

THE NATIONAL ENVIRONMENT CLEANING AUTHORITY

The Prime Minister's Office

**One Million Tree Plantation Programme by the National
Environment Cleaning Authority & Mauri Facilities Mgt
Co. Ltd**



One Tree, Many Wonders, The Guardian of Life

Inception Report

12/12/2023

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Acknowledgement

*“What a friend we have in a tree,
the tree is the symbol of hope, self-improvement
and what people can do for themselves.”*

Professor Wangari Maathai

Winner of the 2004 Nobel Peace Prize

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This report stands as a collective effort and I am sincerely beholden to each individual who played a role, no matter how small, in its completion.

*Mr Ruben Pillay Munien
Officer in Charge*

Preface

Planting trees is a very effective way to change the environment and by extension fight the galloping climate change resulting in extreme weather conditions.

The widespread adoption of tree planting has become a prominent aspect of the current environmental consciousness, aiming to mitigate the climate crisis through carbon capture and landscape restoration. A thoughtfully devised tree-planting approach that involves local communities is crucial for safeguarding global soil health, biodiversity, and carbon storage. The process goes beyond merely planting seeds in available soil; its success hinges on selecting the appropriate tree species for specific locations and purposes. The task is more complex than simply planting seeds wherever there is soil: ***Success depends on the right tree for the right place and the right purpose.***

The act of planting a tree is a potent symbol of life. There are many initiatives of the Government, the concerned Ministry (Ministry of Environment, Solid Waste Management and Climate Change, Road Development Authority, Ministry of Agro Industry and Food Security (Forestry Service and National Parks and Conservation Service) and other Non-Governmental Organisations to plant trees and embellish the environment. This effort plays a role in converting neglected urban and rural spaces, often eyesores, into areas that may eventually evolve into lush and aesthetically pleasing green environment. Additionally, such initiatives contribute to carbon sequestration, air temperature regulation, and the promotion of biodiversity, ultimately influencing the climate. A noteworthy concern lies in the fact that only about 50% of planted vegetation survives and thrives, largely due to insufficient post-planting care. Only around 2% of the land area of Mauritius is considered to be covered with good quality native forests. It is therefore imperative to plant and nurture the plants to ensure the success of making Mauritius greener.

At NECA we believe that planting trees and above all, growing forests, are essential to overcome the current loss of biodiversity and adapt to climate change. We know that the One Million Tree Plantation Programme is a delicate and long-term endeavour: it requires a clear understanding of why that trees were lost in the first place, who is benefitting or losing from trees, what species and methods are appropriate to the local context, who will be involved in restoring and, importantly, maintaining those trees and monitoring progress?

We have adopted this quote from Professor Wangari Maathai (2004 Nobel Peace Prize laureate) who initiated and inspired tree planting movements in Africa and the whole world twenty years ago: “For me, one of the major reasons to move beyond just the planting of trees was that I have tendency to look at the causes of a problem. We often preoccupy ourselves with the symptoms, whereas if we went to the root cause of the problems, we would be able to overcome the problems once and for all”.

This challenge has started in November 2023 led by the National Environment Cleaning Authority and implemented by Mauri-Facilities Management Co. Ltd (MF). By planting the right tree in the right place for the right purpose, we can help repair ecosystems and halt the advance of climate change.

Mr Ruben Pillay Munien
Officer in Charge

Executive Summary

The One Million Tree Plantation Programme 2023/2024 has been announced as one of the Budgetary measures for 2023/2024, at paragraph 222 & 223 and will be implemented by NECA and Mauri-Facilities Management Co. Ltd.

Trees have numerous benefits and they play a crucial role in sustaining the island's environment, economy and social and cultural well-being. Mauritius, renowned for its biodiversity and unique ecosystems, where trees play a pivotal role. The analysis encompasses the ecological significance of trees, emphasizing their contribution to biodiversity conservation, soil stability, food security and many other aspects.

The aim of the project is to embark in a tree planting campaign across the island, in a sustainable manner to benefit from the numerous advantages of trees and for the greening and embellishment of Mauritius in the long run.

In seeking to understand the ecological dimension of tree planting, the NECA Board, at its sitting held on Wednesday 21 September 2023 approved the constitution of a Technical Committee to come up with a workable and implementation plan for the One Million Tree Plantation Programme 2023/2024.

The purpose of that Technical Committee was to understand, characterise and quantify and come up with an Action Plan.

A budget of Rs 100 M has been earmarked and voted for this National Project to be implemented by Mauri-Facilities Mgt Co. Ltd.

The Technical Committee proposed that the project will be carried out in two phases:

1. Short term plan and;
2. Medium to long term plan

The Short-Term Plan would primarily target four (4) regions in Port Louis and Segments 3 and 4 along M1 Motorway, from Plaine Magnien Round About (Near Cemetery) to Round About

Gros Bois. The Action Plan also include a Training Programme for the Cleaning Technicians of Mauri Facilities that would be involved in the implementation of this programme.

The Medium to Long Term Plan would be extending the Short-Term plan to different regions of the island namely four (4) specific sites identified by the Local Authorities within their administrative jurisdiction.

When Nobel Peace Prize laureate, Professor Wangari Maathai, launched her 'Green Belt Movement' in the 1970s in Kenya she could not have imagined that initiatives such as hers to plant trees on a large scale would become so prevalent in the 21st century. Today, the Government and Non-Governmental Organisations alike are pledging to plant millions, billions and even a trillion trees. In a world that is becoming more polluted and delicate, the positive action of planting a tree holds great allure, given the diverse purposes that trees and forests serve.



