





This initiative is supported by **PacWastePlus**-a 72-month project funded by the European Union (**EU**) and implemented by the Secretariat of the Pacific Regional Environment Programme (**SPREP**) to sustainably and cost effectively improve regional management of waste and pollution.

PROJECT SNAPSHOT
FEDERATED STATES OF MICRONESIA

November 2021

ISBN: 978-982-04-0998-9



Recent audit for the states of Chuuk and Yap identified more than 20% of wastes landfilled are organic waste. This is mainly due to the absence of a designated programme (collection services and processing station) and community awareness to effectively manage organic waste in the two states. Landfilling of organic waste is a concern in the Federated States of Micronesia (FSM) as in most Pacific countries, as it take up critical landfill space. Decomposition of organics in an anaerobic environment like landfills also generate leachate and methane. FSM seeks to focus their PacWastePlus country investment to divert all organic waste away from landfill. The project will pilot organic waste management, in the states of Chuuk and Yap, with learnings used to develop community awareness resources to assist other states in FSM, to replicate similar programmes to divert organic wastes from landfill.

#### Items targeted for inclusion in the FSM organics project include:



Household organic waste



Market and businesses organic waste

All organic material is diverted from landfills



FSM seeks to utilise the PacWastePlus investment for the following activities:



PROGRAMME IMPLEMENTATION

Design and implement suitable organic processing programme based on the volume and type of organic wastes produced



FACILITY
Construct and operate Organic Processing
Facilities in Chuuk and Yap





#### RESOURCES

Develop toolkits and resources to enable transference to other states and islands



COMMUNICATIONS

Implementation of project education and awareness actions to identified stakeholders

## **PROJECT JUSTIFICATION**



Solid Waste Management Strategies for Chuuk and Yap States highlight the **need for organic recycling** 

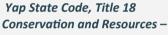
Establishing an organic processing programme will promote:



Organics materials recycling, trialling, and implementation



Collaboration with actors outside of the waste management sector such as Department of Agriculture and Forestry



Yap has made several regulations under Title 18 relevant to waste management



**Regulation 2.1** provides for clear segregation of categories of waste (organic waste is included in Category B), to aid safe and separate disposal



Chuuk State Environmental Protection Act



**Chuuk Women Council (CWC)** 



Working with women in communities for education and awareness on composting organic wastes



**GEF 5 "Ridge to Reef"** project constructed a composting shed within the Yap Department of Agriculture compound



Yap Division of Agriculture have a composting shed that is processing organic wastes generated from daily operation, and there is potential for this facility to receive organic wastes from communities



Yap EPA seeks to build on the learnings from this small-scale composting programme and expand the scope to receive organic wastes from communities for processing

## **CURRENT STATUS / MANAGEMENT OF PRIORITY WASTE**

#### **Current Situation:**

#### **Data collection and Education and Awareness**





Organics make up **more than 20%** of the waste stream currently going into landfill in Chuuk and Yap States

Ongoing awareness campaigns in schools and communities across all four states such as the "Chuuk Litter Bug Project," "Environment Club", and the "Solid Waste/3R campaign"



#### **Policy & Regulation**



Existing legislation for waste governance - performing at a MEDIUM to MEDIUM-TO-HIGH level



Code Title 25: Environmental Protection, Subtitle I: FSM
Environmental Protection Act (as at 2014) – Chapter 2
establishes the Environmental Protection Office. s209 outlines the general powers and duties of the Office, including to abate, control, and prohibit pollution and contamination of air, land and water



Existing *National Solid Waste Management Strategy* for FSM that covers the period 2015-2020. Each State also has a Solid Waste Management Strategy (out to 2027/2028 for Chuuk, Yap and Kosrae) including action plan items

# LOW Project Investment Effort

(Data collection for organic programme, education and awareness programme through implementation of National Education and Awareness plan)



#### **On-Ground Activity**



There is currently no collection services specifically for Organic Wastes



In Chuuk, small scale composting is currently undertaken by Chuuk Women Council (CWC)



In Yap, a composting shed is managed by the Yap Division of Agriculture and Forestry (DAF)



Organic wastes are currently landfilled in these two states due to the absence of effective collection systems and appropriately scaled facilities

# LOW Project Investment Effort

(One organics processing facility at Neouo landfill on Chuuk, six community organics processing facilities on Yap State, resources to expand the scope of the programme to other islands)

#### **Human Capacity**



MODERATE ability to manage organic waste through human resource skills, knowledge capacity and collection



(already capacity for organics waste management, Guidelines for management and training will be provided)

# GENDER EQUALITY, SOCIAL AND DISABILITY INCLUSION (GESDI) CONSIDERATIONS FOR WASTE MANAGEMENT IN FSM



Equality in today's society requires sound waste management.

All people have the right to access waste infrastructure, participate in decision making and able to voice grievances, access information and awareness messages, and be protected from harmful effects of waste — on health, environment, culture and traditions.



