

A Guide to Cocoa Production

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INTRODUCTION

Preface

This guide to cocoa production is based on publications of research carried out in various locations world-wide, and fieldwork in Central America. It will be updated as the need arises. Needless to say, this guide will be most effective if it is translated and adapted to local languages and conditions.

Introduction

The aim of this guide is to enhance and standardize the company's strategy in the production of high-quality cocoa. This compilation of research, fieldwork, and experience provides detailed information about the special conditions required for the various stages of cocoa production.

Cocoa is an important commercial plantation crop, best suited to a humid tropical climate. The cacao tree, *Theobroma cacao*, is a perennial crop that can thrive despite seasonal variations, while maintaining high yield potential. It is found in the lower parts of the evergreen rainforest, and climatic factors, particularly temperature and rainfall, are important to encourage optimum growth.

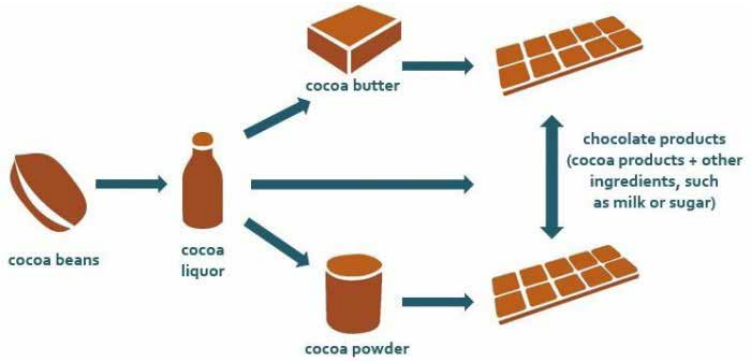
It is cultivated intensively in monoculture plantations as well as part of a mixed crop farm, supplying and receiving shade to/from other crops.

Cacao trees are normally cultivated at altitudes up to 1200 m above MSL with an annual rainfall of 800 mm to 2000 mm. A relative humidity of 80% with a temperature range of 15° C to 35° C characterizes its cultivating conditions. It thrives well on a wide range of soil types with pH ranging from 5.0 - 8.0 (optimally 6.5- 7.0), however is predominantly grown on red laterite soils.

While the cacao tree produces flowers and fruits all year-long, requiring selective harvesting, it takes between 3 and 4 years for the plant to start producing fruit. The yield is 50-70 pods/tree/year. On an average, 3 kg of wet beans (from 30-36 pods) give 1 kg of fermented dried beans. It takes between 300 and 500 cocoa beans to produce one kilogram of chocolate.

The cocoa beans are processed into three basic products: liquor (crushed beans), butter and powder, both of which require further processing. Bean quality is assessed by fat content, taste and size.

The special conditions required for the various stages of cocoa production are documented in this guide with the goal of improving the company's strategy for the cultivation and processing of a high-quality product. This document is based on a wealth of literature, experience, research and observation of the various stages of cocoa production.



Liquor Cocoa Butter



Cocoa Butter blocks



Cocoa powder