1.0 Introduction

In the face of an ever-increasing global environmental challenges, there is a dire need to implement sustainable initiatives that contribute towards the preservation and restoration of our planet. One such endeavour that stands at the forefront of this worldwide movement is our *"One Million Tree Plantation Programme"*.

The "One Million Tree Planting Programme" being spearheaded by the National Environmental Cleaning Authority embodies a **collective national effort** to address the environmental challenges head-on. This report seeks at documenting and elaborating on the multifaceted dimensions of this ambitious campaign by examining its ecological, social and economic implications to ensure its sustainable success.

As this report unfolds, light will be thrown on the short-term and mid to long-term planning of the National Environment Cleaning Authority for the execution of the tree planting initiatives from urban reforestation projects to rural afforestation campaigns. It is worth underlining that the national "One Million Tree Planting Campaign" aims at creating a tree planting frenzy among Mauritians by fostering environmental awareness, a deeper appreciation for the transformative potential embedded in the simple act of planting a tree, promoting community engagement and a sense of stewardship.

2.0 Tree Plantation Initiatives by different Stakeholders

Several concerned authorities have taken significant initiatives to address the environmental impact of tree removal and promote sustainable practices through extensive tree plantation projects.

The Road Development Authority, in response to the felling of 4438 trees on the La Vigie La Brasserie Beaux Songes link road Phase 1, has committed to planting approximately 13315 trees/plants, with progress already made through the planting of 3200 trees at Beemanique and plans for additional plantations along the new road alignment. ENL is actively involved in the plantation of trees along the St. Pierre bypass and Motorway M3, collaborating with relevant authorities to ensure safety and compliance with landscaping plans.

The Forestry Service, National Parks and Conservation Service, FAREI, and NGOs such as Rotary Cubs are also integral contributors, collectively working towards sustainable afforestation efforts.

3.0 Trees and Their Wonders

Trees can be referred to majestic giants that have graced our planet for millennia and have been explicitly connected to the Earth ecosystem by offering priceless contributions to both the environment and human civilization over time. With their roots firmly entrenched in the soil and branches reaching for the sky, trees play a pivotal role in maintaining the balance of life on our planet.

Trees forms part of the natural landscape but nonetheless, their importance transcends the aesthetic by far as they form an integral part of the very existence of life on the planet. Trees are vital for the well-being of our planet and its inhabitants. Acknowledging their pivotal role in pivotal role in sustaining life, protecting ecosystems and fostering prosperity of human activities underscores the importance of preserving and planting trees as over and above their environmental significance, they are key players in the economic, social and health fields.

In this exploration, the multifaceted significance of trees will be uncovered and the pressing needs to protect these majestic giants will be underlined.

3.1 Environmental Significance of Trees

The environmental significance of trees is vast and encompasses a wide range of aspects that contribute to the health and balance of ecosystems. A fragmented summary of the various environmental importance of trees are:

3.1.1 Oxygen Production and Carbon Sequestration

Trees are **THE LUNGS** of our planet. Through the process of photosynthesis, they act as carbon dioxide sinks, whereby carbon dioxide from the atmosphere is absorbed and life-sustaining oxygen is released, making the air we breathe fresh and clean. In a world struggling with climate change and increasing greenhouse gas emissions, trees play a pivotal role in mitigating their effects by reducing atmospheric carbon levels thereby contributing in the fight against climatic changes.

3.1.2 Air Quality Improvement

In addition to their role in oxygen production and carbon sequestration, trees are natural filters that trap airborne pollutants and emissions such as particulate matter, sulphur dioxide and nitrogen oxide making the air being breathe in safer and healthier. By improving the air quality, trees further underscore their essential role in supporting both the global human population and the ecosystems making them essential allies in the ongoing battle against air pollution and its associated health risks. As green guardians, trees stand as silent sentinels, continually working to **create cleaner and more breathable air.**

- **Regulating Temperature and Humidity**

Trees play a critical role in temperature and humidity control. Through shading and the cooling effect of transpiration, trees lower local temperatures which in turn can mitigate the gradually intensifying urban heat thereby resulting in the creation of refreshing microclimates.

The process of transpiration and evapotranspiration of trees contributes to the cooling of surrounding air and the balancing of overall humidity which eventually a more comfortable environment especially during hot weather conditions.

- **Biodiversity Support**

Trees are pillars of biodiversity and foster a rich and interconnected web of life. Their diverse structures provide habitats for a variety of organisms from insects and birds to fungi and mammals. The leaves, barks, flowers, fruits and roots of different tree species represent a biodiversity hotspot which support a wide range of organisms.

Additionally, the microenvironments created by trees provide niches for numerous species to thrive which contribute significantly in sustaining life and the overall health and resilience of different ecosystems, promoting biodiversity and ensuring the coexistence of numerous plant and animal species.

Tree plantation plays a crucial role in supporting and sustaining bee populations, fostering a mutually beneficial relationship between trees and these essential pollinators. As trees mature, they provide a diverse and abundant source of nectar and pollen, which are vital food

sources for bees. The flowering trees offer a continuous supply of forage throughout the seasons, contributing to the overall health and resilience of bee colonies.

Moreover, trees serve as nesting sites for solitary bees and other pollinators, offering shelter and protection. The symbiotic connection between trees and bees extends beyond mere ecological balance; it significantly influences agricultural productivity.

Bees, through their pollination activities, enhance the reproduction of various plants, including many food crops. Therefore, promoting tree plantation not only contributes to environmental conservation but also supports the preservation of pollinator habitats, ultimately benefiting biodiversity, food security, and the overall health of our ecosystems.