# Opportunities for FSM to provide for equality during the management of recyclables



Continue development of effective legislation to provide coordinated and equitable approach for waste management.



Include considerations regarding equality and inclusion in wasterelated legislation and regulation



Consider additional bans and phaseouts of certain types of problematic or hazardous products



Provide for effective implementation, monitoring, and enforcement of wasterelated legislation to protect vulnerable members of society



Mobilise additional resources for waste management including through an Advance Recovery Fee system



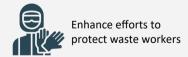
Enhance the availability and accessibility of information



Include additional Government departments, in particular labour, culture, women, and equality-related authorities and/or bodies, in waste-related decision making to identify and address potential inequalities



Provide waste management facilities for rural and outer island communities





Utilise traditional knowledge and customs to enhance participation, environmental protection and stewardship

### **MAPPING PROJECT SUCCESS**







All organic material is diverted from landfills to a designated organic processing facility







All households, markets and businesses in FSM are effectively participating in the Organic Processing Programme by segregating organic wastes for collection and composting



Pollution caused by inappropriate management of organic waste products is eliminated as 90% is captured through designated organic processing facilities and diverted from landfills



All communities in FSM have access to compost material generated through the Organic Processing Programme.



**SHORT TERM OUTCOMES** 



**Organic Processing Programme** established and effectively operational for Weno and Colonia to divert organic and recyclable waste from landfill



**Expand the Organic Processing** Programme to other states to share learnings and achieve similar outcomes



Have organic waste collection services and accompanying awareness programs in Weno and Yap to promote community participation in the Organic **Processing Programme** 





**Operational Organic Processing** Programme established in the States of Chuuk and Yap



Organic Processing Facility constructed and operational in Weno, Chuuk



**Community Organic Processing sites** constructed and operational in six communities across the State of Yap



Training in management of organic •••• processing systems in Chuuk and Yap



Development of Guideline on the effective management of the Organic **Processing Programme** 

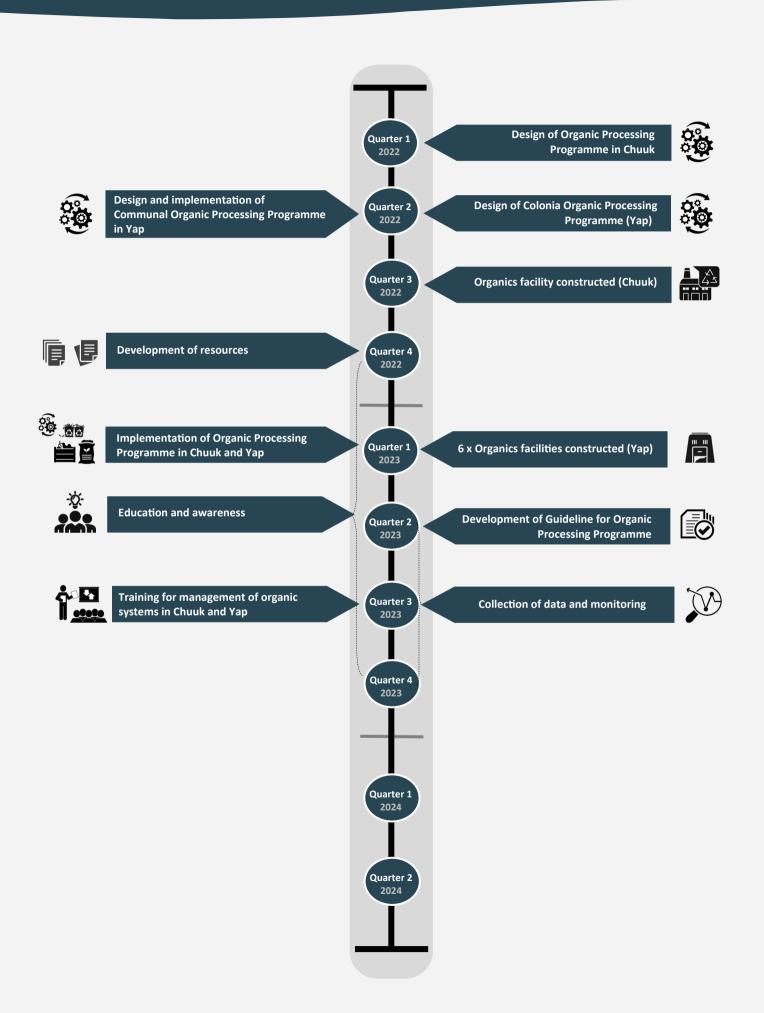


Development of toolkits and resources to enable transference to other states and islands



