TANZANIA NATIONWIDE MILLS CENSUS REPORT

2022







LIST OF ACRONYMS

DAICO District Agriculture, Irrigation and Cooperative Officer

DED District Executive Director

DMO District Medical Officer

GAIN Global Alliance for Improved Nutrition

Geographical Information System

GPS Global Positioning System

GPX GPS Exchange Format

HKI Helen Keller International

JOSM Java OpenStreetMap editor

NBS National Bureau of Statistics

NFFA National Food Fortification Alliance

mt Metric Tons

ODK OpenDataKit

OMDTZ OpenMap Development Tanzania

OSM OpenStreetMap

PMO Prime Minister's Office

PO-RALG President's Office Regional Administration and Local Government

QGIS Quantum Geographic Information System

RAICO Regional Agriculture, Irrigation and Cooperative Officer

RAS Regional Administrative Secretary

RMO Regional Medical Officer

SANKU Sanku-Project Healthy Children

SDGs Sustainable Development Goals

SMEs Small and Medium Enterprises

TFNC Tanzania Food and Nutrition Center

ToR Terms of References

ToT Training of Trainers

VEO Village Executive Officer

WEO Ward Executive Officer

WFP World Food Programme

XLS Excel Sheet Format

List of Pictures

Picture 1: Deputy Minister of Industries, Trade and Investments, Honourable	
Exaud Kigahe and Sarah Gordon-Gibson, WFP Representative and	_
Country Director launch the Milling Census Report in Dodoma	7
Picture 2: A mapper collecting mill machine information in Mpanda district	8
Picture 3: An ODK Collect app loaded with the survey form	10
Picture 4: Training community mappers	11
Picture 5: Zones for mills mapping in Tanzania	12
Picture 6: Monitoring data collection	13
Picture 7: Data cleaning process by using JOSM	14
Picture 8: Example of milling processing machines	16
Picture 9: Diesel powered milling machine	17
Picture 10: Private individual owned mill	18
Picture 11: Women owned milling machine	19
Picture 12: Sanku dosifier	20
Picture 13: Dosifier for maize fortification	21
Picture 14: Packaging status of cereals and tuber products	22
Picture 15: Large scale mill with packaging facility	22
Picture 16: Safety and hygiene practice for milling	24
Picture 17: Mappers preparing for data collection	27
Picture 18: Mappers briefing	28
Picture 19: Mappers testing data collection tools	28
Picture 20: Mappers familiarizing with survey questions	29
List of Figures	
2.50 01 1.801 05	
Figure 1: Methodology and implementation strategy	9
Figure 2: Team composition	10
Figure 3: Types of mill processing machines	16
Figure 4: Milling processing machine energy sources used	17
Figure 5: Types of cereals and tuber milled	17
Figure 6: Safety equipment status	18
Figure 7: Ownership status of mills in Tanzania	18
Figure 8: Gender composition of machine owners	19
Figure 9: Age group of machine owners	19
Figure 10: Micro, Small and Medium-scale millers fortification status	20
Figure 11: Fortification standards/specifications used by millers	21
Figure 12: Recommendations	20
Figure 13: Gender composition of recruited mappers	20
Figure 14: Age composition of community mapper	20
Figure 15: Education level of community mappers	20
1. 1841 0 191 Laucadon level of community mappers	20

List of Tables

ACKNOWLEDGEMENTS

The World Food Programme (WFP) would like to thank the Government of the United Republic of Tanzania for the support and collaboration provided through different ministries and departments, which have made the mapping exercise a success. In particular WFP thanks the Ministry of Industry, Trade, and Investment, the President's Office - Regional Administration and Local Government, Prime Minister's Office, Ministry of Health, National Bureau of Statistics (NBS), and Tanzania Food and Nutrition Centre (TFNC) for their involvement in data collection, data validation, report writing and eventual launch.