- **Soil Conservation**

The extensive roots of trees anchored firmly in the earth contribute in soil conservation by preventing risk of erosion by wind and water and minimize risk of landslides. Additionally, the roots network of trees also enhances soil structure, increasing its permeability and its overall health by promoting greater water absorption and nutrient retention.

Fallen leaves and organic matter from trees create a natural mulch on the soil surface which maintain soil moisture level, quality and stability. This organic material enriches the soil with nutrients and eventually enhance its fertility rendering it more productive without any chemical aids.

- **Contributes to the Water Cycle**

Trees are integral to the water cycle. The released water vapour from trees during the process of transpiration contributes to atmospheric humidity and as the air cools down some condenses into clouds, leading to precipitation and rainfall. As such, the presence of trees **influences the local and regional precipitation patterns** and the distribution of rainfall thereby highlighting their role in sustaining water cycles and promoting rainfall.

- **Flood Control**

Trees are natural barriers protecting civilization against flooding by employing a range of mechanisms to mitigate the risk of inundation. With their extensive root networks anchored

in the soil, surface runoff from rainfalls is significantly slowed down allowing more time for infiltration into the ground.

Additionally, in areas where trees have been planted along riverbanks, same create natural barriers that absorb excess water during periods of heavy rain eventually preventing rapid rises in water levels. Furthermore, trees contribute to the regulation of water flow in floodplains, acting as sponges that absorb and release water gradually. This helps to maintain riverbank stability and prevents downstream flooding. The collective impact of these processes underscores the vital role of trees in sustainable flood prevention, promoting ecosystem resilience and safeguarding communities from the devastating impacts of floods. Sustainable land use practices that preserve and enhance tree cover are essential for maximizing these flood-prevention benefits.

3.2 Economic Significance of trees

Tree planting not only fosters environmental sustainability but also generates economic benefits by creating jobs and supporting different industries. From a direct economic perspective tree planting stimulate employment and income generation, especially in the forestry, construction, furniture-making, paper manufacturing and logging industries. Trees can also create jobs in activities like production of timber, agriculture, plant nurseries, general planting and landscaping, farming and the production of natural medicines thereby contributing to diverse sources of sustainable livelihoods.

Tree planting in Mauritius holds significant potential to positively impact the country's economy across various dimensions. As an island nation with unique ecosystems, trees play a vital role in the economic benefits as it not only contributes to the generation of jobs and production of goods but it can also attract tourists and promote the destination for its green spaces, landscapes and environmental quality.

Tree planting in Mauritius has the potential to enhance economic resilience, promote sustainable practices, and contribute to the island's global environmental responsibilities. Balancing economic development with environmental conservation positions tree planting as a strategic and beneficial component of Mauritius's economic landscape.

3.3 Food Security and Self-Sufficiency

Food security and self-sufficiency are critical aspects of a country's stability. While food security relates to country's ability to provide its population with access to sufficient, nutritious, affordable and safe food to meet their dietary needs and preferences for a healthy and prosperous life, self-sufficiency refers to a country's ability to produce a significant portion of its own food thereby reducing dependence on foreign sources.

A country that relies massively on food imports becomes vulnerable to geopolitical influences, trade disputes, natural disasters, pandemics, economic shocks, embargoes, global price fluctuations and other unforeseen factors which may disrupt the global food supply.

As such, countries that cannot guarantee food security for its nation may face a shortage of food which on the long-term will result in hunger and famine and these are triggers to numerous health problems, malnutrition, diminished workforce productivity, social unrest and even political instability.

By contrast, a food secure nation is better equipped to face international crisis and is less susceptible to bear the impacts of external pressures rendering it more likely to maintain social cohesion and political stability. Food security is not just about providing sustenance but also about preserving the peace and social order.

By engaging in sustainable domestic agriculture and promoting the planting of food-bearing plants, the country can achieve a certain degree of self-sufficiency and food security making it more resilient to external vulnerabilities.

In the intricate tapestry of Mauritian culinary traditions, rice and flour have woven themselves as indispensable staples, forming the cornerstone of our basic sustenance. Yet, the reality looms large that our heavy reliance on importing these essentials renders us vulnerable to disruptions in the global supply chain. In the face of the current world situation, where unforeseen challenges can impede importation, the specter of a potential food crisis becomes a cause for concern on our island.

However, a beacon of resilience shines through the gloom. The strategic cultivation of alternative staples such as cassava, potatoes, and breadfruit emerge as a viable solution, a green lifeline that could bolster our food security.

Embracing these locally grown alternatives not only fortifies our self-sufficiency but also celebrates the richness of our land, offering a diverse and sustainable array of options to satiate our culinary cravings while navigating the unpredictable seas of global trade. It's a call to cultivate not just crops but a robust and resilient food future for Mauritius.

3.4 The Social and Cultural Significance of trees

Trees have profound social and cultural benefits that are very often overlooked. These majestic giants enrich the social fabric around the world. From the social perspective, trees serve as focal points for community gatherings where parks become spaces for recreation, exercise, and shared leisure. While in many countries, urban tree-lined streets enhance the neighbourhood aesthetics and influencing property values positively, in rural areas, tree canopies offer shared spaces for traditional practices, celebrations and cultural events which reinforce cultural identity.

On the cultural front, certain trees species hold spiritual significance and they are considered as sacred and incorporated into prayers and rituals. Additionally, trees provide resources for traditional crafts, ceremonies, and artistic expressions, preserving cultural heritage.

