

**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 – North-Central 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>12</b>
3.1 Specific Tasks .....	12
3.2 Methodology .....	12
<b>CHAPTER 04: FINDINGS AT COMPLETION IN NORTHERN PROVINCE .....</b>	<b>13</b>
4.1 OVERALL PROJECT COST .....	13
4.2 CDPs, IMPLEMENTATION AND OUTPUTS .....	13
4.3 Production and Market Infrastructure .....	14
<b>4.3.1 Expenditure on Production and Market Infrastructure .....</b>	<b>17</b>
4.4 ATDP Development .....	19
<b>4.4.1 Production Data of ATDPs .....</b>	<b>21</b>
<b>4.4.2 Exported Volumes of ATDPs .....</b>	<b>23</b>
4.5 Status of PUC Establishment .....	23
4.6 Training and Capacity Building of Beneficiaries .....	25
<b>CHAPTER 05: CONCLUDING REMARKS .....</b>	<b>26</b>
<b>Annex 1: Infrastructure Details .....</b>	<b>27</b>
<b>Annex 2: ATDP Farmer Inputs .....</b>	<b>35</b>
<b>Annex 3: PUC Assets .....</b>	<b>37</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 financed under the Agriculture Sector Modernization Project (ASMP) are at the tail-end and will be concluded by December 2024. Therefore, preparation of Cluster completion report for each cluster implemented under ASMP is required as per the agreement with the IDA/EU with the GOSL. Hence, ASMP is obliged to submit Cluster Completion Reports for all 72 clusters (including cost of cultivation, production and market infrastructure, Institutional development, Farmer Training and Capacity Building, etc) implemented under ASMP supported districts (IDA and EU funded). Below table identifies the total clusters which are to be considered for preparation of Completion Reports.

#	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
24			4. Pomegranate Cluster	EU
25		Vavuniya	1. Dried Chilli Production	EU
26			2. Maize seed production	EU
27			3. TJC Mango	EU
28			4. Papaya Production	EU + pilot
29			5. Cassava Production cluster	pilot
30	Uva	Monaragala	1. Passionfruit production	pilot
31			2. Pineapple production	pilot

## Cluster Completion Report – North-Central Province - ASMP

32			3. TEJC Mango production	pilot+ISP
33			4. Moringa Leaves Production	pilot
34			5. Bee keeping	pilot
35			6. Cavendish Banana Production Cluster	ISP
36			7. Cavendish Banana instead of MD2 pineapple	ISP
37			8. Chilli Production	pilot
38		Badulla	1. Avocado Cluster	EU
39			2. Dry Chili Production Cluster	EU
40			3. Seed Potato Cultivation -	EU +Pilot
41			4. Vegetable production cluster	EU
42			5. Passionfruit production cluster	pilot
43			6. Mandarin Production	pilot
44			7. Soursop Production	pilot
45	Eastern	Batticaloa	1. Cucumber Production	pilot
46			2. Green chilli Production Kaluthavalai	pilot
47			3. Dry chili production	pilot
48			4. Ground Nut Production Kathiravelai	pilot
49			5. Ground Nut Production Karadiyanaru	pilot
50			6. Cavendish Banana production	ISP
51			7. Pomegranate Production Kaluwanchikudy	ISP
52			8. Pomegranate Production	ISP
53		Ampara	1. Dry Chili Production Cluster	EU
54			2. Jumbo peanut Production (pilot cassava 100)	EU + pilot
55			3. Maize seed production Cluster	EU
56			4. Soursop Production Cluster	EU+pilot
57	North Central	Anuradhapura	<b>1 Green chilli production</b>	<b>pilot</b>
58			<b>2 Bitter gourd Production</b>	<b>pilot</b>
59			<b>3 Mushroom production</b>	<b>pilot</b>
60			<b>4. Aloe Vera Production</b>	<b>pilot</b>
61			<b>5. Moringa Leaves production</b>	<b>pilot</b>
62			<b>6. Maize seed Production</b>	<b>pilot</b>
63			<b>7. Small Banana Production Cluster</b>	<b>ISP</b>
64			<b>8. Dry Chili Production Cluster</b>	<b>ISP</b>
65			<b>9. Guava Production Cluster</b>	<b>ISP+Pilot</b>
66		Polonnaruwa	<b>1. Green chilli production</b>	<b>pilot</b>
67			<b>2. Bitter gourd Production</b>	<b>pilot</b>
68			<b>3. Mushroom production</b>	<b>pilot</b>
69			<b>4. Aloe Vera cultivation</b>	<b>pilot</b>
70			<b>5. Dry Chili Production Cluster</b>	<b>ISP</b>
71			<b>6. Papaya Production Cluster</b>	<b>ISP+Pilot</b>
72			<b>7.Vegetable Production Cluster</b>	<b>ISP</b>
			<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> <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</li> </ul>



		<p>construction and rehabilitation, PUC office facilities, PUC office equipment, and so on</p> <ul style="list-style-type: none"> <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> <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 Financing (WB)</b>	<b>Credit</b>
<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

<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

## 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 farm. Target	No of Farmer	Extent (Acre)	Start Year
Anuradhapura	1 Green chilli production	ANU-GCL	80	80	31	2020
	2 Bitter gourd Production	ANU-BTGD	40	40	20	2018
	3 Mushroom production	ANU-MSHM	50	50	N/A	2018
	4. Aloe Vera Production	ANU-ALVR	100	100	25	2019
	5. Moringa Leaves production	ANU-MRNG	100	100	50	2019
	6. Maize seed Production	ANU-MZD	200	200	100	2021
	7. Small Banana Production	ANU-SBNA	500	480	450	2021
	8. Dry Chili Production Cluster	ANU-DCL	420	400	210	0
	9. Guava Production Cluster	ANU-GVA	300	255	100	2018
Polonnaruwa	1. Green chili production	POL-GCL	40	40	20	2018
	2. Bitter gourd Production	POL-BTGD	30	30	15	2018
	3. Mushroom production	POL-MSHM	40	40	N/A	2018
	4. Aloe Vera cultivation	POL-ALVR	100	100	25	2019
	5. Dry Chili Production Cluster	POL-DCL	380	154	129	2023
	6. Papaya Production Cluster	POL-PPA	300	173	164.5	2019
	7. Vegetable Production Cluster	POL-VEG	300	243	134.5	2023