Implementation of effective national education and awareness program

## **ACTIVITIES AND TIMELINE**



# PACWASTEPLUS REGIONAL PROJECTS / ACTIVITIES AND WHAT FSM CAN EXPECT



#### **Health Care Waste Management**

#### FSM will receive:

- Healthcare waste training [storage, treatment, and disposal solutions for healthcare waste]
- Assessment of the impact of the PacWaste Project healthcare waste activities
- Repair selected healthcare waste Incinerators in the region
- Work with development partners to implement a long-term plan for the sustainability of health care waste infrastructure
- Ongoing Technical Assistance



#### **Organics Management**

#### FSM will receive:

- Document providing technical analysis of how to compost common organic materials received in the Pacific
- Template Minimum Standard document to guide effective and safe composting
- Resources to guide organic facility design and operation
- Training on organic facility design and operation
- Ongoing Technical Assistance
- Learnings from country projects focused on organics management



#### **Disaster Waste Management**

#### FSM will receive:

- Terms of Reference for the establishment of an Environment Sector Working Group (Cluster) within National Disaster Management Framework to ensure effective implementation of disaster Waste Management Response and Recovery
- Drafting/Guiding Notes on National and Community Disaster Waste Management Plans
- Disaster Waste Training Manual for use at both the National and Community level
- Learnings from country projects focused on disaster waste management
- Ongoing Technical Assistance



#### **Bulky Waste Management**

#### FSM will receive:

- Guiding document and a Decision
  Support Tool to guide on how to design
  and implement a national ELV
  management programme.
- Drafting/Guiding Notes on how to draft national legislation for the management of End-of-Life vehicles
- Safe Dismantling Training Manual
- Publications and awareness materials



#### **Asbestos Management**

#### FSM will receive:

- A guidance and drafting note to assist with legislative reform to ban the importation of asbestos
- Template Code of Practice to guide the safe handling and management of asbestos
- Communication resources and materials to provide information on safe handling and management of asbestos
- Learnings from other country projects focused on asbestos
- Ongoing Technical Assistance



#### **ARFD / Sustainable Financing**

#### FSM will receive:

- Communication resources and materials to provide information to stakeholders on the benefits of ARFD systems
- Resources and training to assist during ARFD system design and guide decisions support
- Learnings from other country feasibility studies and projects focused on ARFD
- Ongoing Technical Assistance



#### **Regional Course Development**

#### FSM will receive

- Development of a sustainable capacity building program for waste management in based on country needs
- Training through the adopted training courses, both vocational and tertiary



#### **Schools Curriculum Development**

#### FSM will receive

- School curriculum on waste management education (eight programme waste streams) incorporated in to existing school core subjects such as Maths, English and Science
- Primary school education-problem based curriculum
- Secondary school education-culturally responsive
- Tertiary school education-culturally responsive
- Training and capacity building opportunities for teachers



#### **Behaviour Change**

#### FSM will receive

- Learnings of the community-based social marketing Pilot projects and replication of successfully implemented projects
- Ongoing Technical Assistance

### **ABOUT THE PACWASTEPLUS PROGRAMME**

The Pacific – European Union (EU) Waste Management Programme, PacWastePlus, is a 72-month programme funded by the EU and implemented by the Secretariat of the Pacific Regional Environment Programme (SPREP) to improve regional management of waste and pollution sustainably and cost-effectively.

#### **About PacWastePlus**

The impact of waste and pollution is taking its toll on the health of communities, degrading natural ecosystems, threatening food security, impeding resilience to climate change, and adversely impacting social and economic development of countries in the region. The PacWastePlus programme will generate improved economic, social, health, and environmental benefits by enhancing existing activities and building capacity and sustainability into waste management practices for all participating countries.

Countries participating in the PacWastePlus programme are: Cook Islands, Democratic Republic of Timor-Leste, Federated States of Micronesia, Fiji, Kiribati, Nauru, Niue, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu.

#### **KEY OBJECTIVES**

#### **Outcomes & Key Result Areas**

The overall objective of PacWastePlus is "to generate improved economic, social, health and environmental benefits arising from stronger regional economic integration and the sustainable management of natural resources and the environment".

The specific objective is "to ensure the safe and sustainable management of waste with due regard for the conservation of biodiversity, health and wellbeing of Pacific Island communities and climate change mitigation and adaptation requirements".

#### **Improved Data Collection**

- Improved data collection, information sharing, and education awareness
- Policy & Regulation Policies and regulatory frameworks developed and implemented.
- Best Practices Enhanced private sector engagement and infrastructure development implemented
- Human Capacity Enhanced human capacity







Learn more about the FSM Project by visiting

https://pacwasteplus.org/country-project/federated-states-of-micronesia/

#### For more information please contact:



The PacWastePlus team on pwp@sprep.org



Or visit - https://www.pacwasteplus.org

#### Disclaimer

This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of SPREP and do not necessarily reflect the views of the European Union.

\*Countries mentioned in this publication are as at November 2021