3.5 Influence on Overall Health

Apart from improving the air quality, absorbing pollutants and particulate matter to promote respiratory well-being, trees also exert a significant influence on the overall health. Several studies have elaborated on that exposure to green environments with trees reduces stress levels and improved the mental well-being which therefore fosters a positive impact on emotional health. A consistent exposure to nature is believed to improve concentration, cognitive functions and the overall psychological health of humans.

Green spaces encourage outdoor activities and foster physical exercises which support the cardiovascular health and reducing the prevalence of sedentary lifestyles.

The holistic impact of trees on human health showcases the importance of integrating nature into urban environments and preserving natural spaces.

4.0 The Tree Planting Initiative by NECA and Mauri-Facilities Management Co. Ltd

The Tree Planting Initiative elucidates the objectives of the One Million Tree Plantation Programme 2023/2024, as announced in the Budget Speech for the Financial Year 2023/2024. The initiative, implemented by NECA and Mauri-Facilities, aims to address climate change through widespread tree planting across public spaces on the island. There are several factors that are being considered in this Tree planting programme; types of plants, soil, climate, etc. Plants grow according to certain environment requirements.

Moreover, not all selected plants are readily available. NECA has therefore requested the Forestry Department, Mins Environment, Solid Waste Management and Climate Change and National Parks and Conservation Service to continue on their propagation programme for plants, however some require time before being made available. So, procurement of plants from private suppliers is required.

NECA has also decided that 3 to 5 plants be donated in through gift vouchers to New Building and Land Use Permits holders.

4.1 The Aim of the Project

The aim of the project is to embark on a tree planting campaign across the island, in a sustainable manner to benefit from the numerous advantages of trees and for the greening and embellishment of Mauritius in the long run.

4.2 The Objectives of the Project

- To set up a Technical Committee with relevant stakeholders in the field of Tree Planting
- To identify sites for tree planting and appropriate trees such as fruit trees, decorative plants, medicinal plants and so on
- To acquire the required plants from different stakeholders
- To devise a Short-Term Plan for Tree Plantation Programme to be implemented during Financial Year 2023/2024
- To provide appropriate training to employees of Mauri-Facilities

- To formulate a Medium to Long Term Plan for Tree Plantation Programme across the island
- To encourage the Ministries, Departments, Private Sectors, Non-Governmental Organisations including the population at large to plant trees
- To inculcate a habit and culture of tree planting among students since early childhood

4.3 Budget Allocation

A critical aspect of any initiative is the financial commitment. With a substantial allocation of Rs 100 million to Mauri- Facilities Management Co. Ltd, the initiative reflects a serious commitment to the cause. The Short-Term Implementation Plan and Procurement Plan proposed by the Technical Committee detailed budget for its successful implementation. For the amount earmarked in the Financial Year 2023/2024 for this project, only a total of 60,000 plants is expected to be planted. The sum earmarked will be used not only for the purchase of plants but also for procurement of fertilisers, required machineries and cost of maintenance. To attain the objective of 1M Tree Planting Programme, the project should be extended over several years and additional funds be required accordingly.

4.4 The Technical Committee

To ensure the effective and efficient implementation of the One Million Tree Plantation Programme, a Technical Committee was set up. The composition of the Technical Committee was approved by the NECA Board at its meeting held on September 21, 2023. It includes the committee's mandate, the scope of their work and the anticipated outcomes. Highlighting the significance of this committee in steering the implementation process adds depth to the understanding of how the initiative will unfold. It explored the significance of having a structured implementation plan and the role of the committee in its formulation.

The Terms of Reference of the Technical Committee included the following:

- Identification of convenient sites for the tree plantation campaign;
- Recommendation on the specification of trees in relation to region where it would be planted;
- Tree Plantation Techniques;
- Devising a maintenance plan of at least one year to ensure that trees planted are well adapted to the area; and

- Working out a plan for procurement of mature plants

4.4.1 The Composition of the NECA Technical Committee

The Technical Committee was composed of representatives from the following institutions:

1. The National Environment Cleaning Authority
2. Ministry of Environment, Solid Waste Management and Climate Change
3. Ministry of Local Government and Disaster Risk Management
4. Municipal City Council of Port Louis
5. District Council of Moka
6. Forestry Service
7. National Parks and Conservation Service
8. Mauri-Facilities Management Co. Ltd



The Technical Committee did set up a Consultative Committee to assist in the implementation of the Programme concerning, amongst others, the types and quantity of plants, soil and sites characteristics, etc. The Committee comprised representatives of the following:

1. The National Environment Cleaning Authority
2. Road Development Authority
3. Local Authorities
4. Beach Authority
5. Mauritius Police Force
6. Food and Agricultural Research and Extension Institute (FAREI)
7. Agricultural Services
8. Rotary Club – Flacq & Rose Belle (Non-Governmental Organisation)
9. Forena Foundation Resources et Nature (Non-Governmental Organisation)
10. Friends of the Environment (Non-Governmental Organisation)

Additionally, a Focus Committee on training of concerned employees of the MF was convened and it made recommendations which were considered by the NECA Technical Committee.

4.5 Sites and Plants identified for the Kick Off of the Programme

The main responsibility of NECA was to request information from Local Authorities and other relevant stakeholders with regards to potential sites across the island where tree plantation could take place.






During a meeting held on 01 September 2023 under the chair of the Honourable Minister of Environment, Solid Waste Management and Climate Change, it was proposed that plantation of trees (linear forest) be carried out along Motorways M1 and M2. The Minister of Environment requested that due consideration be given for a tree plantation program along stretches of Motorway M1 and M2 as per their Master Plan for greening and embellishment of Motorways M1 and M2.