## 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

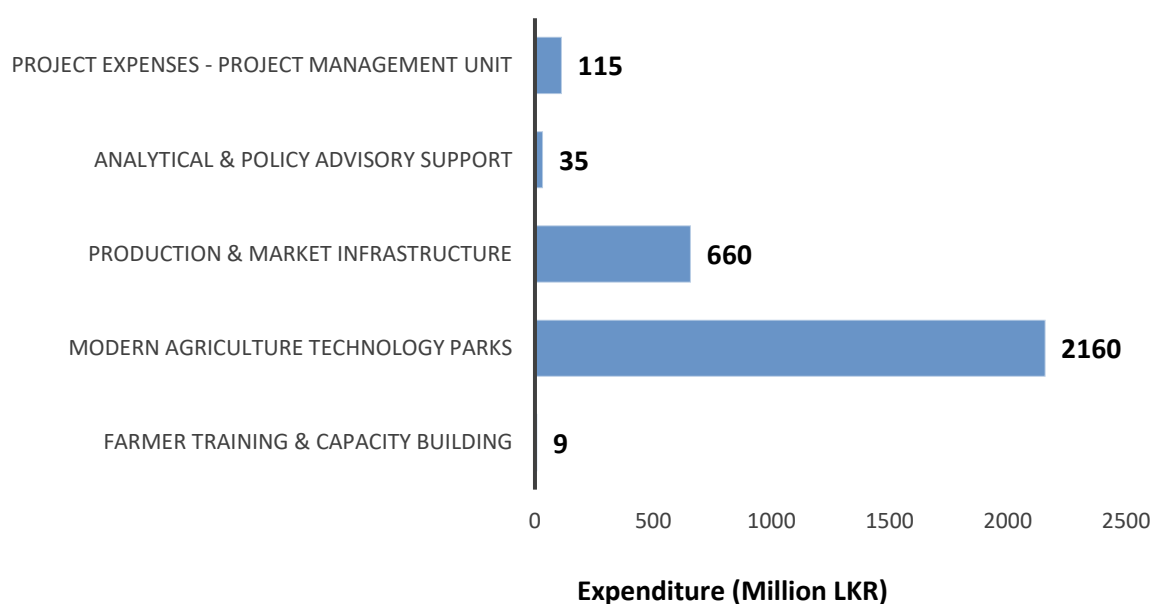
### 3.2 Methodology

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. 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.

## CHAPTER 04: FINDINGS AT COMPLETION IN NORTH CENTRAL PROVINCE

### 4.1 OVERALL PROJECT COST

Activity	Expenditure (Million LKR)	% of Expenditure
Farmer Training & capacity Building	9.18	0.31
Modern Agriculture Technology parks	2159.84	72.51
Production & Market infrastructure	660.20	22.17
Analytical & Policy Advisory Support	34.76	1.17
Project Expenses - Project Management Unit	114.58	3.85
<b>Total Expenditure</b>	<b>2978.55</b>	<b>100.00</b>



### 4.2 CDPs, IMPLEMENTATION AND OUTPUTS

In the development of crop clusters and cluster development plans, several key components have been 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**

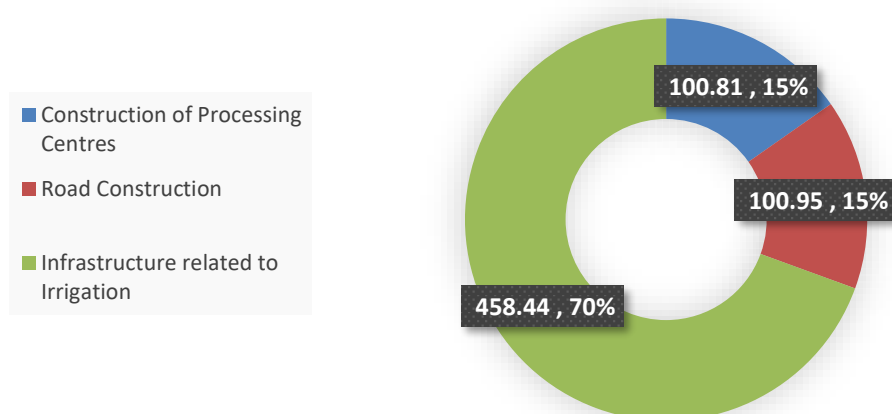
Providing analytical and policy advisory support is crucial for informed decision-making and strategic planning. This component included conducting market analysis, policy research, and impact assessments to guide the development of effective agricultural policies and programs. Advisory support ensured 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.

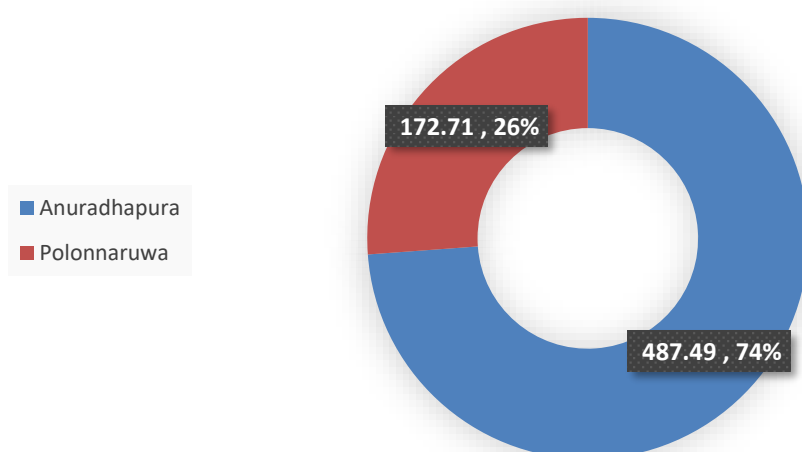
## **4.3 Production and Market Infrastructure**

**Expenditure Breakdown - Infrastructure Category Wise**



The figure shows the financial expenditures and their corresponding percentages for various infrastructure development activities of the ASMP. The data is presented in Million LKR, highlighting the allocation and utilization of resources across different categories. A notable portion of the budget is allocated to the construction of processing centers, reflecting the importance of improving agricultural productivity and value addition through modern facilities. Another significant portion of the budget is dedicated to road construction, emphasizing the need for enhanced access to markets, efficient transportation of goods, and overall connectivity. The majority of the budget is invested in irrigation infrastructure, ensuring water availability and supporting agricultural activities, which is critical for sustaining high levels of productivity. This reflects the strategic emphasis on water resource management and its critical role in agricultural development. With the largest portion of the budget dedicated to irrigation infrastructure, followed by processing centers and road construction, these investments are expected to significantly boost agricultural productivity, market access, and overall economic growth.

**Expenditure Breakdown - District Wise**



The above figure presents an analysis of the financial expenditures for infrastructure projects in the Anuradhapura and Polonnaruwa districts. The data is presented in Million LKR and highlights the distribution and percentage allocation of resources in each district. The majority of financial resources amounting to 487.49 million LKR (74%) have been allocated to the Anuradhapura district, indicating a strong focus on enhancing infrastructure and supporting agricultural activities in this region. This

significant investment is expected to drive economic growth and development within the district. A smaller portion of the budget has been dedicated to the Polonnaruwa district (172.71 million LKR, accounting for 26% of the total allocation). However, this allocation still represents a substantial investment aimed at improving infrastructure and boosting agricultural productivity in the area. The total financial expenditure for infrastructure projects in the Anuradhapura and Polonnaruwa districts amounts to 660.20 Million LKR.



