nos)	23,760.00		
			Total					291,352.00		



	Mallaitivu	Ground Nut & Chili - Mullai Agribusiness Ltd	Heat Pump Dryer with Additional trays & trolleys	17,135,335.80			Laptop	410,000.00	
			Gravity sepreator	2,400,000.00			Conference Table with chairs	167,000.00	
			Groundnut decorticator (2nos.)	4,400,000.00			Office Table	48,000.00	
							Steel cupboard	35,000.00	
							Multimedia projector with screen	115,000.00	
			Total	23,935,335.80		-		775,000.00	24,710,335.80
		Promegrana te - Lankan Red Gems Farmers Company Ltd	Sorting & Packing conveyor	2,424,370.72			Office Laptop	205,000.00	
			Smart weighing system	1,109,750.00			Multimedia Projector& screen	115,000.00	
			Weighimng & packing tables (4 nos.)	1,769,292.74			Steel Cuboard	35,640.00	
			Hydraulic manual pallet truck	242,576.56			Office Chairs (3 nos.)	71,280.00	
							Management Table	16,200.00	
							Conference Table & chairs (4 nos.)	166,600.00	
				5,545,990.01		-		609,720.00	6,155,710.01
		Papaya - Golden Papaya Farmers Ltd	Weighimng & packing tables	2,920,466.48	Multy Chopper	299,460.00	Laptop	205,000.00	
			Drain conveyor	1,550,270.51	Rotary Siever	837,540.00	Steel cupboard	35,640.00	
			Air drying conveyor	4,352,885.47			Multimedia projector	115,000.00	
			Dispatch roller conveyor	2,008,033.20			Executive table (2 nos.)	25,000.00	
			Preliminary washing unit	5,197,619.35			executive Chair 2	15,840.00	
			Chemical treatment tank	1,698,659.07			Maneger table	16,200.00	
			Weighing & packing tables (10 nos.)	3,676,890.86			Maneger chair	7,920.00	
			Manual pallet trucks	230,000.00			conferences table & chairs (4 nos.)	166,600.00	
				21,634,824.93		1,137,000.00		587,200.00	23,359,024.93
		Banana - Vanni fresh					Office Laptop	205,000.00	

		fruitz farmers Company Ltd					Multimedia Projector& screen	115,000.00	
							Steel Cuboard	35,640.00	
							Office Chair (3 nos)	71,280.00	
							Management Table	16,200.00	
							Conference Table & Chairs (4 nos)	166,600.00	
				0		0		609,720.00	609,720.00
		Passion Fruit - Marutham Smart Agro Ltd					Laptop	205,000.00	
							Clerical table (2nis.)	32,400.00	
							Executive table	21,492.00	
							Conference table with six chairs	166,600.00	
							Chair	23,760.00	
							Steel cupboard	35,640.00	
							Printer(canon)	41,900.00	
							Multimedia projector and handle	115,000.00	
							Suggestion box	3,950.00	
							Notice board	4,750.00	
				0		0		650,492.00	650,492.00
	Jaffana	Potato & Onion - Ceylon Smart Poton mers Company Ltd	Sorting & Packing conveyor	2,402,982.68	Multi chopper	499,100.00	Conference table with 4 chairs	156,600.00	
			Smart Weighing System	1,109,750.00	Rotary siever	1,395,900.00	Office table	16,200.00	
			Weighimng & packing tables (4 nos.)	1,753,683.86	Mixing Shovels	950.00	office chair	23,660.00	
			Hydraulic manual pallet truck (2 nos.)	480,873.04	3 spikes fork	2,250.00	Management table	21,492.00	
			Pedestal type bag sealing machine (2nos.)	264,480.17	Wheelbarrow	8,500.00	Laptop with bag	205,000.00	
			Electrically operated hand - held bag closer	396,720.26	compost thermometer (2 nos.)	30,000.00	Projector	115,000.00	
							Steel Cupboard	35,638.92	

							Printer	41,900.00	
			Total	6,408,490.01		1,936,700.00		615,490.92	8,960,680.93
		Dry Chili Cluster	Heat Pump dryer	11,643,750.00					
			Total	11,643,750.00		-		-	11,643,750.00
		Mango - Jaffna Mango Queen Farmers Ltd					Conference table with four chairs	156,600.00	
							Excutive table -	21,492.00	
							Clerical table (2 nos)	32,400.00	
							Laptops	205,000.00	
							Multi media Projector with screen -	115,000.00	
							Steel Cupboard -	35,638.92	
							Printer (canon) -	41,900.00	
			Total	-		-		608,030.92	608,030.92
		Banana - Jaffna Organic Farmers Company Ltd	Fruit weighing & sorting conveyor	2,624,375.86	Multi shopping	499,100.00	Conference table with four chairs	156,600.00	
			Drain conveyor	1,210,348.67	Sieving Machines	1,395,900.00	Excutive table -	21,492.00	
			Air drying conveyor	2,988,506.18	compost thermometer	15,000.00	Excutive chairs (3 nos)	70,980.00	
			Inclined roller conveyor for empty boxes	2,157,673.62	compost moister meter	15,000.00	Clerical table (2 nos)	32,400.00	
			Dispacth roller conveyor (2nos.)	3,663,282.90			Laptops	205,000.00	
			Preliminary washing unit	3,125,556.92			Multi media Projector with screen -	115,000.00	
			Chemical treatment plant	1,314,136.80			Steel Cupboard -	35,638.92	
			Weighing & packing tables (10 nos.)	3,505,761.80			Printer (canon) -	41,900.00	
			Manual pallet truck	225,000.00			Plastic chairs with Round table	7,500.00	
			Manually operated box making machine (2 nos.)	750,000.00			Plastic chairs Square table	15,000.00	
			Smart weighing system	1,894,000.00					

			Bench type electric weighing balances (20 nos)	760,000.00					
			Platform weighing scales (150 kg) (4 nos.)	2,020,000.00					
			Wheelbarrows (2 nos)	17,000.00					
			Total	26,255,642.75		1,925,000.00		701,510.92	28,882,153.67