







Sufficiency Economy Philosophy to Sustainable Development Goals (SEP to SDGs) การขับเคลื่อนสืบสานศาสตร์พระราชา ปรัชญาของเศรษฐกิจพอเพียงสู่เป้าหมายความยั่งยืนโลก

## "Ban Ya To"

#### SUFFICIENCY ECONOMY LEARNING CENTER



# "Ban Ya To" Sufficiency Economy Learning Center

From the inspection and preliminary analysis of soil characteristics in private land plots of Mr. Nasori Yiseng, Ban Ya To Change Leader from Change Leadership Development Program for Fiscal Year 2021, in Ban Ya To, Bare Nuea Sub-district, Bacho District, Narathiwat Province, it is found that the soil's ability to retain water and minerals was compromised.

### **Soil Characteristics**

The analyzed soil is made up mainly of sand and sandy loam, thus, does not stick together. Its single-grained structure creates low cohesion between particles contributing to soil erosion and affecting plant growth due to fast drainage, water shortage, moderate soil acidity (pH 5.5 - 6) and low absorption of essential minerals. In this light, soil improvement is a challenge for farmers in Ban Ya To area of Bare Nuea Sub-district.

### Soil Improvement

Soil is an essential resource for growing plants and agriculture that, when no longer suitable for farming, must be improved according to the conditions and context of the area. In the case of Ban Ya To, the soil is of sandy loam class.

Basic soil improvement steps include using organic compost and growing drought-tolerant, ground cover crops that require less water and, at the same time, provide more moisture and organic matter in the soil. After improving the soil structure, it is found that plants grow better.

**Manure compost** is used to improve soil health, cohesion, drainage and aeration systems.

**Bio compost** is obtained from materials replete with live microorganisms which help to create or release beneficial nutrients to cultivated plants.

Soil covering helps create a habitat for nitrogen-fixing microorganisms, a group of microorganisms that fix nitrogen in the air for plants to use.



From environmental problems regarding household waste management arises a simple yet sustainable solution: the production of organic compost from kitchen waste following a simple DIY method upgraded from the original technique by adding more ventilation areas for higher fermentation efficiency. This practice starts from Change Leaders' household and is now gaining more popularity.

Soil overexploitation for an extensive period of time and lack of soil maintenance are common causes of soil infertility, chemical and biological deterioration of soil properties, making the plot unfit to grow economic crops and unpopular to grow kitchen vegetables. After various campaign projects driven and promoted by the Department of Community Development, however, the villagers become more aware of the benefits of soil maintenance and kitchen vegetable farming, resulting in the improved food security and soil condition.



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