



**UNIVERSITI TEKNOLOGI MARA PERLIS BRANCH
MARCH 2021 – AUGUST 2021**

**MGT666
INDUSTRIAL TRAINING REPORT**

**SWOT ANALYSIS AND HARUMANIS BUSINESS OF UNIT
LADANG UITM PERLIS**

GROUP

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STUDENT

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I. EXECUTIVE SUMMARY

The full 24 weeks of my industrial training which began from 1st March until 13th August 2021 at Unit Ladang UiTM Perlis was an eye-opening and stimulating experience for me in order to complete the Industrial Training course (MGT666). The main objective of this internship is to make sure student to be able to fully gain knowledges and practical skills that will help them in their high paced future careers. This report has enclosed an overview background of Unit Ladang UiTM Perlis and the reflection of my training in terms of knowledges and skills that I have gained to overcome obstacles throughout my industrial training. An overview of every roles and responsibilities that given to me by Unit Ladang UiTM Perlis during my internship also contain in this detailed report.

One of the main objectives of this industrial training report is to conduct a SWOT analysis toward the company in which to learn their strengths, weaknesses, opportunities, and threats throughout my internship period. From what I have discovered, Unit Ladang's strengths and weaknesses are affected by internal forces whereas their opportunities and threats are affected by external forces. In this report, there is a discussion about the SWOT analysis of the company and recommendations on how to improves the performance of the company.

A feasibility study on whether Harumanis business of Unit Ladang UiTM Perlis is a profitable business entity or not is also one of the main objectives in this MGT666 report. The study also includes a discussion and recommendation towards the process of managing Harumanis plantations at the Unit Ladang UiTM Perlis. There is also an appendices section to which I have submitted unclassified documentation of my participation and contribution during my internship at Unit Ladang UiTM Perlis.

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PART 3: COMPANY'S PROFILE

Unit Ladang is one of the subsidiaries under the Academic Affairs Divisions (HEA) of UiTM Perlis which is located at the Arau campus. The company is responsible to manage a land of 197 acres in the campus that function to support the Faculty of Agricultural and Agrotechnology in the process of learning and research related to agricultural areas. There are multiple commodities plantations such as fruits, vegetables and also livestock farming.

Functions:

- 1) Supporting researchers in their studies related to agricultural activities.
- 2) Providing practical training and internships to students of UiTM.
- 3) Assisting and supporting the process beautification of the UiTM Perlis campus and events.
- 4) Generating income through the sales of harvested fruits and livestock farming.

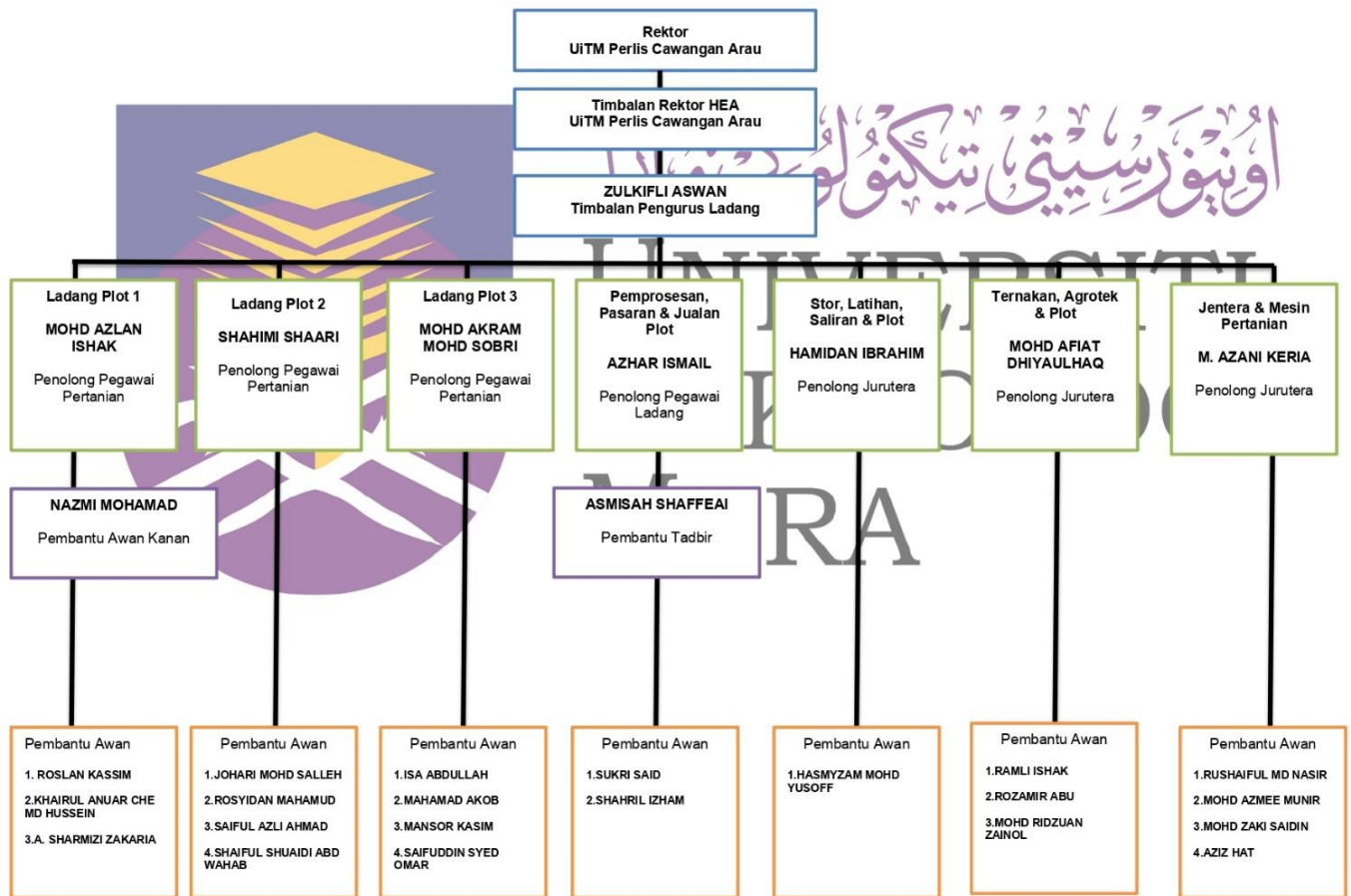
Products:

- 1) Harvested Fruits such as Mangoes, Soursops, Cash Crops
- 2) Livestock such as Cows, Rabbits, Deers

Mission & Vision:

Memberi sebaik-baik khidmat dengan menyediakan kemudahan kepada pelajar-pelajar Fakulti Perladangan dan Agroteknologi agar dapat melahirkan graduan UiTM yang berkualiti, menyediakan kemudahan penyelidikan kepada pensyarah-pensyarah, menyediakan kemudahan peralatan pertanian kepada unit-unit lain di UiTM Perlis dan sentiasa berusaha meningkatkan pendapatan hasil dari usaha-usaha perladangan.