The Technical Committee decided that the Short-Term Plan would primarily target the Port Louis region and concentrate on Segment 3 and Segment 4 of the Motorways M1 and M2 spanning from Gros Bois to Plaine Magnien roundabout as per the Master Plan of the Ministry of Environment, Solid Waste Management and Climate Change.

As per the Master Plan of the Ministry of Environment, Solid Waste Management and Climate Change, the following plants were required:






SEGMENT 3 (Plaine Magnien (Cemetery) Roundabout to Mare D'Albert Interchange)

Plant Supply

Item No.	Code	Botanical Name	Height	Visual Illustration
1				
1.1	P7 (L)	Hyophorbe verschaffeltii (20-25 Lts)	1-2M	
1.2	P3 (XL)	Roystonea regia (50-100 Lts)	>2-3M	
2				
2.1	S/G9 (S)	Hydrangea Assorted (0.5-3 lts)	0.15-0.3M	
2.2	S/G8 (S)	Codiaeum variegatum (0.5-3Lts)	0.15-0.3M	
3				
3.1	L (S.d)	Supply of lawn - Sprigged lawn buffalo type.		

SEGMENT 4 (Mare D'Albert Interchange to Gros Bois Roundabout)

Plant Supply




Item No.	Code	Botanical Name	Height	Visual Illustration
1				
1.1	P7(L)	Hyophorbe verschaffeltii (20-25 Lts)	1-2M	
1.2	P8(L)	Wodietya bifurcate (20-25 Lts)	1-2M	
2				
2.1	S/G9 (S)	Hydrangea Assorted (0.5-3 lts)	0.15-0.3M	
2.2	S/G28 (S)	Dietes grandiflora (0.5-3Lts)	0.15-0.3M	
3				
3.1	L (S.d)	Supply of lawn - Sprigged lawn buffalo type.		





The following four identified regions for Port Louis are:






1. **Mgr Leen (Foot of Signal Mountain) from Marie Reine de la Paix Monument to Mgr Leen Street same along Pope Francis Link Road Track.**
2. **Montee Husard (Annex Passerelle Residence Vallejee, near UBS bus depot)**
3. **Sir Gaetan Duval Recreational Park Roche Bois**
4. **Promenade Jhellum, Cite La Cure**






Proposed plant list






1. Mgr. Leen

PLANT NAME	PLANT TYPE	MINIMUM HEIGHT	QUANTITY	VISUAL
Latania loddigesii (Latanier bleu)	Tree (Endemic)	1.5m	70	
Dracaena concinna (Bois de chandelle)	Shrub (Endemic)	1m	35	
Crinum mauritianum (Lys du Pays)	Shrub (Endemic)	30cm	200	






<p><i>Psiadia arguta</i> (Baume de L'Ile Plate)</p>	<p>Shrub (Endemic)</p>	<p>30-50cm</p>	<p>200</p>	
<p><i>Barleria observatrix</i> (Barleria)</p>	<p>Shrub (Endemic)</p>	<p>30-40cm</p>	<p>200</p>	
<p><i>Tournefortia argentea</i> (Véloutier blanc)</p>	<p>Shrub (Indigenous)</p>	<p>1m</p>	<p>6</p>	
<p><i>Cassine orientalis</i> (Bois d'olive)</p>	<p>Tree (Endemic)</p>	<p>1m</p>	<p>10</p>	
<p><i>Sophora tomentosa</i> (Bois chapelet)</p>	<p>Shrub (Indigenous)</p>	<p>1m</p>	<p>10</p>	



Foetidia mauritiana (Bois puant)	Tree (Endemic)	1.5m	10	
Dombeya acutangula var. rosea (Dombeya)	Shrub (Endemic)	1m	10	
Polyscias maraisiana (Bois boeuf)	Tree (Endemic)	1m	6	
Protium obtusifolium (Bois colophane batard)	Tree (Endemic)	1m	6	
Diospyros tessellaria (Bois d'ébène noir)	Tree (Endemic)	1m	5	

Dendrolobium umbellatum (Bois Malgache)	Shrub (Indigenous)	0.5-1m	6	
Ochna mauritiana (Bois bouquet banané)	Shrub (Endemic)	0.5-1m	6	
Terminalia bentzoe subsp. bentzoe (Bois benjoin)	Tree (Endemic)	1m	6	
Erythroxylum sideroxyloides (bois de ronde)	Shrub (Endemic)	1m	10	
Coffea myrtifolia (Bois café marron)	Tree (Endemic)	1m	6	



<p>Dodonaea viscosa (Bois de reinette)</p>	<p>Tree (Indigenous)</p>	<p>0.5-1m</p>	<p>10</p>	
<p>Pittosporum ferrugineum (Bois carotte a grosses feuilles)</p>	<p>Tree (Indigenous)</p>	<p>1m</p>	<p>6</p>	
<p>Thespesia populnea (Ste Marie)</p>	<p>Tree (Indigenous)</p>	<p>1m</p>	<p>6</p>	
<p>Tabernaemontana persicariifolia (Bois de lait)</p>	<p>Tree (Indigenous)</p>	<p>1m</p>	<p>6</p>	
<p>Diospyros egrettarum (Bois d'ébène)</p>	<p>Tree (Endemic)</p>	<p>1m</p>	<p>6</p>	