## 4.3.1 Expenditure on Production and Market Infrastructure

Cluster	Construction of Processing Centers (1)		Road Construction (2)		Infrastructure related to Irrigation (3)		Total		Financial Progress		
	Awarded Value	Actual value	Awarded Value	Actual value	Awarded Value	Actual value	Awarded Value	Actual value	(1)	(2)	(3)
ANU-DCL	26.29	14.48	25.90	20.84	123.93	131.98	176.12	167.29	55.09	80.44	106.49
ANU-GVA	5.74	5.30	11.22	6.17	79.91	48.14	96.88	59.61	92.26	54.98	60.25
ANU-MSHM	20.91	23.55	-	-	-	-	20.91	23.55	112.63		
ANU-GCL	0.54	0.67	0	-	46.63	42.50	47.17	43.18	124.33		91.16
ANU-PSNFT	0.54	0.67	14.74	13.35	26.35	26.84	41.64	40.86	124.33	90.52	101.85
ANU-SBNA	71.89	19.29	25.75	19.89	123.88	113.15	221.51	152.32	26.83	77.23	91.34
ANU-GNT	0.54	0.67	-	-	-	-	0.54	0.67	124.33		
POL-DCL	24.79	9.03	-	-	78.11	69.91	102.90	78.93	36.41		89.50
POL-PPA	28.41	0.92	23.29	20.84	16.82	6.99	68.51	28.76	3.25	89.52	41.57
POL-GCL & POL-BTGD	-	-	12.76	14.57	23.96	18.93	36.72	33.50		114.20	78.99
POL-MSHM	26.32	26.22	5.93	5.30	-	-	32.25	31.52	99.63	89.32	
<b>Total</b>	<b>205.98</b>	<b>100.81</b>	<b>119.59</b>	<b>100.95</b>	<b>519.59</b>	<b>458.44</b>	<b>845.16</b>	<b>660.20</b>			

This table provides an analysis of the financial status of the construction of processing centers across various clusters. The financial values are presented in Million LKR, comparing the awarded values to the actual values achieved. The financial progress for the construction of processing centers varies significantly across different clusters. Some clusters, like ANU-MSHM and POL-MSHM, have achieved actual values close to or exceeding the awarded values. However, other clusters, such as ANU-SBNA and POL-PPA, show a substantial difference between awarded and actual values. The financial progress for road construction projects shows a mix of outcomes across different clusters. Several clusters, such as ANU-DCL and POL-PPA, have actual values that closely align with the awarded values. However, some clusters, like ANU-GVA, display a significant difference between awarded and actual values. The financial progress for infrastructure related to irrigation projects shows a range of outcomes across different clusters. Some clusters, like ANU-DCL and ANU-PSNFT, have actual values that align closely with or exceed the awarded values. Others, such as ANU-GVA and POL-PPA, display a significant difference between awarded and actual values. The financial progress for infrastructure projects varies significantly across different clusters and types. Notably, some clusters have achieved over 100% financial progress in certain areas, indicating a higher actual expenditure than initially awarded. Other clusters, like ANU-SBNA and POL-PPA, show considerable differences between awarded and actual progress percentages.

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

Cluster	Type of Infrastructure	Status of Construction
ANU-DCL	Processing center	One is Expected to be completed by December 31 <sup>st</sup> 2024 & one has been established PPMU Office Building
	Rehabilitation of Canal Roads- Galnewa and Thalawa	Expected to be completed by December 31 <sup>st</sup> 2024
	Improvement of Irrigation System	Completed
	Installation of solar irrigation systems	Expected to be completed by December 31 <sup>st</sup> 2024
ANU-GVA	Processing and Collecting Center	Completed & PPMU Office Building
	Rehabilitation of roads	Expected to be completed by December 31 <sup>st</sup> 2024
	Irrigation -Construction & rehabilitation of Irrigation systems	Some are Expected to be completed by December 31 <sup>st</sup> 2024 & Kadiyangalla Tank - completed
	Installation of solar irrigation systems	Expected to be completed by December 31 <sup>st</sup> 2024
	Irrigation - Construction of Macro Level Drainage System for Guava cluster, Ipalogama,	Contractor is to be terminated due to farmers' objections
ANU-MSHM	Processing Centre	Completed & PPMU Office Building
ANU-GCL & ANU-BTGD	Processing center	PPMU Office Building
	Rehabilitation and Improvement of Irrigation systems	Completed
ANU-PSNFT	Processing center	PPMU Office Building
	The Renovation & Improvement of Roads	Completed
ANU-SBNA	Construction of Banana Collection and Processing Center	One is expected to be completed by December 31 <sup>st</sup> 2024, temporary one - completed, PPMU Office Building - completed
	Rehabilitation of roads	Expected to be completed by December 31 <sup>st</sup> 2024
	Irrigation -Construction of Agro Wells	Expected to be completed by December 31 <sup>st</sup> 2024
	Installation of Solar Irrigation Systems	Expected to be completed by December 31 <sup>st</sup> 2024
	Excavation of Agro Wells	Completed
ANU-GNT	Processing center	PPMU Office Building
	Irrigation - Rehabilitation of Tank Bund	

POL-DCL	Processing center - Building Extension & renovation	Expected to be completed by December 31 <sup>st</sup> 2024
	Installation of Solar irrigation systems	Expected to be completed by December 31 <sup>st</sup> 2024
	Irrigation -Construction of Agro Wells	Expected to be completed by December 31 <sup>st</sup> 2024
POL-PPA	Processing Centre - Building rehabilitation	Expected to be completed by December 31 <sup>st</sup> 2024
	Road - Improvement of Agricultural Road	Completed
	Installation of Solar irrigation systems	Expected to be completed by December 31 <sup>st</sup> 2024
	Rehabilitation of Five Common Agro Wells	Terminated by wildlife
POL-GCL & POL-BTGD	Improvement of Agriculture Road	Completed
	Rehabilitation and Improvement of Irrigation systems	Completed
	Irrigation - Improvement of Dehiathhawala Tank and Unagollewa Tank with Canal System at Hingurakgoda	Completed
	Installation of solar irrigation system	Expected to be completed by December 31 <sup>st</sup> 2024
POL-MSHM	Construction Mushroom Cultivation Center & Growing Houses	Completed
	Access Road to Mushroom common Center-Dimbulagala	Completed

The table indicates significant progress in various infrastructure activities, with several expected to be completed by December 31<sup>st</sup>, 2024. Completed projects include improvements to irrigation systems, road rehabilitation, and the establishment of processing centers. Installation in solar irrigation systems are in progress and expected to be completed by December 31<sup>st</sup> 2024. Rehabilitation of five common agro wells were terminated by Department of Wildlife Conservation. A few processing centers have been build on the PPMU office buildings. Progress in constructing infrastructure and irrigation system is commendable.