ORGANIZATIONAL CHART



PART 4: TRAINING REFLECTION

1. Duration: 1 March 2021 until 13 August 2021
2. Specific Department: Department of Processing, Marketing, and Sales
3. Roles, task, assignment given:
 - a) Involve the processing process of every harvested crop at Pusat Jualan such as Harumanis.
 - b) To assist in creating logos and brochure for the company.
 - c) Constructing and designing business plans for company's business operation such as Harumanis Business, Rabbit Breeding Business and Agricultural Tourism.
4. Benefits I received and gained:
 - a) Allowances
 - i. No basic allowances given
 - ii. RM8/ hour (Student Overtime)
 - b) Experiences and Skills
 - i. Gain the ability to adapt and handle towards unexpected events such as the worldwide pandemic Covid-19
 - ii. Experienced real-life fast-paced working conditions.
 - iii. Acquired knowledges about the agricultural industry.
 - iv. Able to understand the significance of teamwork and decision making in managing a project.
 - v. Understand the importance of excellent multi-tasking which will affect the punctuality of every work done.

PART 5: SWOT ANALYSIS

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> • Highly skilled and professional staffs of Unit Ladang UiTM Perlis in agriculture. • Acquired basic necessities and machinery funding to undergo agriculture activities. 	<ul style="list-style-type: none"> • The lack of knowledges and experiences to market and promote the fruits yield. • Unable to fulfil high demand of Harumanis.
OPPORTUNITY	THREAT
<ul style="list-style-type: none"> • Able to generate profit for UiTM Perlis. • Able to create high demand downstream products from fruit crops. 	<ul style="list-style-type: none"> • Competitive market sector in the sales of fruit crops. • Pests and bad weather conditions affecting fruit crops.

The first strength that I have discovered in Unit Ladang UiTM Perlis is that all of the staffs are all highly skilled and professional in the area of agriculture activities. In order to harvest high quality fruits from the plantations in UiTM Perlis, the workers needed to have a strong working background in agriculture in terms of knowledges and skills which is why I believed that every staff are very competent to take care of the plantations. Based on the organizational chart of Unit Ladang UiTM Perlis, every employee has been assigned to their job responsibilities based on the employee's working experiences and expertise. The successful of harvesting Harumanis fruits shows that the upper management in Unit Ladang UiTM Perlis also have a very strong leadership skill in which they able to guide and delegate their subordinates properly so as to keep the plantations in UiTM Perlis healthy and able to bear fruits. Thus, proving that Unit Ladang UiTM Perlis have employees who are qualified and skilled to operate and taking care every plantation in the UiTM Perlis.

Next is that I believed Unit Ladang UiTM Perlis are funded by UiTM Perlis to undergo agriculture activities is also one of the strengths in this company. The company is funded in terms of basic necessities such as water and electricity and also agricultural machinery and equipment which can make any agriculture activities more effective and efficient. On the account of Unit Ladang UiTM Perlis is being one of the subsidiaries of the Academic Affairs Division (HEA) in UiTM Perlis, the company is funded because of their support to the Faculty of Plantation and Agrotechnology in terms of learning and research in agriculture. This shows that the company is resourceful and fully equipped in making sure that every plantation can be tend to its every needs. Both strengths that I have experienced in this company in which gives skilled employees sufficient amount of resources to manage every plantation in UiTM Perlis at the highest level of quality standards so that the company can serve its purposes.

One of the weaknesses that I have experienced during my industrial training at Unit Ladang UiTM Perlis is that the employees lack the knowledges and experiences to promote and market the harvested fruits from the plantation. This is due to the fact that almost every employee in this company came from a non-business background which makes them only expert in the field of agriculture activities. In my opinion, this is a major problem for this company as they are engaging in the business of selling harvested fruits. Even though, the company have a facility that act to be the main centre for selling fruits, but the facility is located in the UiTM Perlis which makes difficult to market outside of the campus. I would like to recommend that in order Unit Ladang to be able to market and promote the business of the company so that it can be reach outside of UiTM Perlis, the company need to be able to have a good financial planning and marketing strategies. As the company is supported by the Academic Affairs Division (HEA) of UiTM Perlis, they can obtain these knowledges and experiences from the Faculty of Business and Management (FBM).

The business of selling Harumanis is always have been the main focus at Unit Ladang UiTM Perlis but due to the company inability to keep up with the high demand is one of the weaknesses that I have found in this company. Currently, there are five plots of Harumanis in which there are around of 1468 trees. Even though, the number of Harumanis trees are sufficient enough but the quality and quantity of fruits produced are not. For instance, a Harumanis tree will produce a lot of fruits but low quality while other trees will produce less fruits but high quality. This is because of the unexpected natural causes in the world of agriculture such as bad weather and pests in the plantations. Employees who are working directly at the plantations of UiTM Perlis should be more cautious and observant towards the

condition of every plantations. Increasing the number of Harumanis plantation is also a best alternative to increase the production of high quality Harumanis fruits. The company can decide to discard any other fruit plantations that are suitable to be replace with Harumanis plantations in the future.

There are two opportunities to which I believed Unit Ladang UiTM Perlis can achieve, one of them is that the company have the ability to generate profit for UiTM Perlis. Even though, the company main function is to assist the learning and research process of the agriculture activities but due to them to be able to grow and harvest multiple types of fruits from the plantations, they can also operate a business activity that sell those harvested fruits. For example, Harumanis is the most demanded mango fruit in every parts of Malaysia and because of Perlis is the suitable state to grow them, it can be a very big opportunity for the company to sell Harumanis fruits. In order for the company to be able to generate profits for UiTM Perlis, Unit Ladang need to have a precise and thorough business planning mainly in financing and marketing. This is because to be able to gain profits, a company should learn to minimize their cost while be able to fully maximise their production. Creating an excellent business planning should be able to prevent the company from suffering a minimum amount of losses and wasting resources.

The second opportunity that I am able to identify in Unit Ladang UiTM Perlis is that the company can create a number of downstream products from their harvested fruits. There are many types of fruits at the plantations of Unit Ladang UiTM Perlis such as mangoes, lime, coconut, and many more in which all can be made into downstream products. These fruits can be made into variations of downstream products such as fruit juice, cordials, and ice-cream. This could also create a new business product which can also increase the sales for the company. Furthermore, by creating these downstream products, the company will be able to reduce the amount of rotten fruits. For example, the company could create high demand of downstream products from the off-grade Harumanis fruits. These off grade Harumanis can be made into famous downstream products such as Harumanis juice, cordials, Harumanis with sticky rice, and also Harumanis ice-cream. The company can market and promote these products inside and outside the Arau campus of UiTM Perlis.