2. MONTEE HUSARD

PLANT NAME	PLANT TYPE	MINIMUM HEIGHT	QUANTITY	VISUAL
Phoenix dactylifera (date palm)	Palm (exotic)	1-2m	25	
Plumeria rubra (frangipani) assorted	Shrub (exotic)	1-1.5m	20	
Dombeya acutangula var. rosea (Dombeya)	Shrub (Endemic)	1m	6	
Crinum mauritianum (Lys du Pays)	Shrub (Endemic)	30cm	300	
Tournefortia argentea (Véloutier blanc)	Shrub (Indigenous)	1m	6	


Psiadia arguta (Baume de L'Ile Plate)	Shrub (Endemic)	30-50cm	100	
Bougainvillea Spp.	Shrub (exotic)	30-50cm	200	




3. Sir Gaetan Duval Recreational Park, Roche Bois

PLANT NAME	PLANT TYPE	MINIMUM HEIGHT	QUANTITY	VISUAL
Cyphostemma mappia (Bois Mapou)	Tree (Endemic)	0.5-1m	6	
Dombeya acutangula var. Rosea (Dombeya)	Shrub (Endemic)	1m	4	

Tournefortia argentea (Véloutier blanc)	Shrub (Indigenous)	1m	4	
Hyophorbe lagenicaulis (Palmiste Bouteille)	Tree (endemic)	1m	50	
Dodonaea viscosa (Bois de reinette)	Tree (Indigenous)	0.5-1m	50	
Psiadia arguta (Baume de L'Ile Plate)	Shrub (Endemic)	30-50cm	50	

4. Promenade Jhellum, Cite la Cure

PLANT NAME	PLANT TYPE	MINIMUM HEIGHT	QUANTITY	VISUAL
Dombeya acutangula var. Rosea (Dombeya)	Shrub (Endemic)	1m	20	

Dodonaea viscosa (Bois de reinette)	Tree (Indigenous)	0.5-1m	25	
Barleria observatrix (Barleria)	Shrub (Endemic)	1m	100	
Hyophorbe verschaffeltii (palmiste Rodrigues)	Tree (endemic)	1-1.5m	20	

5.0 The Implementation Phase

The implementation phase of the One Million Tree Plantation Project is a crucial stage in translating plans into tangible actions. The implementation phase consists of the strategies employed to ensure effective execution, with a focus on the Short-Term and Medium to Long-term phases.

Consequently, this pivotal stage, has been fragmented into two distinct phases, namely Phase I which is Short-Term implementation phase and Phase II which is the Medium to Long-term implementation phase with a view to ensuring that the crafted plans and strategies are translated into concrete actions and tangible outcomes.

The success of the entire endeavour hinges on the effectiveness of this implementation, requiring meticulous coordination among stakeholders, resource allocation and a keen focus on the established objectives.

5.1 Phase I – Short Term Implementation Plan

The Technical Committee decided that the implementation plan would be carried out phase wise. However, with a view to having a quick win and to kick start the project, it is imperative that a Short-Term Implementation Plan be devised in the very first instance for the tree planting activities to start at the earliest possible.

NECA Short term Implementation Plan to kick off the Project – As proposed by the NECA Technical Committee October 2023

SN	District Selected	Identified Site by Technical Committee	Status of Land following site visit	Recommended Plant by Technical Committee	Labour Force	Monitoring	Remarks/ Logistics required
1.	Port Louis	1	Mgr Leen-Marie Reine de la Paix	1	Latania loddigesii (Latanier bleu)	Additional 30 Cleaning Technicians from Mauri facilities	SOPG CCPL Arrangement: In every team of MF to be deployed for the tree plantation campaign and its maintenance, the CCPL will supplement with 3 trained gardeners to ensure the work
				2	Dracaena concinna (Bois de chandelle)		
			Owner: Forestry Service	3	Crinum mauritianum (Lys du Pays)		
			Approx. Dimension: 0.7 km road reserve +	4	Psiadia arguta (Baume de L'Ile Plate)		
				5	Barleria observatrix (Barleria)		
				6	Tournefortia argentea (Véloutier blanc)		
				7	Cassine orientalis		
						All clearances from Forestry Service Fixing of a water tank (9000 L), for irrigation	

SN	District Selected	Identified Site by Technical Committee	Status of Land following site visit	Recommended Plant by Technical Committee	Labour Force	Monitoring	Remarks/ Logistics required							
			1600 m ² for mini forest	(Bois d'olive)	M A U R I - F A C I L I T I E S	is being done efficiently.	purposes by gravity).							
			Actual state:	8 Sophora tomentosa (Bois chapelet)		M A U R I - F A C I L I T I E S	Overall monitoring will be done by the SOPG	Water bowser Tools and equipment						
				9 Foetidia mauritiana (Bois puant)										
			Partly cleaned	10 Dombeya acutangula var. rosea (Dombeya)					M A U R I - F A C I L I T I E S	Overall monitoring will be done by the SOPG	Water bowser Tools and equipment			
				11 Polyscias maraisiana (Bois boeuf)										
			Maintained by (If greenspace):	12 Protium obtusifolium (Bois colophane batard)								M A U R I - F A C I L I T I E S	Overall monitoring will be done by the SOPG	Water bowser Tools and equipment
				13 Diospyros tessellaria (Bois d'ébène noir)										
				14 Dendrolobium umbellatum (Bois Malgache)										
				15 Ochna mauritiana (Bois bouquet banané)										
				16 Terminalia bentzoe subsp. Bentzoe (Bois benjoin)	M A U R I - F A C I L I T I E S									

