

**FEASIBILITY  
STUDY** ON  
THE DEVELOPMENT OF  
**COTTON  
BY-PRODUCTS**  
*in Malawi*

## Feasibility study on the development of cotton by-products in Malawi

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## List of acronyms and abbreviations

ADD .....	Agricultural Development Division
ADMARC.....	Agricultural Development and Marketing Corporation
AEDO .....	Agriculture Extension Development Officer
AICC .....	African Institute of Corporate Citizenship
CCM.....	Cotton Council of Malawi
CFM.....	Contract Farming Model
COFA .....	Cotton Farmers Association of Malawi
CORL.....	Cooking Oil Refining Industry
CPUM.....	Cotton Production Up-scaling Model
DARS .....	Department of Agriculture Research Services
DWS .....	David Whitehead and Sons
ECOAM .....	Edible Cooking Oil Association of Malawi
EIF .....	Enhanced Integrated Framework
EPA.....	Extension Planning Area
ESA .....	Eastern and Southern Africa
FAO .....	Food and Agriculture Organization
FGD .....	Focus Group Discussion
FUM.....	Farmers Union of Malawi
GOT.....	Gin Out Turn
ICAC .....	International Cotton Advisory Committee
KII.....	Key Informant Interview
LUANAR.....	Lilongwe University of Agriculture and Natural Resources
MCDS.....	Malawi Cotton Development Strategy
MK.....	Malawi Kwacha
MoA.....	Ministry of Agriculture
MoTI.....	Ministry of Trade and Industry
MT.....	Metric Tons
NAIP .....	National Agriculture Investment Plan
NAP.....	National Agriculture Policy

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NCFS .....	National Contract Farming Strategy
NES .....	National Export Strategy
NGO .....	Non-Governmental Organization
PPP .....	Public-private partnerships
SADC .....	Southern African Development Community
SWOT.....	Strengths Weaknesses Opportunities Threats

# Chapter 1. Introduction

## 1.1 Background

Malawi is a highly commodity-dependent country where commodities represented 92.3 per cent of merchandise exports in 2018-2019, increasing from 90.4 per cent ten years earlier (UNCTAD, 2021). Agriculture accounts for 31 per cent of GDP but employs 76 per cent of the workforce. Women represent more than half of the agricultural workforce. The agriculture sector, comprising estate and smallholder farming, accounts for almost 90 per cent of export revenue. The four leading commodity exports are tobacco, tea, sugar, and cotton. Malawi exports were down from about US\$1 billion a decade ago to US\$865 million in 2018-2019, reflecting the vulnerability of the economy to price fluctuations in primary commodities. As a landlocked country, Malawi depends on access to ports in neighbouring countries, such as the deep-sea port of Nacala in Mozambique, and other logistics corridors including railways, to reach international markets.

Historically, the very first cash crop of Malawi was coffee, followed by tea. However, since the 1920s, tobacco has been the country's main export crop. The ongoing anti-tobacco global campaign impressed the need for Malawi to identify alternative export crops such as cotton, which has been grown since the early 1960s. Over 200,000 smallholder farmers use their income from cotton to buy food and pay for other necessities. This is particularly crucial in cotton growing areas where food crops such as maize are constrained due to adverse weather conditions. Cotton has a relatively long value chain comprising, in addition to its production, the processing industry in terms of ginning, oil crushing, spinning and weaving companies, as well as textile and garment retailers. In total, 15,000 people are employed in the processing sector.

Until the 1980s, seed cotton was bought and processed by the government-owned Agricultural Development and Marketing Corporation. After market liberalization, private sector ginners entered the cotton business (WTO, 2019).

The area that is dedicated for cotton production in Malawi is fully rainfed. More than half of this area is in the Lower Shire Valley. Although its planted area is much smaller than that used for main crops such as maize, groundnuts, sweet potatoes and dry beans, cotton is one of the priority oil seed crops. The National Agriculture Investment Plan (NAIP) describes cotton and other oil seeds as having potential both in the domestic and export market. Indeed, cotton seed oil consumption contributes to food and nutritional diversity.

## Feasibility study on the development of cotton by-products in Malawi

Despite the importance of cotton as a cash crop, its yields are generally low, hovering between 200 and 300 kg/Ha of lint in the past three decades (ICAC, 2021). This low yield is due to a number of constraints including the following: poor or inadequate insect and mite pest management, high investment requirements aggravated by high levies on inputs such as pesticides, spraying equipment, protective clothing and fertilizer; inappropriate crop husbandry practices; environmental factors such as moisture and heat stress in drought prone areas; low soil fertility; competition with high value crops with respect to pricing and marketing; and lack of high yielding varieties with improved fibre quality characteristics.

The Malawi Government, through the Ministry of Agriculture, launched a special programme for the revitalisation of the cotton value chain known as the Cotton Production Up-scaling Model (CPUM) between 2011-14. The government invested 1.6 billion Kwacha (equivalent to US\$10 million using an exchange rate of 160MK per US\$ in 2011) to support smallholder farmers within the framework of CPUM, leading to an average production of 148,000 metric tons of seed cotton for three seasons as of 2011/12. CPUM aimed to set up a cotton development fund sustained through levies from ginners and farmers. However, this failed because ginners under-declare the amount of cotton that they buy on the market to pay less levy. This happens because most cotton is traded through informal channels. So overall, there is limited transparency in the cotton market.

Following CPUM, the Contract Farming Model (CFM) was introduced between 2013 and 2015 by ginners who made an investment of K2 billion Malawi Kwacha (equivalent to US\$5 million using an average exchange rate of 400 MK per US\$ for the given period). It was expected that the private sector would sustain cotton production through CFM, which increased production of seed cotton by 7,000 metric tons on average during the implementation period. However, it was discontinued due to the high default rate of farmers, which resulted in losses amounting to 1.3 billion Malawi Kwacha (US\$3.25 million using 400MK per US\$). Since the peak recorded in the 2011/12 season, production volumes have been on the decline.

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