The first threat that I believed Unit Ladang UiTM Perlis will face is the competitive market sector in which the business of selling harvested fruits. As this is a common business, there is a statutory body which have been established such as Federal Agricultural Marketing Authority (FAMA) to help out the local and small businesses which have engaged in the agricultural business. In addition, FAMA also assist the businesses to which they have prepared an online platform called AgroBazaar Online for them to promote and sell their products. For instance, there have been a number of sellers who sell Harumanis fruits on the online platform but there are a lot more of sellers who have opened their physical stores to operate their business activity such as at the roadside or morning market. The other biggest competitor in this market sector is the hypermarkets like Tesco and Giants who also sell healthy fruits at their location to the customers. Thus, Unit Ladang need to have a strong and excellent marketing strategy in which they can penetrate the market mainly in selling Harumanis fruits and its downstream products.

The other threat that I believed the company is facing is the natural pests and bad weather which can heavily affect the plantations and the quality of fruits harvested. Dangerous pest which are present at the plantations can have a very bad effect toward the plantations. They will attack a part of a tree or the actual fruit itself to which can disturb the growth of the fruits that will be harvest. There are many types of pests such as shoot weevil, a pest that will dry up the shoot of the tree which then become infertile. Thrips is also one of the dangerous pests that is harmful to Harumanis mango as it can stun the growth of the fruits. Besides pests, other factor that can also stun the process and the growth of fruits is the bad weather conditions. Harumanis plantation for example requires a hot and dry climate to grow and nurture so that it can be healthy and as Perlis is one of the states which is suitable for this plantation. If there is an unforeseen weather conditions such as prolonged raining during the pollination phase, the bad weather condition may ruin the process thus decreasing the productions of Harumanis fruits. I would like to recommend that employees of Unit Ladang UiTM Perlis should be prepared to prevent and handle every risk that may come to the plantations.

PART 6: DISCUSSION AND RECOMMENDATION

6.1 INTRODUCTION

Farm management is the process of organizing and operating the plantations and livestock breeding in order to achieve maximum productions and create strong and positive cash flow for the business. Malaysia being one of the developed countries in the world, is full of natural resources such as soils, water, and animal diversity which can support the agriculture sector of the country. In order for a country to sustain their economic growth, they must engage the agricultural activities which is one of the most basic sources that are highly rely on the raw materials (Faruque & Ali, 2018). Agricultural activities which involved workers to manage whether their fruits and vegetables plantations or livestock breeding or even the combination of both activities which is called crop-livestock integration system. Researchers conclude that a crop-livestock integration system with a high flow of intensity will boost the efficiency of the system while other agriculture system which is more complicated and diverse will only enhances the reliability of that system (Stark et al., 2018). Agriculture activities in Malaysia have been long exists before their independence and with nowadays technological advancement, local farmers will be able to ease up any agricultural productions in terms of minimizing the risks and maximizing the outputs from their farm. For examples, upper management will be able to make a precise decision making in terms of time management to every agricultural process such as pre-cultivation process, crop cultivation and harvesting process and also post-harvest process. Other researchers believed that suitable and proper uses of technological development and digitization can increase the flexibility and efficiency of the resources and also soil condition, while being able to reduce the environment-climate on farming and the costs faced by the farmers (Bucci et al., 2019). Marketing activity is also becoming more challenging for nowadays farm management as there are many competitions in the agriculture business. Marketing cooperative should help farmers so that they will be able to market their product by sharing their experiences and advising the farmers with excellent marketing strategy (Terzi & Artukoglu, 2021).

An agricultural company which have adapted crop-livestock integration system as the purpose is to focus educating agricultural scholars to be well experienced and innovative. Even the main purpose of the company is not to market and sell any products which have been produced and nurtured at the establishment nonetheless every activities in the company especially cost related should be well documented in order to create a profitable business entity.

6.2 LITERATURE REVIEW

Farm company which is responsible in managing their fruits and vegetables plantations and also livestock breeding so that they will be able to produce and harvest high quality yields. There are many factors that can affect the productivity of any plantations which can disturb their process to increase the production of crop yields. Farm management should be able to identify and understand their respecting plantations in terms of plantation lifecycle, types of fertilizers and soils used, climate and weather suitability, and types of pests. The growth of any plantations will be affected heavily by the fertility of soil at the plantations. Researchers have concluded that due to soil erosion, the loss crop productivity in European Union countries have increased fourfold to the loss in the agricultural sector and even more compared to the GDP loss (Panagos et al., 2018). Next, other study also found out that plant growth, nutrients supply and the production of yield can be improved by assessing the soil properties at the plantations so that they will be able to determine the appropriate soil for crop cultivation (Nasron et al., 2021). Another factor that able to affect the productivity of plantations growth and yield production is the climate and weather suitability. Different types of plants respond and grow well to different climate and weather conditions. Both global production of the top ten largest crops and the production of consumable food calories in certain countries and also globally have already affected by the climate change (Ray et al., 2019). Another study also found out that both of Northern and Eastern Europe have faced a strong heatwave weather during the spring and summer of 2018 which have caused the losses of yield production whereas the condition in Southern Europe with an excellent wet condition during the spring, manage to prevent a major crop productions losses (Beillouin et al., 2020). Hot weather and dry climate can also affect the production to any plantations. In a research study agreed that drought and hot weather condition can have a bad side effects toward the overall growth and development of any plants and can also destroy an important phase which is the reproductive growth (Fahad et al., 2017). Farm size also plays an important factor that contribute to the productivity of crop yields. This is because farm management need to be able to manage every plantation on their land to which they can either use a full labour workforce or machinery or even both. According to researchers, the have analysed that agricultural sustainability in terms of the economy, environment, and society are impacted heavily by the size of farm (Ren et al., 2019).