We also extend our gratitude to the technical committee of the National Food Fortification Alliance for their input and validation of the report, Sanku-Project Healthy Children, Global Alliance for Improved Nutrition, milling machine owners, community mappers, and our partner OpenMap Development Tanzania for designing, supervising, and undertaking the milling census and developing the interactive map.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	6
INTRODUCTION	7
PROJECT OBJECTIVES General Objective Specific Objectives	8 8
METHODOLOGY AND IMPLEMENTATION STRATEGY PRE-FIELD ACTIVITIES Data Collection Survey Design Training of the Trainers	10 10 10 10 10
DATA COLLECTION Permission for the Mills Census Survey Pilot Mapping Recruitment of Community Mappers Training Community Mappers	11 11 11 11
POST FIELD ACTIVITIES Data Quality Assurance	13 13
KEY FINDINGS TYPES OF MILL PROCESSING MACHINES Energy Source Used Types of Cereal and Tuber Milled Safety Equipment	15 16 17 17 18
MILLS OWNERSHIP Gender Composition of Mills Owners	18 19
FORTIFICATION Fortification Standards/Requirements	20 21
PACKAGING	22
CONCLUSIONS AND RECOMMENDATIONS Conclusion Recommendations	25 23 24
LIST OF REFERENCES	25
ANNEXURES	26

EXECUTIVE SUMMARY

The national milling census was conducted to establish a Geographical Information System dataset for micro, small, medium, and large mill enterprises in Tanzania. In addition the census was to provide information on each of the mills that included type of machinery used, production capacity use, food safety measures employed and fortification practice. Open-source tools and a community mapping approach were used for data collection where a total of 1,091 community mappers mapped 33,721 mills across 31 regions in Mainland Tanzania and Zanzibar over a over a of course of three months. The census focused on cereals and tuber mills maize, wheat, rice, and sorghum production for cereals and Cassava for tubers.

In addition to successfully mapping 33,721 food processing facilities the census also established the different food processing machines used in the mills with hammer mills (58%) being the major type of processing machine found followed by dehuller (28.7%), rice mills (9.3%) and others (3.7%) such as pin, roller, and disc mills. The results from the census further showed that only about 2% of maize flour millers surveyed fortified maize flour with vitamins and minerals. Packaging was practiced by only 36% of millers whereas 64% were not packaging their produce. The predominant staple food milled by majority of the millers was maize flour (50%) followed by tubers such as cassava (20%), sorghum (14%), rice (12%), and wheat (4%). Practice of safety measure such as wearing protective clothes was observed among 19% of millers while majority of millers (81%) did not wear any protective clothes. Following the mapping of mills, an online interactive web map was developed where stakeholders would be able to fetch, filter, analyse and make informed decisions based on available results for all 31 regions of Mainland Tanzania and Zanzibar. The census report and web map¹ were validated by a technical committee selected from the National Food Fortification Alliance.

The findings of this census will be instrumental to the Government and development partners in increasing access to fortified and nutritious foods in the country as well as supporting Government's efforts toward mandatory fortification.

INTRODUCTION



Picture 1: Deputy Minister of Industries, Trade and Investments, Honourable Exaud Kigahe and Sarah Gordon-Gibson, WFP Representative and Country Director launch the Milling Census Report in Dodoma

The cereal and tuber milling sector plays a crucial part in food and nutrition security in Tanzania, with over 85 percent of the population² relying on maize flour (ugali) to meet 40 percent of their average household calorie need. The sector is primarily divided into micro, small, medium, and large-scale enterprises. It is estimated that 95 percent³ of all maize flour in the country comes directly from micro, small, and medium-scale mills while a large percentage of wheat flour, which is consumed in significant quantities in cities and towns, comes from large-scale mills.

In most industries, particularly food processing, up-to-date, available, and accessible data is crucial for a robust sector. However, the lack of information and unavailability of a milling database in Tanzania poses significant challenges for stakeholders, especially when pavigating different regions, honce limiting their

预览已结束, 完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5_31640

