## Land-use suitability maps and scenarios for targeted commodities and landscapes

## Introduction

Due to its high cacao production, contributing almost 80% of the country's total production, the Davao region was coined as the Cacao Capital of the Philippines. However, there are still areas in the region that are not maximized in terms of production; this includes the province of Davao de Oro (formerly Compostela Valley). This is despite all the resources devoted by the national and local government, as well as development partners, to strengthen the province's cacao industry. This is also happening even if data shows that there has been a continuous expansion of areas planted with cacao some of which used to be forests.

One of the related factors that can be examined is the suitability of the crop to the land. This helps ensure that the resources spent on growing the crop, including institutional and environmental inputs, are not being wasted.

In line with the Sustainable Farming in Tropical Asian Landscapes (SFITAL) Project's objective to develop sustainable and inclusive cacao value chains, the team conducted a cacao suitability analysis for Davao de Oro.

## Methodology

Based on an extensive literature review, the team identified several site-specific factors affecting the growth and development of cacao. This includes slope, elevation, rainfall, temperature, relative humidity, soil, land cover, road aspect, and access.

These site factors were then used in the implementation of the Analytical Hierarchy Process (AHP), which is a multicriteria decisionmaking method that uses a pair-wise comparison to assign unbiased weight distribution across identified factors. The pair-wise comparison was conducted through purposive interviews of experts, government extension workers, training institution, and farmers.

## **Highlights of findings**

Here are the key findings of the said study:

- Over 58% of Davao de Oro's land is moderate suitable for cacao while only 15% is slightly suitable.
- Only 10% of the province's land area have 'very low' and 'low' suitability.
- The land in Davao de Oro currently being used in agroforestry is suitable for cacao.







