



#### RICE HIGH PRODUCTION TIPS

# A STUDY ABOUT THE FACTORS THAT HAVE CONTRIBUTED TO THE LOW PRODUCTION OF RICE IN KALIRO DISTRICT NAMWIWA SUBCOUNTY

BY

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## **DECLARATION**

I BWAMIKI MATHEW declare that this research rep	port is my own original work unless
otherwise cited, and where such has been the case referen	nce has been stated and that the same
work has not been submitted for any award in any other	university or other tertiary institute of
higher education.	
Signature	Date

A	P	P	R	N	V	Α	I

This dissertation has been submitted for examination with t	he approval of my supervisor.
PROF. OCHWOH VICTOR AKANGAH	
Signature	Date

### **DEDICATION**

I dedicate this research review to my dear parents **Mr. MUSALWA ISAAYA** and **Mrs. NAMUKOSE HARIET** for their entire effort to support me materially and financially through daring to pay all the necessary school fees throughout my academics and to all my dearest family members; the likes of NakisigeAishat, Naguyo Sam, NalukoSona, Nakyesa Rebecca and NamugayaMonic for their sincere support, guidance and counseling granted to me.

I further dedicate this review to my dear friends of Busitema University including the likes of Mukisa Ahamadah, WamubiligweMutwalibi, Wakiro Allan and many others who have been there for me in times of happiness and times of trouble.

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## LIST OF ACRONYMS

WFP World Food Program

EAC East African Community

MT Metric Tonnes

### **ABSTRACT**

**Due to the decreas**e in the rice production in Namwiwa sub-county inspired the researcher to find out the factors that have contributed to low rice production.

To embrace people with the knowledge on how to improve on their rice production by enabling the farmers to have the new ideas on how to solve their problems to increase the production. In order to find out the factors contributing to the low rice production, the researcher

Selected more dependable and reliable tools namely:- Questionnaires observation and oral interviews with the respondents. Among the farmers, three respondents were randomly selected from each parish, two extension workers (respondent) cooperative assistant and Agricultural assistant in change Namwiwa Sub-county. There was selection of the parishes, the four Parishes were selected randomly from the eight parishes namely; Bilari, Mutendeli, Bukale, Buseleka, one of the farmers from each parish was interviewed.

Farmers should use improved seeds, herbicides to reduce labour costs, making farmer to extension worker or extension worker to farmer visits etc.

It is my self who did the research under the directives of the parish leaders who led me to the farmers to get the information and also extension workers enabled me to get more information and proof.

Under the findings I found out that among the factors that have led to low rice production include; limited capital to enhance the production, low yielding seed varieties, lack of herbicides, and low prices since farmers invest much income in the production.

I conclude by informing the farmers to involve more in rice production since it's the most profitable crop.

I recommend farmers to read this information to improve on their rice production and researchers should research on how to improve soils for high rice production.

### **CHAPTER ONE**

### INTRODUCTION

### 1.1 Background

It has been noticed that, rice is among the first two widely grown cereal crop globally. According to different reports reported by different researchers and analysts, China has been ranked number in rice production and consumption as well with an annual production of 211.4M tonnes as reported in 2019. (Soonsung. H., 2021). Following China, there are many other countries having high production of rice including India, Indonesia etc.

Table I Showing countries with high rice production in the world

Country	<b>Tonnes Rice Produced (2019)</b>	% of Total
China	211.4M	28.0%
India	177.6M	23.5%
Indonesia	54.6M	7.2%
Bangladesh	54.6M	7.2%
Vietnam	43.4M	5.7%
Thailand	28.3M	3.7%
Myanmar	26.3M	3.5%
Philippines	18.8M	2.5%
Pakistan	11.1M	1.5%
Brazil	10.4M	1.4%
Others	119.0M	15.8%
Total	755.5M	100.0%

According to World Food Program (WFP2019), Nigeria has overtaken Egypt as the largest rice producer in Africa. Nigeria now produces 8 million tonnes out of the Africa average of 14.6

### References

Akongo, G. G.-S. (2017). Characterisation of Rice Production Systems in Northern Agro-Ecological Zone. *Uganda. Journal of Agricultural Science*. *10*(1), 272.

Alibu, S. O. (2016). Farmer's Knowledge and Perceptions on Rice Insect Pests and Their Management in Uganda. Agriculture.6(3).

Barungi, M. a. (2016). Understanding the Rice Value Chain in Uganda: Opportunities and Challenges to Increased Productivity. *Economic Policy Research Centre*, 15(16), 1-24.

Barungi. M., a. O. (2016). Understanding rice value chain, opportunities and challenges in rice growing. *Economic Policy Research Centre.* 15(16), 1-24.

Biashara, K. (2019). Expanding rice market in East African Cumminity. tilimo trust Institute of East Africa.

Bua, B. a. (2014). Assessing the Importance of Rice as Food and Income Security Crop in Puti-puti Sub-county Pallisa District, Uganda. *American Journal of Experimental Agriculture*. 4(5), 532-540.

Karubanga, G. A. (2019). Factors effecting change in rice production practices and technologies among smallholder farmers in kamwenge district. Uganda. *Indian Journal of Ecology*, 46(2), 316-324.

Lee. H., &. C. (2020). Analysis of rice value chain and implications for development cooperation in Ghana. *J. Korean Soc. Int. Agri 32(4)*, 354-369.

Miyamoto, K. M. (2012). NERICA Cultivation and its Yield Determinants: The Case of Upland Rice Farmers in Namulonge, Central Uganda. *Journal of Agricultural Science.*, 4(6).

Mubiru, D. R. (2018). Climate trends, risks and coping strategies in smallholder farming systems in Uganda. *Climate Risk Management*, 22, 4-21.

Nanfumba, D. T. (2013). Participatory identification of farmer acceptable improved rice varieties for identification of farmer acceptable improved rice varieties for. *African Crop Science Journal.* 21(1), 683-692.

Oonyu, J. (2011). Upland rice growing: A potential solution to declining crop yields and the degradation of the doho wetlands, butaleja district-uganda. *African Journal of Agricultural Research.* 6(12).

Soonsung. H., S. H. (2021). The current status of opportunities for rice cultivation in Uganda. *J. Korean Soc. Int. Agric*, 5.

Trust., K. (2012). Development of Inclusive Markets in Agriculture and Trade (DIMAT); The Nature and Markets of Rice Value Chains in Uganda. *UNDP*, 1-48.

USAID. (2013). Uganda Climate Change Vulnerability Assessment. *USAID African and Latin American Resilience to Climate change (ARCC)*, 1-77.