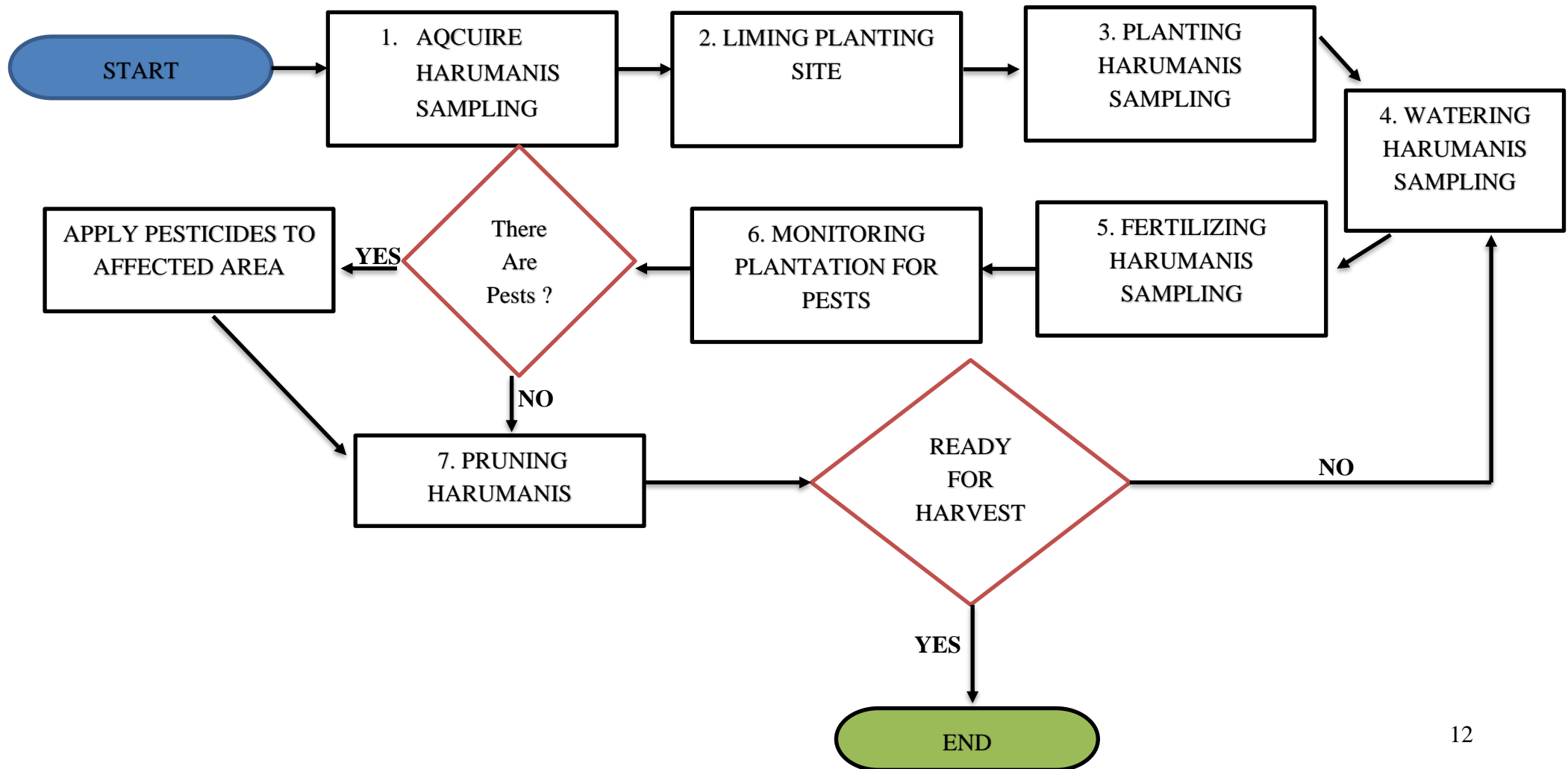
6.3 RESEARCH DESIGN

The purpose of this research study is to understand the current business practices of Harumanis Unit Ladang UiTM Perlis which includes process costing involving process to cultivate, planting, marketing, and selling Harumanis fruits in order to determine the total income generated. Thus, this research study able to reach a decision whether the selling of Harumanis at Unit Ladang UiTM Perlis is acceptable or not to be recognized as a business entity of the company. Unfortunately, due to the unavailability of financial data related to the cost of operation and sales of Harumanis because of the pandemic Covid-19 which have led most employees of the company to work from home. Besides that, the latest guidelines for the Industrial Training Report (MGT666) have prohibited student to collect any primary data which related to their research study hence this study will focus to the processes of Harumanis by using flowchart to describe every process's description, tools, substances and labours needed.

6.4 FINDINGS AND ANALYSIS

HARUMANIS INTRODUCTORY STAGE

(TREE AGED BELOW 3 YEARS OLD)