#### 4.4 ATDP Development

District	Cluster	Abbr.	ATDP Investment (Million LKR)
Anuradhapura	Green chilli production	ANU-GCL	82.63
	Bitter gourd Production	ANU-BTGD	73.04
	Mushroom production	ANU-MSHM	55.82
	Passion Fruit production	ANU-PSNFT	73.93
	Ground nut production	ANU-GNT	100.62
	Maize seed Production	ANU-MZD	78.45

	Small Banana Production Cluster	ANU-SBNA	187.93
	Dry Chili Production Cluster	ANU-DCL	237.35
	Guava Production Cluster	ANU-GVA	239.70
Polonnaruwa	Green chilli production	POL-GCL	68.48
	Bitter gourd Production	POL-BTGD	61.21
	Mushroom production	POL-MSHM	54.76
	Aloe Vera cultivation	POL-ALVR	84.91
	Dry Chili Production Cluster	POL-DCL	126.80
	Papaya Production Cluster	POL-PPA	207.13
	Vegetable Production Cluster	POL-VEG	273.95
Other Expenses			153.15
<b>Grand Total</b>			<b>2,159.84</b>

The table shows the ATDP investment across various agricultural production clusters in the districts of Anuradhapura and Polonnaruwa. The data includes the allocation of funds in Million LKR for each cluster, along with the total investment. The total ATDP investment across all clusters in North Central Province amounts to 2,159.84 Million LKR. Anuradhapura district has the highest individual investments, particularly in the Guava Production Cluster (239.70 Million LKR) and the Dry Chili Production Cluster (237.35 Million LKR). These high investments indicate a strong focus on these crops due to their potential profitability and market demand. The largest investment in Polonnaruwa district is directed towards the Vegetable Production Cluster (273.95 Million LKR), followed by the Papaya Production Cluster (207.13 Million LKR). This suggests a strategic emphasis on diversifying agricultural outputs to meet varying market needs. A significant portion of the investment (153.15 Million LKR) is allocated under 'Other Expenses' which include all bulk purchase of inputs, machineries, equipment etc. for two districts. The ATDP investments demonstrate a focused approach towards enhancing agricultural productivity and market readiness in Anuradhapura and Polonnaruwa. By allocating substantial funds to specific clusters, the program aims to boost yields, improve quality, and ensure sustainable farming practices. The emphasis on high-value crops like guava, dry chili, and vegetables reflects an alignment with market demands and potential for increased farmer income.

## 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
ANU-GCL	18	15	68.00	160.00	No		Middle men	
ANU-BTGD	15	10.4	49.50	120.00	No		Middle men	
ANU-MSHM	3.2 Mt/ Farm./ Yr	0.48 Mt/ Farm./ Yr	90.00	600.00	No	Habara Hotel and other outside growers	PUC	
ANU-PSNFT	4.5	3.6	190.00	250-300	Expected to be signed	Great Frozen	PUC and middle men	Keells with PUC, (30% total production)
ANU-GNT	3.6	2.52		550.00	Expected to be signed	CW Mackie	PUC	
ANU-MZD	0.4	0.35	1,078.70	1,250.00	No		Middle men	
ANU-SBNA	45	36	22.00	70.00	Yes	Ceylon fresh fields(pvt) LTD ASMP PPMU Kandy	Mostly through PUC	Ceylon fresh fields(pvt) LTD for export quality and ASMP PPMU Kandy for Banana Plantlets
ANU-DCL	18	15 (Green chili)	160.00	800-1500	No		Mostly green chili is produced	
ANU-GVA	26.9	62	25.00	70.00	No	Tropikal Life International	Local market and middlemen	
POL-GCL	18	15	68.00	160.00	No	Local Market	Middle men	

<b>POL-BTGD</b>		15	10	49.50	120.00	No	Local Market	Middle men	
<b>POL-MSHM</b>		3.2 Mt/ Farm./ Yr	0.6 Mt/ Farm./ Yr	120.00	600.00	No	Local Market	Middle men	
<b>POL-ALVR</b>			48	6.25	40.00	No	Local Market	Middle men	
<b>POL-DCL</b>		18	12 (Green Chili)	160 (Dry Chili) 72 (Green Chili)	800-1500 (Dry Chili) 160 (Green Chili)	No	Local Market	Mostly green chili is produced	
<b>POL-PPA</b>		45	24	44.00	45-150	No	Serendib Global, Keels, Lanka Fruits	PUC and middle men	
<b>POL- VEG</b>	<b>Eggplant</b>	36	16	63.74	50-500	No	Keells	Through PUC	
	<b>Okra</b>	48	38.86	49.21	50-200	No	Keells	Through PUC	
	<b>Capsicum</b>		12		100-600	No	Keells	Through PUC	
	<b>Chili</b>	18	14.2	68.00	160-800	No	Keells	Through PUC	

The table provides an overview of the expected and actual yields, cost of production (COP), selling price, marketing channels, and buyer agreements for clusters in the Anuradhapura (ANU) and Polonnaruwa (POL) districts. Significant gaps between expected and actual yields are observed, especially in clusters like ANU-MSHM and POL-ALVR. High production costs, particularly for ANU-MZD and POL-MSHM, reduce profit margins despite favorable prices. The lack of formal agreements exposes farmers to market volatility. Clusters like ANU-PSNFT and ANU-GNT show potential with pending agreements. Over-reliance on middlemen limits profitability. Integration with PUCs and partnerships with large-scale buyers can improve outcomes. Strengthening linkages with buyers and formalizing agreements would benefit the PUCs substantially. Except for Guava cluster, actual yields of other clusters are lower than the expected volume. However, the difference between COP/kg and the unit price is mostly substantial implying a higher profit gains to the farmers. ANU-PSNFT and ANU-GNT are expected to sign agreements with Great Frozen and CW Mackie respectively. Some products are purchased by leading companies, hotels and supermarkets without an agreement. Diversify marketing channels by leveraging PUCs and connecting with export markets.

#### 4.4.2 Exported Volumes of ATDPs

Cluster	Item	Exporter's	Buying quantity	Average buying rate (Rs/Kg)	Export destinations	Frequency of Shipments	Export Earnings (US\$)/ year
ANU-SBNA	Small Banana	Ceylon Fresh Fields Pvt Ltd (With Agreement with PUC)	7312.5 Kg Weekly	170	Middle East	Weekly	772,200.00
ANU-SBNA	Small Banana	Individual Exporter	200 kg Weekly	170	Middle East	Weekly	21,120.00

The table shows the exported volumes and export earnings of small banana in Anuradhapura District focusing on small bananas. It details the exporting clusters, items, exporters, buying quantities, average buying rates, export destinations, frequency of shipments, and annual export earnings. The bulk of small banana exports is managed by Ceylon Fresh Fields Pvt Ltd, with a substantial weekly export quantity of 7312.5 Kg. while an individual exporter buys small amount for export purpose. Both exporters have a consistent buying rate of 170 Rs/Kg, reflecting a stable market price for small bananas. Ceylon Fresh Fields Pvt Ltd significantly leads in annual export earnings with 772,200 USD, while the individual exporter contributes 21,120 USD. This disparity highlights the impact of larger-scale operations and formal agreements on export profitability. Both exporters target the Middle East market with weekly shipments, underscoring the region's demand for small bananas and the importance of regular, reliable supply chains. The export data for small bananas from the ANU-SBNA cluster demonstrates the effectiveness of structured agreements and large-scale operations in achieving higher export volumes and earnings. The Middle East market's consistent demand and the competitive buying rate further support the success of these exports. To maximize export potential, other clusters could consider adopting similar agreements and expanding their market reach

#### 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
ANU-GCL	N/A	N/A	62	N/A	N/A	N/A	N/A	
ANU-BTGD	N/A	N/A	40	N/A	N/A	N/A	N/A	
ANU-MSHM	Rajarata Agmiracle Ltd	2023.03.13	50	9	18%	37,500.00	1,018,407.00	