SN	District Selected	Identified Site by Technical Committee	Status of Land following site visit	Recommended Plant by Technical Committee	Labour Force	Monitoring	Remarks/ Logistics required
				17	Erythroxylum sideroxyloides (bois de ronde)	M A U R I - F A C I L I T I E S	
				18	Coffea myrtifolia (Bois café marron)		
				19	Dodonaea viscosa (Bois de reinette)		
				20	Pittosporum ferrugineum (Bois carotte a grosses feuilles)		
				21	Thespesia populnea (Ste Marie)		
				22	Tabernaemontana persicariifolia (Bois de lait)		
				23	Diospyros egrettarum (Bois d'ébène)		
		2	Monte Husard Cite Vallijee	Owner: CCPL	1	Phoenix dactylifera (date palm)	

SN	District Selected	Identified Site by Technical Committee	Status of Land following site visit	Recommended Plant by Technical Committee	Labour Force	Monitoring	Remarks/ Logistics required
			<p>Approx. Dimension: 1700 m²</p> <p>Actual state: Mostly cleaned</p> <p>Maintained by (If greenspace): Partly maintained</p>	<p>2 Plumeria rubra (frangipani) assorted</p> <p>3 Dombeya acutangula var. rosea (Dombeya)</p> <p>4 Crinum mauritianum (Lys du Pays)</p> <p>5 Tournefortia argentea (Véloutier blanc)</p> <p>6 Psiadia arguta (Baume de L'Ile Plate)</p> <p>7 Bougainvillea Spp.</p>			
		3	<p>Sir Gaëtan Duval Recreational Park, Roche Bois</p> <p>Owner: CCPL</p> <p>Approx. Dimension: 9000 m²</p>	<p>1 Cyphostemma mappia (Bois Mapou)</p> <p>2 Dombeya acutangula var. Rosea (Dombeya)</p> <p>3 Tournefortia argentea (Véloutier blanc)</p>			

SN	District Selected	Identified Site by Technical Committee	Status of Land following site visit	Recommended Plant by Technical Committee	Labour Force	Monitoring	Remarks/ Logistics required
			<p>Actual state: Cleaned</p> <p>Maintained by (If greenspace): CCPL</p>	<p>4 Hyophorbe lagenicaulis (Palmiste Bouteille)</p> <p>5 Dodonaea viscosa (Bois de reinette)</p> <p>6 Psiadia arguta (Baume de L'Ile Plate)</p>			
		4 Promenade Jhellum – Residence La Cure	<p>Owner: CCPL</p> <p>Approx. Dimension: 2000 m²</p> <p>Actual state: Partly cleaned</p> <p>Maintained by (If greenspace): CCPL</p>	<p>1 Dombeya acutangula var. Rosea (Dombeya)</p> <p>2 Dodonaea viscosa (Bois de reinette)</p> <p>3 Barleria observatrix (Barleria)</p> <p>4 Hyophorbe verschaffeltii (palmiste Rodrigues)</p>			

SN	District Selected	Identified Site	Status of Land	Recommended Plant	Labour Force	Monitoring	Remarks and Logistics
2.	Grand Port	1 Motor way M1 – Segment 3: Cemetery Round about to Mare D’Albert Interchange	Owner: RDA Approx. Distance: 2.13 km	1 Hyophorbe verschaffeltii (20-25 Lts)*	M A U R I - F A C I L I T I E S (already on site doing cleaning maintenance)	Mins of Env in collaboration with NECA & Maurifacilities	-Detailed specifications as per the Master Plan attached. -The RDA or the MoE to advise for the embellishment of the Central Verge. -Possibility of hiring a backhoe excavator loader for digging of pit for planting -Hiring of water bowser for watering the plants
				2 Roystonea regia (50-100 Lts)**			
				3 Hydrangea Assorted (0.5-3 lts)**			
				4 Codiaeum variegatum (0.5-3Lts)**			
		2 Motorway M1 – Segment 4 (Mare D’Albert Interchange to Gros Bois Roundabout)	Owner: RDA Approx. Distance: 2.87 km	1 Hyophorbe verschaffeltii (20-25 Lts)*			
				2 Wodietya bifurcate (20-25 Lts)**			
				3 Hydrangea Assorted (0.5-3 lts)**			
				4 Dietes grandiflora (0.5-3Lts)**			

5.2 Training Initiative for Employees of Mauri Facilities Management Co. Ltd

The Implementation Plan delves into the training initiatives designed for Mauri Facilities Management Co. Ltd. employees to equip them for successful project execution. This section of the report is a roadmap that navigates into the strategies to highlight the dynamic interplay between theory and practice. Central to the realization of these strategies, a targeted training program, encompassing both theoretical and practical sessions, was meticulously designed and delivered to the dedicated employees of Mauri Facilities Management Co. Ltd as per table below.

Training Programme for Mauri- Facilities Personnel for short term implementation plan for one million Tree Plantation Project 2023/2024

SN	Module	Organisation
1	Plant structure a. Parts of plants b. Classification	FAREI
2	Soil a. Profile	FAREI
	b. Clearing c. Furrowing/ holes/ beds d. Spacing / alignment of plants e. Plantation	Forestry Services
3	Cultural practices a. Fertilizer (types and application) b. Irrigation (types and application) c. Mulching d. Wind break	FAREI
4	Tools and equipment	Forestry Services
5	General Maintenance and monitoring a. Weed control b. Pest and diseases control	Forestry Services
	c. Pruning d. Circle weeding e. Rehabilitation of trees	NPCS
6	Safety at work	Maurifacilities
7	Practical Session	All organisation

This training initiative serves as the catalyst, propelling the short-term implementation plan into action. By equipping the workforce with a blend of theoretical knowledge and hands-on expertise, we are not only bridging the gap between conceptual understanding and real-world application but also empowering the team at Mauri-Facilities to champion the initial phases of our ambitious plan.