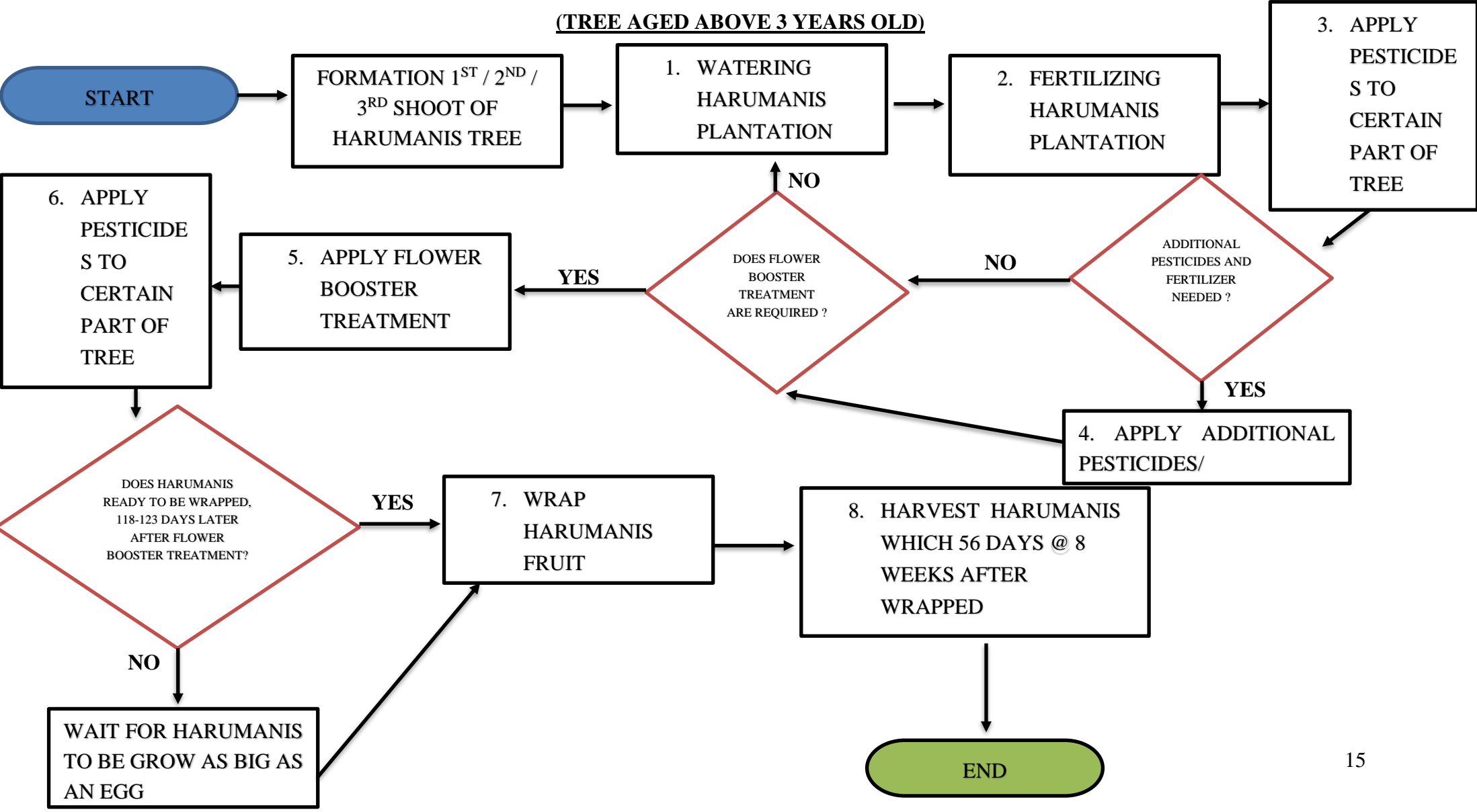


No.	PROCESS	DESCRIPTION	SUBSTANCES /TOOLS INVOLVED	NUMBER OF WORKERS INVOLVED
1.	Acquired Harumanis Saplings	Must acquire healthy saplings the size of a tree which have 2-3 tiers of leaves and upright from an authentic supplier.	1. Harumanis Saplings	
2.	Liming Planting Site	Maintain the soil pH level 5.5-6.5 which is the optimum pH level.	1. Ground Magnesium Limestone (GML)	Employees: 15
3.	Planting Harumanis Saplings	Harumanis saplings must be planted in an upright position dan base level height must 5cm from ground level.	1. Harumanis Saplings 2. Triple Super Phosphate (TSP) fertilizer 3. Mulching Materials 4. Rafia Rope	Employees: 15
4.	Watering Harumanis Saplings	Watering the Harumanis saplings every morning and evening except for rainy days for 20.48 – 40.96 litres per day per tree.	1. Water	Employees: 15
5.	Fertilizing Harumanis Saplings	Apply fertilizers such as NPK 15:15:15/ 15:15:16/ 16:16:16 (every three months), Organic fertilizers (every six months) and other necessary fertilizers.	1. NPK 15:15:15/ 15:15:16/ 16:16:16 2. Organic Fertilizer 3. Other Fertilizers	Employees: 15
6.	Monitoring Plantations for Pests	Identify any pest infestation and use the necessary pesticides to terminate them.	1. Pesticides	Employees: 15

7.	Pruning Harumanis Branches	Recommend pruning using the Central Open system to which the main stem is cut at a height of 0.6m – 0.8m from ground level. Then, let three branches grow to the main branch. After obtaining the desired tree shape, pruning care should be done from time to time in order to get a fertile, balanced, and productive tree. This pruning involves the removal of close, overlapping, or intersecting branches or diseased, damaged, or broken twigs.	<ol style="list-style-type: none"> 1. Secateurs 2. Fungicides 	Employees: 15
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HARUMANIS HARVEST STAGE

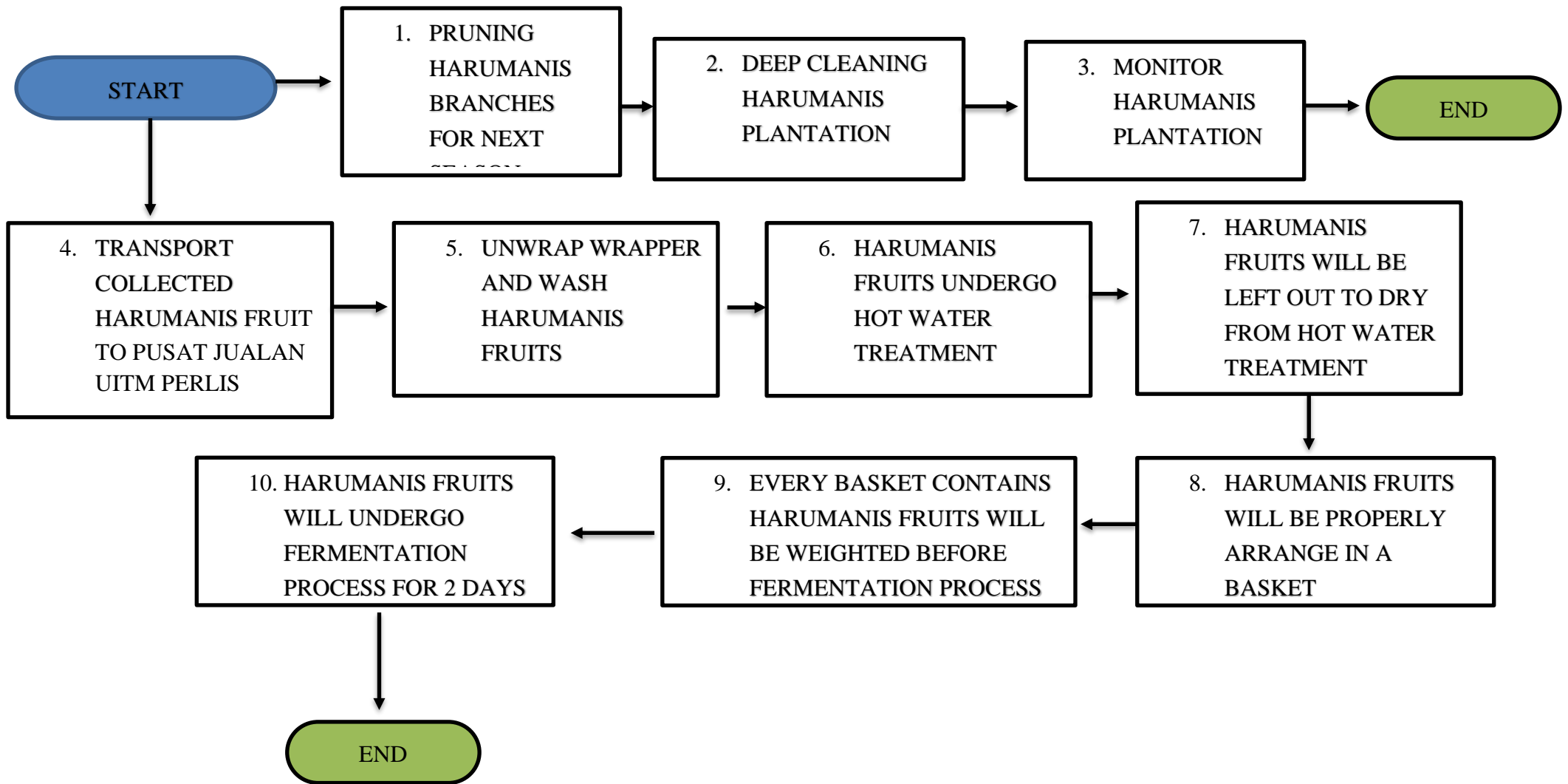
(TREE AGED ABOVE 3 YEARS OLD)