# Cluster Completion Report – North-Central Province - ASMP

<b>ANU-PSNFT</b>	Andarawewa Agri Ltd	2023.03.13	100	100	100%	500,000.00		Earlier Aloe vera cluster
<b>ANU-GNT</b>	Mahawilachchiya Agro product Trading Ltd	2023.03.14	100	53	53%	250,000.00	1,325,000.00	Earlier Moringa cluster
<b>ANU-MZD</b>	N/A	N/A	200	N/A	N/A	N/A	N/A	
<b>ANU-SBNA</b>	Rajanganaya A park Ltd	2022.11.06	500	381	76%	4,058,734.46	48,456,686.09	
<b>ANU-DCL</b>	Ceylon Agro Park Ltd	2023.01.25	400	253	63%	2,384,500.00	3,895,250.00	
<b>ANU-GVA</b>	Ipalogama Agri products Ltd	2023.04.29	300	213	71%	2,945,000.00	2,999,428.00	
<b>POL-GCL</b>	N/A	N/A	40	N/A	N/A	N/A	N/A	
<b>POL-BTGD</b>	N/A	N/A	30	N/A	N/A	N/A	N/A	
<b>POL-MSHM</b>	N/A	N/A	30	N/A	N/A	N/A	N/A	
<b>POL-ALVR</b>	N/A	N/A	100	N/A	N/A	N/A	N/A	
<b>POL-DCL</b>	LPL Agri holding Ltd	2022.12.05	380	154	41%	1,540,000.00	1,961,590.00	
<b>POL-PPA</b>	Ceylon Fresh Papaya Ltd	2023.05.08	300	173	58%	1,730,000.00	888,770.00	
<b>POL-VEG</b>	Ceylon Organic Vegetable Ltd	2023.11.23	300	243	81%	2,430,000.00	461,116.00	

Clusters such as ANU-MZD and POL-GCL lack established PUCs, limiting organized farmer engagement and potential income. Higher shareholder participation is observed in ANU-SBNA with 76%. Clusters like ANU-SBNA and ANU-DCL show strong performance in both capital raised and income, while POL-PPA and POL-VEG have relatively lower income despite significant farmer participation. Several clusters, including ANU-MZD and POL-MSHM, show potential for organized development through PUCs. Some of the established and registered PUCs do not have a satisfactory shareholder base. Most successful cluster is Rajanganaya A park Ltd followed by Ceylon Agro Park Ltd, Ipalogama Agri products Ltd and LPL Agri holding Ltd.

Higher farmer shareholder participation should be encouraged to raise share holder capital which can be utilized in future investment of the PUC. Without diversifying the markets, members of the PUCs may not be able to earn higher profits.



#### 4.6 Training and Capacity Building of Beneficiaries

Cluster	GAP		FPO/ Technical Training		PUC training		FBS		
	# of Trainings	# of Beneficiaries	# of Trainings	# of Beneficiaries	# of Trainings	# of Beneficiaries	# of Trainings	# of Beneficiaries	% of participation
ANU-GCL			11	60			30	65	81%
ANU-BTGD			11	23			30	28	70%
ANU-MSHM			11	35	4	40	4	40	80%
ANU-PSNFT	4	50	11	90	4	100	30	95	95%
ANU-GNT			11	65	4	100	30	70	70%
ANU-MZD									
ANU-SBNA	4	50	17	264	4	320	84	236	73%
ANU-DCL	4	50	5	382	4	160	90	194	54%
ANU-GVA	4	50	2	85	4	140	48	132	68%
POL-GCL			11	20			30	25	63%
POL-BTGD			11	17			30	15	50%
POL-MSHM			11	28			30	27	90%
POL-ALVR			11	71			30	67	67%
POL-DCL	3	50	15	399	10	410	108	360	49%
POL-PPA	3	50	14	430	9	488	60	200	42%
POL-VEG	3	50	7	112	8	425	24	81	21%

Training programs were conducted across agricultural clusters in the Anuradhapura (ANU) and Polonnaruwa (POL) districts, with a focus on GAP (Good Agricultural Practices), FPO (Farmer Producer Organization)/Technical Training, PUC Training, and FBS training. In some of the clusters minimal training activities have been conducted. No training sessions have been conducted for ANU-MZD clusters, indicating a lack of capacity-building activities. Clusters like ANU-PSNFT (95% participation) performed exceptionally well, while farmer engagement in POL-VEG (21% participation) is not satisfactory. Most training efforts have been concentrated on FBS, while GAP and PUC training were less prevalent across clusters. ANU-PSNFT, ANU-GCL, ANU-MSHM, ANU-SBNA, ANU-GVA, and POL-DCL showed substantial participation and well-rounded training programs. It is recommended to use high-performing clusters like ANU-SBNA as benchmarks to replicate best practices in underperforming areas.

## CHAPTER 05: CONCLUDING REMARKS

- Highest allocation and cost are recorded related to ATDP development.
- Financial progress in market infrastructure development ranges from 3.25% to more than 100%
- On average the financial progress in each activity of market infrastructure is satisfactory.
- There are many ongoing projects still in market infrastructure development.
- In comparison to estimated yield, the actual yield lower in most of the clusters.
- Some PUCs have secured market linkages with buyers and export performance of banana cluster is commendable.
- Many PUCs have been registered. Members have purchased shares, with ownership ranging from 18% to 100%. Shareholder base is not commendable in most of the PUCs.
- Participation of beneficiaries in training programs is below 75% in FBS training.
- A few training sessions on GAP have been carried out
- Overall, the financial progress of infrastructure projects shows mixed results across clusters and project types. Some clusters have performed well, with actual expenditures meeting or exceeding the awarded values with some cost overrun. Commendable progress has been made in key areas, including the completion of irrigation improvements, road rehabilitation, and processing center construction. The ongoing installation of solar irrigation systems, expected to finish by December 2024, further underscores the commitment to modernizing agricultural infrastructure. The ATDP investments demonstrate a focused approach towards enhancing agricultural productivity and market readiness in Anuradhapura and Polonnaruwa. The emphasis on high-value crops like guava, dry chili, and vegetables reflects an alignment with market demands and potential for increased farmer income. Significant gaps between expected and actual yields are observed in some clusters while High production costs reduce profit margins despite favorable prices. Over-reliance on middlemen limits profitability. Integration with PUCs and partnerships with large-scale buyers can improve outcomes. Except for the Guava cluster, actual yields of other clusters are lower than the expected volume. However, the difference between COP/kg and the unit price is mostly substantial, implying higher profit gains for the farmers. Some products are purchased by leading companies, hotels, and supermarkets without an agreement which is commendable. Diversifying marketing channels by leveraging PUCs and connecting with export markets is recommended.