This deliberate integration of training sessions aligns seamlessly with the roadmap, forging a path where strategic insights transform into actionable initiatives, laying the foundation for a successful implementation journey.



5.3 Proposals for Phase II – Medium to Long Term Implementation Plan

Looking ahead, the project envisions the formulation of proposals for Phase II – the Medium to Long-term implementation plan. Anticipated for the next year, this phase will build upon the successes and lessons learned from the short-term implementation. Proposals will be designed to ensure sustained efforts in meeting the overarching goals of the One Million Tree Plantation Project. The Medium to Long Term Plan would extend the Short-Term Plan to different regions of the island namely four (4) specific sites identified by the Local Authorities within their administrative jurisdiction.

For the medium to long term plan 44 sites have been identified within the 11 other Local Authorities. Other sites that will be considered for tree planting beyond the 44 sites above are:

- Other Public places (green spaces, road reserves, Motorway Reserves, etc)
- Beaches
- School Premises

In line with one of the objectives and functions of NECA, that is “the development of a National Cleaning and Embellishment Strategy with an Action Plan to embellish Mauritius and keep Mauritius clean, in consultation with relevant Ministries and other stakeholders”, NECA would come up with a strategy for the embellishment of Mauritius by encouraging the population at large to plant various types of trees.

6.0 End Note

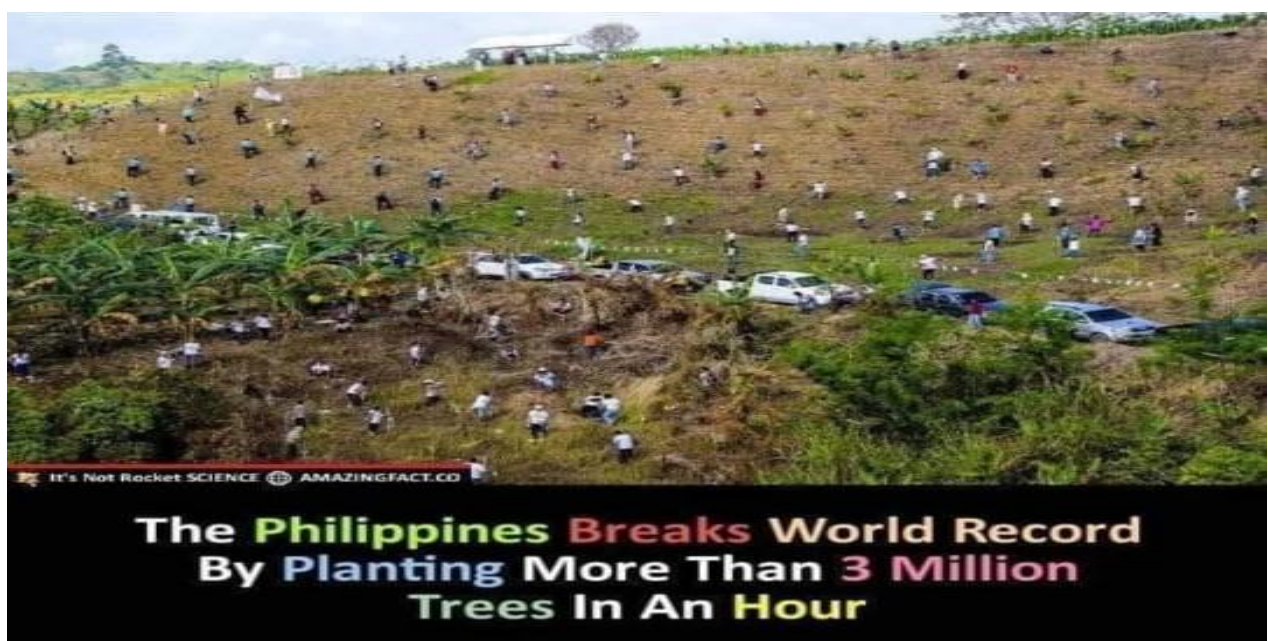
Trees bring a myriad of contributions to the environment, economy, human health, social cohesion and culture. Their existence which is understated and mostly taken for granted is intricately intertwined with life and the health on our planet. Acknowledging their importance is not just a matter of environmental responsibility but **A COMMITMENT** for each and every inhabitant of this world for the betterment of our future.

Efforts to protect and sustain trees are essential in addressing the urgent environmental challenges. Without these guardians of life, the world would be barren and life would not subsist. Embracing a harmonious relationship with trees is not just an option but an imperative.

Let's preserve the existing fragments of green spaces and not destroy nature and the natural habitats; leave something for the future generation to see in terms of green areas in their harmonious natural state. Let's reshape development while laying stress on the need for fairness to nature and other living entities. Let's plant so that the country looks like a garden.

In the pursuit of environmental sustainability and the mitigation of climate change impacts, the One Million Tree Plantation Project, a collaborative effort between NECA and Mauri Facilities Management Co. Ltd., stands as a beacon of proactive environmental stewardship. This Technical Report has delved into the multifaceted dimensions of the initiative, examining its inception, objectives, budget allocation, and the intricacies of its implementation phases.

In conclusion, the One Million Tree Plantation Project exemplifies the power of collaborative, strategic, and sustained efforts in addressing the challenges posed by climate change. By promoting a cultural shift towards tree planting and engaging diverse stakeholders, the initiative not only contributes to environmental sustainability but also cultivates a sense of shared responsibility for the well-being of our planet. As this project unfolds, it serves as an inspiration and a model for future endeavours in environmental conservation and climate change mitigation.



Where there is a will there is always a way