No.	PROCESS	DESCRIPTION			SUBSTANCES /TOOLS INVOLVED	NUMBER OF WORKERS INVOLVED
1.	Watering Harumanis Plantation	Watering the Harumanis trees every morning and evening except for rainy days for 61.43 litres per day per tree.			1. Water	Employees: 15
2.	Fertilizing Harumanis Plantation	Apply fertilizers such as NPK 15:15:15/ 15:15:16/ 16:16:16 (every four months), Organic fertilizers (every six months).			1. NPK 15:15:15/ 15:15:16/ 16:16:16 2. Organic Fertilizer	Employees: 15
3.	Apply Pesticides to Certain Parts of Tree	Must apply pesticides to the shoots and leaves of tree to prevent any diseases or unwanted pests before process of pollination.			1. Pesticides	Employees: 15
4.	Apply Additional Pesticides/ Fertilizers	Identify any additional pesticides or fertilizers which are needed.			1. Additional Fertilizers 2. Additional Pesticides	Employees: 15
5.	Apply Flower Booster Treatment	Mix the Paclobutrazol (PBZ) with water and spray the mixture around the base of the Harumanis trees.			1. Paclobutrazol 2. Water 3. Water Pump Sprayer	Employees: 15
		Tree Aged	Rate of PBZ (ml)	Rate of Water (ml)		
		3-5	4-6	500		
		6-9	6-9	1000		
>10	14	1000				

6.	Apply Pesticides to Certain Parts of Tree	Must apply pesticides to the shoots and leaves of tree to prevent any diseases or unwanted pests that can disturb the process of pollination.	1. Pesticides	Employees: 15
7.	Wrap Harumanis Fruit	Harumanis fruits with a circumference of 16cm-19cm which is the size of an egg must be wrap on which the wrapper must have different colour for different wrapping week.	1. Standard Wrapper 2. Carbon Wrapper 3. Colour Spray Cans	Employees: 15 Contract Workers: 10
8.	Harvest Harumanis Which 56 Days @ 8 Weeks After Wrapped	After 56 days or 8 weeks, wrapped Harumanis can be harvest from the trees.	1. Secateurs 2. Ladders 3. Fruit Baskets	Employees: 15 Contract Workers: 5