## 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						
NCP	Anuradhapura	Dry Chili	<b>Processing centre</b> - Chili Processing Center- Kiralogama	420	Kiralogama			06-Aug-24	12-Dec-24	On-going	25,850,000.00	25,746,609.76	13,807,460.69		
			<b>Processing centre</b> - PPMU Office Building									541,936.04	673,767.07		
			<b>Road</b> - Rehabilitation of Canal Road 307 D3 in Chili cluster in Galnewa, Anuradhapura		Galnewa	24-Jan-24	06-Aug-24			On-going	6,600,000.00	6,631,715.64	4,793,659.58		Work completed . Pending final payment
			<b>Road</b> - Reghabilitation of Canal Road 411/D2 and D4 in Chili cluster in Thalawa,		Thalawa	24-Jan-24	06-Aug-24			On-going	19,340,000.00	19,271,739.59	16,043,202.92		Work completed . Pending final payment
			<b>Irrigation</b> - Improving Lift Irrigation system Replasing PVC Pipe and Reconstructing of Concrete Canal Lining at Rajanganaya RB trac-6		Rajanganaya			19-Nov-18	28-Jun-18	Functioning	34,325,962.11	27,106,608.86	35,522,276.35		
			Irrigation - The Rehabilitation and Improvement of Kurundankulama Kudawewa Tank at Thirappane								9,084,911.58	7,297,569.16	7,532,551.53		
			Irrigation - The Improvement of Tank Bund, Flud Bund, Repairing Sluic and Spil and Canal System Kurundankulama					21-Nov-18	28-Jun-19	Functioning	11,569,431.40	10,054,134.37	9,184,639.27		

			Mahawewa at Thirappane											
			<b>Irrigation</b> -The Improvement of Nabadawewa Tank at Thalawa	5	Nabadawewa			04-Mar-19	03-Aug-19	Functioning	5,936,492.74	5,042,895.95	4,978,246.52	
			<b>Irrigation</b> - Installation 44 nos. of solar irrigation systems					22-May-23		On-going		70,669,731.00	70,669,731.00	
			<b>Irrigation</b> -The Improvement of Kelekumbukwewa Field Canal System at Thalawa		Thalawa			17-Oct-18	07-Apr-19	Functioning	3,579,854.42	3,761,222.58	4,088,337.44	
		Guava	<b>Processing</b> - Proposed Building for Guava Collecting Center at Kadiyangalla of Ipalogama DS Division	60	Ipalogama			30-Jul-19	06-Dec-19	Functioning	5,066,037.31	5,203,011.81	4,626,404.90	
			<b>Processing centre</b> - PPMU Office Building									541,936.04	673,767.07	
			<b>Road</b> - Rehabilitation of Hapitiyagama First Lane in a Guava cluster, Kadiyangalla in Ipalogama,		Ipalogama			08-Apr-24	16-Oct-24	On-going	12,560,000.00	11,221,800.00	6,169,242.52	Pending final payment
			<b>Irrigation</b> - Construction of 13 Nos. of Agro Wells in Guava cluster, Ipalogama	50	Ipalogama	01-Feb-22	10-Sep-22	01-Feb-22		On-going	18,200,000.00	24,150,636.00	13,276,610.69	only 4 wells were completed
			<b>Irrigation</b> - Two Agro Wells Ipalogama		Ipalogama			08-Apr-24	16-Oct-24	On-going	5,120,000.00	5,160,524.68	3,115,345.63	
			<b>Irrigation</b> - Rehabilitation and Improvements of					17-Oct-18	29-Mar-19	Functioning	5,417,079.70	5,609,601.01	6,210,160.24	

			Kadiyangalla Tank at Ipalogama DS											
			<b>Irrigation</b> - 14 nos. of solar irrigation systems					22-May-23	On-going		22,485,823.50	22,485,823.50		
			<b>Irrigation</b> - Construction of Macro Level Drainage System for Guava cluster, Ipalogama,		Ipalogama	31-May-24	13-Oct-24		Other	25,030,000.00	22,502,600.00	3,055,236.48		Contractor is to be terminated due to farmers' objections
		Mushroom	<b>Processing Centre</b> - Construction Mushroom Cultivation Center with Steel Rack at Ipalogama DS Division	50	Ipalogama			14-Feb-19	04-Jul-19	Functioning	13,511,810.32	9,783,990.65	10,527,471.68	
			<b>Processing centre</b> - PPMU Office Building								541,936.04	673,767.07		
			<b>Processing Centre</b> - Construction of 20 Numbers of Mushroom Growing Houses at 20 Locations of Ipalogama DS Division	50	Ipalogama			14-Feb-19	04-Jul-19	Functioning	12,243,954.17	10,585,512.00	12,350,906.48	
		Gren Chili & Bitter Gourd	<b>Processing centre</b> - PPMU Office Building								541,936.04	673,767.07		
			<b>Irrigation</b> - Rehabilitation of Maddumagama Tank at Nuwaragampalatha Central		Nuwaragampalatha Central	17-Oct-18	01-Apr-19	17-Oct-18	20-Nov-19	Functioning	2,661,496.75	2,780,937.90	2,589,454.99	
			<b>Irrigation</b> - The Rehabilitation of Weerawewa Tank and Irrigation System at Nuwaragampalatha Central	10	Nuwaragampalatha Central			17-Oct-18	27-Apr-19	Functioning	5,272,477.26	5,313,266.28	5,463,492.89	

			<b>Irrigation</b> - The Improvement of Halmillawewa Tank at Nuwaragam Palatha East	5	Nuwaragam Palatha East			14-Feb-19	03-Aug-19	Functioning	6,209,332.04	5,103,680.83	4,272,993.94		
			<b>Irrigation</b> - The Improvement of Nelumkanniya Tank at Nuwaragampalatha East		Nuwaragam Palatha East	17-Oct-18		17-Oct-18	01-Apr-19	Functioning	2,044,028.47	2,155,445.42	2,111,478.28		
			<b>Irrigation</b> - The Rehabilitation of Ihalamoragoda Tank at Thalawa					17-Oct-18	27-Apr-19	Functioning	5,112,719.61	5,440,870.60	5,318,441.47		
			<b>Irrigation</b> -The Rehabilitation of Iththewewa Tank at Nuwaragampalatha East					17-Oct-18	27-Apr-19	Functioning	4,193,334.11	4,343,418.56	3,320,745.26		
			<b>Irrigation</b> - Rehabilitation and Improvements of Paladikulama Mahawewa, Pokunuwewa & Unagaswewa Tanks of Nuwaragam Palatha East	10		17-Oct-18	29-Mar-19	17-Oct-18	30-Jun-19	Functioning	3,727,136.11	4,342,096.52	3,664,774.46		
			<b>Irrigation</b> - Rehabilitation of Iththewawewa Tank (Paladikulama) at Nuwaragam Palatha East					17-Oct-18	29-Mar-19	Functioning	1,673,403.84	1,814,247.83	1,946,239.48		
			<b>Irrigation</b> - Improvement of Irrigation Canal Grainage Canal and Bund Road Construction, Sluice of Kaluwila Tank and Construction Retaining Wall at	15	Nachchaduwa			04-Jun-19	04-Dec-19	Functioning	15,551,283.33	15,333,779.52	13,816,605.26		