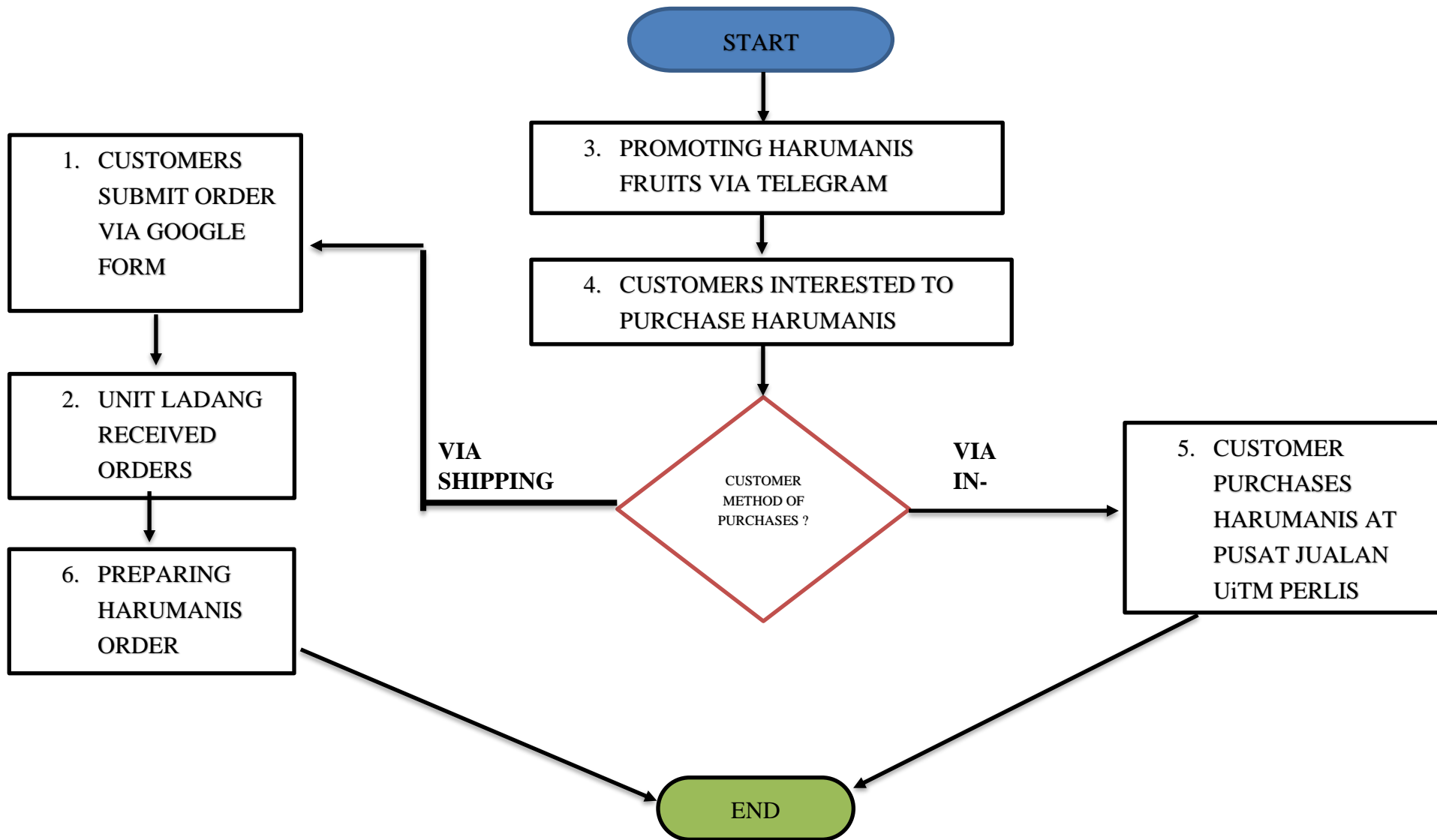
HARUMANIS POST- HARVEST STAGE



No.	PROCESS	DESCRIPTION	SUBSTANCES /TOOLS INVOLVED	NUMBER OF WORKERS INVOLVED
1.	Pruning Harumanis Branches for Next Season	Restorative pruning should be done during or after harvest to encourage budding production for the coming Harumanis season.	1. Secateurs 2. Fungicides	Employees: 15
2.	Deep Cleaning Harumanis Plantation	Dead twigs and dried leaves should be removed and cleared out from the Harumanis plantations.	1. Cleaning Equipment	Employees: 15
3.	Monitor Harumanis Plantation	Monitoring Harumanis plantation for any pests and diseases and tends the trees every needs.	1. Pesticides 2. Fertilizers 3. Fungicides	Employees: 15
4.	Transport Collected Harumanis Fruit to Pusat Jualan UiTM Perlis	Every basket containing Harumanis fruits need to be transport properly to Pusat Jualan UiTM Perlis.	1. Fruit Baskets 2. Truck	Employees: 15 Contract Workers: 5
5.	Unwrap Wrapper and Wash Harumanis Fruits	Carefully open the wrapper and put the Harumanis in a container filled with clean water. Rinse and wash the fruits using a soft sponge. Then, transfer the fruit to a basket to dry them.	1. Large Container 2. Water 3. Cloth Gloves 4. Fruit Baskets	Employees: 15 Contract Workers: 5
6.	Harumanis Fruits Undergo Hot Water Treatment	Put the basket filled with Harumanis into a hot water container with a stable temperature of 52°C for 5 minutes.	1. Large Container 2. Water 3. Gas Tank 4. Fungicides 5. Digital Infrared Thermometer	Employees: 15 Contract Workers: 5

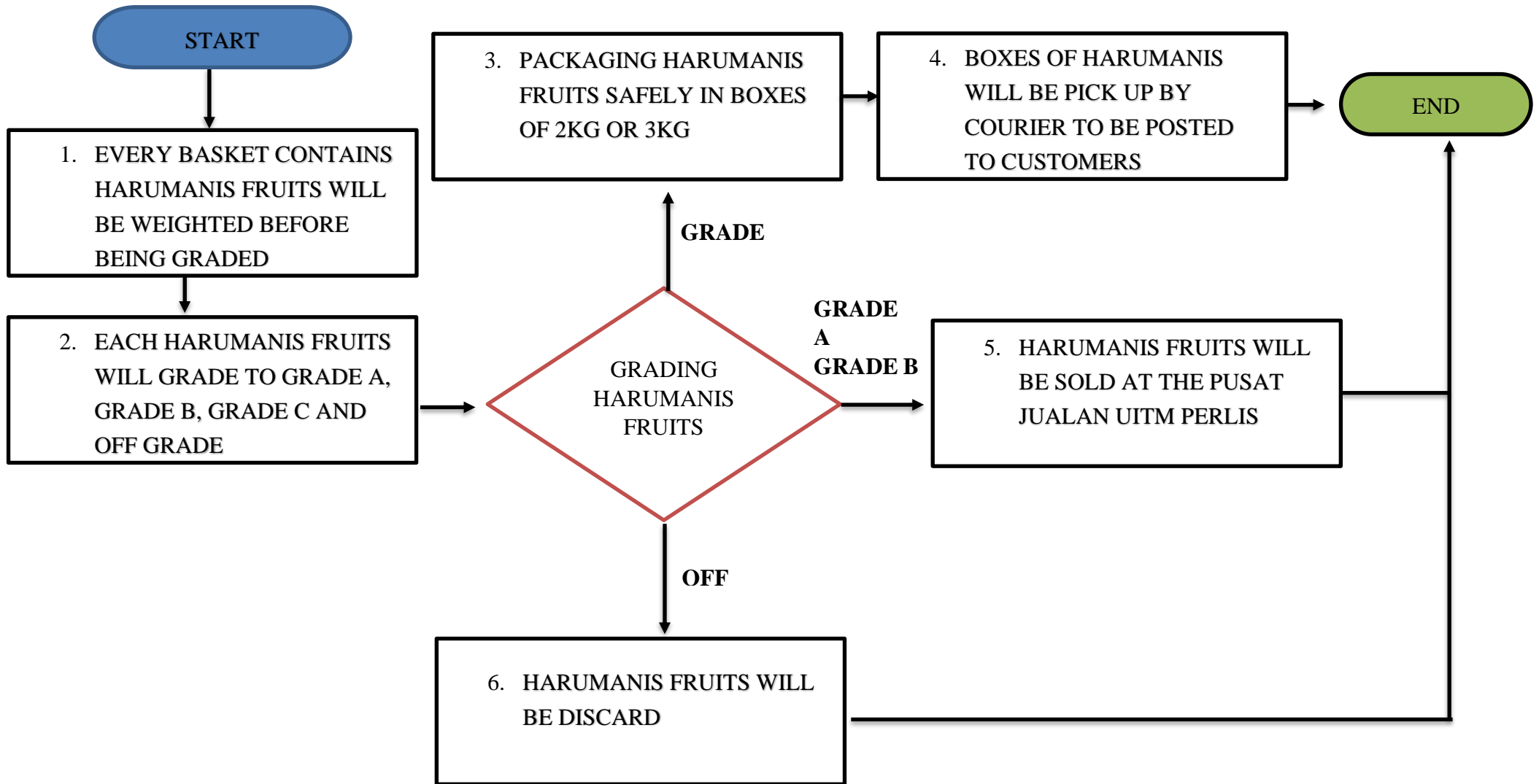
7.	Harumanis Fruits Will Be Left Out to Dry from Hot Water Treatment	Then lift up the basket and placed the Harumanis fruits on the floor to be dry up from the Hot Water Treatment using a blower.	1. Blower	Employees: 15 Contract Workers: 5
8.	Harumanis Fruits Will Be Properly Arrange in a Basket	Harumanis fruits will be properly arranged inside the fruits baskets alongside with packets Calcium Carbide (CaC_2) powder (amount of CaC_2 depend on the number of Harumanis stored in the baskets) and will be sealed with old newspapers.	1. Fruits Baskets 2. Calcium Carbide powder 3. Newspapers.	Employees: 15 Contract Workers: 5
9.	Every Basket Contain Harumanis Fruits Will Be Weighted Before Fermentation Process	After Harumanis fruits have been sealed off, every fruit basket will be weighed and recorded.	1. Commercial Mechanical Weight Scale	Employees: 15 Contract Workers: 5
10.	Harumanis Fruits Will Undergo Fermentation Process for 2 Days	Every sealed fruit basket containing Harumanis fruits will be stored at the storage of Pusat Jualan UiTM Perlis to undergo fermentation process for two days so that the fruits will be more ripe.	-	Employees: 15 Contract Workers: 5

HARUMANIS PROMOTION STAGE



No.	PROCESS	DESCRIPTION	SUBSTANCES /TOOLS INVOLVED	NUMBER OF WORKERS INVOLVED
1.	Promoting Harumanis Fruits via Telegram	The advertisement and promotion of Harumanis from UiTM Perlis will be sent out and display to the public via Telegram app.	1. Telegram Application	Employees: 1
2.	Customers Interested to Purchase Harumanis	Customer who are interested to purchase Harumanis fruit can either submit order through Google Form for postage or walk in at Pusat Jualan UiTM Perlis.	-	-
3.	Customers Submit Order via Google Form	Customer will fill in details order such as name, shipping address, contact number, number of Harumanis order (customer only have the option to buy 3Kg Boxes) and made payment using Google Form.	-	-
4.	Unit Ladang Received Order	The order details from customers will be collected from Google Form and recorded in Excel spreadsheet.	1. Google Form 2. Excel Spreadsheet	-
5.	Preparing Harumanis Order	Every customer detail will be fill in the consignment notes of courier.	1. Consignment Notes	Employees: 2
6.	Customer Purchases Harumanis at Pusat Jualan UiTM Perlis	Walk in customer can purchase any amount of Harumanis fruits and made payment at Pusat Jualan UiTM Perlis.		Employees: 3

HARUMANIS SELLING STAGE



No.	PROCESS	DESCRIPTION	SUBSTANCES /TOOLS INVOLVED	NUMBER OF WORKERS INVOLVED
1.	Every Basket Contain Harumanis Fruits Will Be Weighted Before Grading	After fermentation process, each basket of Harumanis will be weighted due to the process which have affect the weight of Harumanis.	<ol style="list-style-type: none"> 1. Commercial Mechanical Weight Scale 2. Platform Trolley 	Employees: 5
2.	Each Harumanis Fruit Will Be Graded to Grade A, B, C, and Off-Grade	Each Harumanis will be graded to A, B, C, and Off-Grade based on their physical shape and skin. Each grade will be placed into separate baskets.	<ol style="list-style-type: none"> 1. Commercial Mechanical Weight Scale 	Employees: 3
3.	Packaging Harumanis Fruits Safely in Boxes of 2Kg and 3Kg	Grade A Harumanis fruits will be safely packed in a box of 2Kg and 3Kg based on the customers' order. Then, attach the completed consignment notes of the customer details to their order boxes of Harumanis.	<ol style="list-style-type: none"> 1. Commercial Mechanical Weigh Scale 2. 2Kg, 3Kg Boxes 3. Foam Net Wrapper 4. "Fragile" Tape with Tape Dispenser 5. Completed Consignment Notes 	Employees: 5

4.	Boxes of Harumanis Will Be Pick Up by Courier to be Posted to Customers	Every box of Harumanis will be stored for pick up by the assigned courier.	-	-
5.	Harumanis Will Be Sold at Pusat Jualan UiTM Perlis	Grade A, B, and C of Harumanis fruits will be stored and sold at Pusat Jualan to walk in customers.	-	Employees: 3
6.	Harumanis Fruits Will Be Discard	Off-Grade Harumanis fruits will be discarded or feed to the livestock at the Unit Ladang.	1. Platform Trolley.	Employees: 5

6.5 RECOMMENDATIONS

The Harumanis business is a very big opportunity for Unit Ladang UiTM Perlis as Harumanis is a very popular and desirable mango fruit among Malaysian. In order to be an excellent and profitable business, the company must make sure to be able to produce high quality Harumanis fruits and a strong marketing strategy to sell the harvested fruits. The employees of the company and the funding from UiTM for agricultural activities will be beneficial as it will help to improve the efficiency and effectiveness of each agriculture process. These strengths in this company have a very good advantage that can contribute towards this company. Even though, the company's strengths are very good, but it is insufficient to take the Harumanis business to the next level as there are weaknesses and threats that the company need to focus on.

In my opinion, I would like to suggest that the company should increase the production of Harumanis fruits in order to fulfil the high demand in the market. Even though, currently the company already having five plots of Harumanis plantation, but the addition of planting more trees can bring more investment and minimize the risks to the business. In a fact, researchers have found out that Harumanis trees aged 33 to 35 years old have produce the biggest fruits in contrast to more younger aged trees (Yusuf et al., 2020). Harvested Harumanis should also be well preserve so that the fruits able to prolong its freshness and prevent any waste. A study shows that the number of post-harvests Harumanis turn rotten can be decrease by adding chitosan edible coatings with starch (Amilia et al., 2020). As the production of Harumanis fruits increased, the quality of the Harumanis should also improve as the fruit itself is famous for its freshness and sweetness. Near-Infrared (NIR) Spectroscopy scan along with Unit Vector Normalization (UVN) pre-processing method and Partial Least Square Regression Model (PLSR) have been identified to be the time-saving, non-invasive and less tedious method of sampling to identify and estimate the intensity of sweetness in Harumanis fruits (Amirul et al., 2020). The company should also be exposed to more technological advancement which can efficiently and effectively improve the agricultural activities. Researchers believed that agricultural employees always equip and execute the most inappropriate tools and plan of action due to their lack of information and low technical skills which have led to the wasted investments and funding (Bucci et al., 2019). Another study mentioned that it is very viable to develop strategies with necessary ICT policies which able to engage every agricultural employee to partake in the adoption of agricultural technologies (Barakabitze et al., 2017). The uses of robotics and machinery could also decrease the amount of excessive labour force in the company while being able to complete the same amount of works done. Researchers agreed

that the most promising method for harvesting that will likely to be relevant within the next five to ten years is the uses of robots instead of part-time workers (Mitaritonna & Ragot, 2020).

I would like to also recommend for future researchers to collect and analyse financial data of the business of Harumanis at Unit Ladang UiTM Perlis in terms of cost of each Harumanis process and sales of Harumanis. Hence, this will give a more accurate understanding and results in order to determine the feasibility study of Harumanis UiTM Perlis as a profitable business establishment.

PART 7: CONCLUSION

Mangifera indica or better known as Harumanis is the iconic and famous local fruits among Malaysians due to its unique fragrant and sweetness. This type of mango fruits can only be found in the northern part of Malaysia mostly in Perlis as it is the perfect weather and climate condition for Harumanis plantation which is hot and dry. The tree able to continuously produce a high number of Harumanis fruits that weighted around 350g to 600g per fruit when the tree has achieved the maturity ages which is about 8 to 20 years old. In order to do so, there are many requirements and actions need to be taken by farmers to make sure that Harumanis plantation is healthy and fully fertile to produce high quality fruits.

As Harumanis fruits being the most demand mango in Malaysia, there are many sellers who also have been engaged in the business of selling Harumanis which have increased the number of competitors towards Unit Ladang UiTM Perlis. Even though, the company is completely equipped with high skilled agriculture employees and also agriculture funding from UiTM Perlis, but the lack of marketing and financing management in the company could deteriorate the performance of Harumanis business in the company. The application of agricultural technology and robotics can also boost up the efficiency of every Harumanis process which involve planting, cultivating, marketing, and selling while being able to reduce any risks and costs that are related to the business such as pests, bad weather condition and excessive amount of labours.

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PART 9: APPENDICES



FIGURE 1: ASSISTING IN HARUMANIS SELLING STAGE