			Nachchaduwa DS Division											
		Aloe vera	<b>Processing centre - PPMU Office Building</b>								541,936.04	673,767.07		
			<b>Road</b> -The Renovation of Spill Cum Causeway & Foot Path Bridge Under Wilachchiya DS Division	25	Wilachchiya			20-May-20	28-Oct-20	Functioning	4,644,000.00	4,976,299.04	4,357,176.57	
			<b>Road</b> - Improvement Tank Bund, Sluice, Spil, Agro Road and Canal System of Hinguruwewa Tank at Nuwaragampalatha Central	25	Nuwaragampalatha			19-Nov-18	28-Jun-19	Functioning	12,119,652.01	9,765,855.31	8,987,955.66	
			<b>Irrigation</b> - Improvement of Canal System of Galpoththegama Tank at Nuwaragampalatha Central	25	Nuwaragampalatha			19-Nov-18	28-Jun-19	Functioning	30,543,951.19	26,353,746.42	26,841,129.68	
		Banana	<b>Processing Centre</b> - Construction of Banana Collection and Processing Center	416	Rajanganaya	23-Aug-24	28-Dec-24			On-going	76,850,000.00	65,914,516.80	13,182,890.00	Slow Progress
			<b>Processing Centre</b> - Construction of Banana Processing Center-Tempory	416	Rajanganaya					Functioning		5,428,599.13	5,428,599.13	
			<b>Processing centre - PPMU Office Building</b>								541,936.04	673,767.07		

			<b>Road -</b> Rehabilitation of 21.5 Km Agri Road at Rajanganaya in Anuradhapura	416	Rajanganaya	17-Feb- 22	30-Jun-23		On-going	25,430,000.00	25,753,669.87	19,889,704. 28	
			<b>Irrigation -</b> Construction of 18 Nos. of Agro Wells in Banana Cluster - Rajanganaya	50	Rajanganaya	28-Jan- 22	22-Sep-22	28-Jan- 22	On-going	28,000,000.00	34,385,796.00	23,659,798. 67	Only 14 nos were completed
			Irrigation - Solar Irrigation Systems - 49 nos.		Rajanganaya			22-May- 23	On-going		78,700,382.25	78,700,382. 25	
			<b>Irrigation -</b> Excavation 70 no of Agrow Wells in Rajanganaya		Rajanganaya				Functioni ng		10,788,900.00	10,788,900. 00	
	Moringa		<b>Processing centre - PPMU Office Building</b>								541,936.04	673,767.07	
			<b>Irrigation -</b> Rehabilitation of Tank Bund, Constructing Sluice and Spill of Dewalagama Tank at Wilachchiya	50						25,218,573.23	19,022,619.05	17,103,443. 13	
	Polonnaru wa	Dry Chili	<b>Processing centre - Building Extension &amp; renovation</b>	380	Sewanapitiya	14-Aug- 24	15-Dec-24	09-Aug- 24	On -Going		24,791,410.60	9,025,318.3 7	85% phjyscal progress despite of 14% financial progress
			Irrigation - 18 nos. of Solar irrigation systems					22-May-23	On-going		28,910,344.50	28,910,344. 50	
			<b>Irrigation -</b> Construction of 33 Nos. of Agro Wells in Chili cluster, Polonnaruwa		Welikanda			08-Mar- 22	04-Sep-22	On -Going	49,197,785.40	40,997,115. 88	18 completed ,2 half excavation ,13 balance non excavation



		Papaya	<b>Processing Centre</b> - Building rehabilitation	50	Glathalawa	14-Aug-24	15-Dec-24	09-Aug-24		On -Going		28,411,079.42	923,357.00		Low physical progress
			<b>Road</b> - Improvement of 0.9Km Length Agriculture Road with 4.8m Length Courseway and 3 Culverts at Dewahena Road, Elahera Cluster	25	Elahera			04-Jun-19	04-Nov-19	Functioning	12,610,790.74	12,459,945	11,302,076.87		Though there is a 20% financial progress, the job was completed very recently.
			<b>Road</b> - Improvement of 1.1Km Length Agriculture Road with 4 Culverts at Kandurupitiya of Atharagallewa Elahara Cluster	25	Elahera			04-Jun-19	04-Nov-19	Functioning	11,057,751.61	10,825,140.89	9,542,749.56		
			<b>Irrigation</b> - 2 nos, of solar irrigation systems						22-May-23	On-going		3,212,260.50	3,212,260.50		
			<b>Irrigation</b> - Rehabilitation of Five Common Agro Wells at Elahera DS Division	25	Elahera			04-Jun-19	04-Nov-19	Other	11,163,037.27	13,605,375.60	3,779,271.00		Terminated by wildlife
		Green Chili & bitter gourd	<b>Road</b> - Improvement of Canal System and Agriculture Road with Culvert of Abhayawewa Tank at Hingurakgoda	5	Hingurakgoda	05-Dec-18	03-May-19	05-Dec-18	31-Aug-19	Functioning	13,752,379	12,756,189.26	14,567,743.91		
			<b>Irrigation</b> - The Rehabilitation and Improvement of Makulawewa Tank and Canal System at Hingurakgoda	5	Hingurakgoda			19-Nov-18	28-Jun-19	Functioning	7,554,359	6,806,245.43	5,162,173.49		
			<b>Irrigation</b> - Improvement of Dehiathhawala Tank and Unagollewa Tank						10-Aug-18	Functioning	3,591,330	3,570,018.79	3,204,150.05		

			with Canal System at Hingurakgoda											
			<b>Irrigation</b> - 1 solar irrigation system					22-May-23	On-going		1,606,130.25	1,606,130.25		
			Irrigation - improvement Rambawewa Tank at Medirigiriya DS Division	5	Medirigiriya		04-Jun-19	04-Nov-19	Functioning	14,604,572	11,980,583.59	8,956,412.96		
		Mushroom	<b>Processing</b> - Construction Mushroom Cultivation Center with Steel Rack at Dimbulagala DS Division	40	Dimbulagala		14-Feb-19	04-Jul-19	Functioning	13,511,810.32	10,213,506.00	9,340,764.31		
			<b>Processing</b> - Construction of 30 Numbers of Mushroom Growing Houses at 30Locations of Dimbulagala DS Division	40	Dimbulagala		14-Feb-19	04-Jul-19	Functioning	17,512,191	16,106,104.80	16,880,646.74		
			<b>Road</b> - Access Road to Mushroom common Center-Dimbulagala	40	Dimbulagala						5,931,190.00	5,297,854.08		

## Annex 2: ATDP Farmer Inputs

District	Cluster Name	Item	Targeted units	Units distributed
Anuradhapura	ANU-GCL	Drip Irrigation system		80
		Seeds		6.4 Kg
		Polymulch		62400 LM
		Insect proof net		16000 LM
	ANU-BTGD	Drip Irrigation system		40
	ANU-MSHM	Processing center equipment (Gas stove, Gas cylinder, heater jug, Soup cup set, Aluminium sauce pan, Blender, set of drinking glasses, 25 L bucket, Set of forks and spoons, curry spoon, knife, oil filer spoon, aluminium pan, Aluminium, oil strainer spoon		
	ANU-PSNFT	Sprayjet irrigation systems		50
		Sprinkler irrigation systems		50
		Water Pumps		100
		Plastic crates		250
	ANU-GNT	Spray jet irrigation systems		50
		Sprinkler irrigation systems		50
		Water Pumps		100
		Plastic crates		250
		GI pipes 1 1/4"		1000
		GI pipes 1"		4500
	ANU-MZD	Sprinkler irrigation systems		100
	ANU-SBNA	Plastic crates		4800
		Plastic tree bags (Bunch cover bags) (43.8 Rs)		24000
		Plastic tree bags (Bunch cover bags) (43.8 Rs)		24000
		Plastic nursery trays		50000
		Low-pressure mini sprinkler irrigation systems		15
		Polythene covering bags		130000
		Micro sprinkler irrigation systems		200
		Sprinkler irrigation systems		100
	ANU-DCL	Polymulch		150000 LM
		Chili dryer		1
		Insect proof nets		20000 LM
		Solar powered water pumps		90
		Insect Proof Net		7000
		Galvanized Iron Pipes		129
	ANU-GVA	Corrugated carton for guava in Anuradapura District. Central province - Tray box (84 Rs)		4500
		Corrugated carton for guava in Anuradapura District. Central province - Top and bottom (Telescopic box) (144 Rs)		4500
		Fruit covering bags		800000
		Fruit covering bags		780000
		Polymulch		60000
		Velem prime chemical for Guava cluster in Anuradhapura and Matale districts		300 L
		Field drainage systems		1
		Sprinkler irrigation systems		50
		Guava fruit covering bag		500000
		Espalier Systems		50 Nos
		Yellow sticky		

Polonnaruwa	POL-GCL	Irrigation system - Drip tube		40
		Chili Seeds		3.2 kg
		Polymulch		62400 LM
		Insect proof net		8000 LM
	POL-BTGD	Irrigation system - Drip tube		30
		Insect proof net		6000 LM
	POL-MSHM	N/A		
	POL-ALVR	Mini Sprinkler Irrigation and Pumps		100
		Aloe vera plants		200000
	POL-DCL	Solar powered water pumps		50
		Yellow sticky		
	POL-PPA	Low-pressure Mini sprinkler irrigation systems with drip tape		300
		Polymulch		300000
	POL-VEG	Yellow sticky cards		69000
		Plastic nursery trays in Polonnaruwa district		48000
		Polymulch sheets		672000
		Insect proof nets		60000 LM
		Drip irrigation systems (Drip tape)		300
		Galvanized iron pipes		6000
		Weighing & Packing Conveyor		1
		Drain Conveyor		1
		Air-Drying Conveyor		1
		Dispatch roller conveyor		2
		Preliminary Washing Unit		1
		Chemical Treatment Tank		1
		Weighing & Packing Tables		10
		Manual Pallet Tracks		1
		Box making machine		1
		Supply Delivery Profile with Spirals		19600 LM

## Annex 3: PUC Assets

Province	District	Cluster	Processing Machinery		Compost Making		Office Assets		
			Machinery Item	Cost - LKR	Item	Cost - LKR	Asset Item	Cost - LKR	
EP	Anuradhapura	Dry Chili - Ceylon Agro Park	kerosene dryer	2,950,000.00	multichopper	499,100.00	Conference Table with Six Chairs	156,000.00	
			Heat Pump dryer - 2 nos.	24,044,746.00	compost sieving machine	1,395,900.00	Executive Table	21,492.00	
			Grinding mills	118,000			Clerical Table - 2 nos.	32,400.00	
			Electric Scale	92,250			Office Chairs - 3 nos.	71,280.00	
							Steel Cupboard	17,900.00	
							Laptop Computer with Bag	410,000.00	
							Printer	41,900.00	
							Multimedia Projector	115,000.00	

			Boiler	650,000.00			Steel cupboards	35,639.00	
			Iron racks	1,918,000.00			Clerical tables	32,400.00	
			Weighing balance	88,000.00			Clerical chairs	71,280.00	
							Multimedia screen with Projector	115,000.00	
							Laptop	410,000.00	
							Printer	41,900.00	
			Total	3,192,900.00		-		884,203.00	4,077,103.00
		Aloe Vera - Andarawewa Agri Ltd.					Conference Table with 6 chairs	156,000.00	
							Executive Table	21,492.00	
							Clerice Table	32,400.00	
							Chairs	71,280.00	
							Steel Cupboard	35,638.92	
							Laptop - 2nos	410,000.00	
							Printer	41,900.00	
							Multimedia Projector	115,000.00	
			Total	-		0		883,710.92	883,710.92
		Banana	Bubble washing tank	7,600,000.00			Conference Table with Four Chairs	156,000.00	
			stainless Steel Tank	2,025,000.00			Executive Table	21,492.00	
			Drain conveyor	6,105,000.00			Clerical Table	32,400.00	
			Mesh conveyor and hot air blowing systems	8,110,000.00			Office Chairs	71,280.00	
			Sorting and pacing PVC conveyor	3,561,000.00			Steel Cupboard	35,638.00	
			Roller conveyor	1,300,000.00			Laptop Computer - 2 nos.	410,000.00	
			stainless Steel Table	5,500,000.00			Printer	41,900.00	
			Smart Weighing system	1,894,000.00			Multimedia Projector	115,000.00	

			Stainless steel tank (304l)	2,025,000.00					
			Stainless steel Sink (450mm,1800mm,300mm)	340,000.00					
			water tank -Iron	496,778.00					
			Pallet tracks	176,000.00					
			Box Former machine (5.5kg size)	335,000.00					
			Box making machine	375,000.00					
				39,842,778.00		0		883,710.00	40,726,488.00
		Moringa	Plastic Crates -250 nos.	745,200.00				Conference Table with Four Chairs	156,000.00
								Executive Table	21,492.00
								Clerical Table	32,400.00
								Office Chairs	71,280.00
								Steel Cupboard	35,638.00
								Laptop Computer with Bag	205,000.00
								Printer	41,900.00
								Multimedia Projector	115,000.00
			Total	745,200.00		0		678,710.00	1,423,910.00
	Polonnaruwa	Dry Chili	Grinding mills	118,000.00				Conference table with six chairs	156,492.00
			Heat Pump dryer	11,643,750.00				Executive table	21,492.00
			Kerosene Dryer	1,685,000.00				Clerice table	32,400.00
			Iron Stand	158,500.00				Office Chairs	71,280.00
								Laptop	410,000.00
								Printor	41,900.00
								Multimdia projector with sreen	115,000.00
								steel cupboards	35,638.00
			Total	13,605,250.00		-		884,202.00	14,489,452.00
		Vegetable						Conference Table with Four Chairs	156,000.00

							Executive Table	21,492.00	
							Clerical Table	32,400.00	
							Office Chairs	71,280.00	
							Steel Cupboard	35,638.00	
							Laptop Computer - 2 nos	410,000.00	
							Printer	41,900.00	
							Multimedia Projector	115,000.00	
							883,710.00	883,710.00	
				Papapya - Ceylon Fresh Papaya Ltd.	Weighing & packing conveyor	2,920,466.48			
Drain conveyor	1,550,270.51						Executive table	21,492.00	
Air drying conveyor	4,352,885.47						Clerice table	32,400.00	
Dispatch roller conveyor	2,008,033.20						Chairs	71,280.00	
Preliminary washing unit	5,197,619.35						Steel cupboard	35,638.92	
Chemical treatment plant	1,698,659.07						Laptop	410,000.00	
Weighing & packing tables - 10 nos.	3,676,890.86						Multimedia projector with screen	115,000.00	
Manual Pallet trucks	230,000.00						Printor & HDTV Cable	41,900.00	
Total	21,634,824.93				-		841,810.92	22,476,635.85	
Total			126,618,198.93		3,790,000.00	7,689,738.84	138,097,937.77		