MALAWI'S ECONOMIC EMPOWERMENT THROUGH DIGITAL SKILLS

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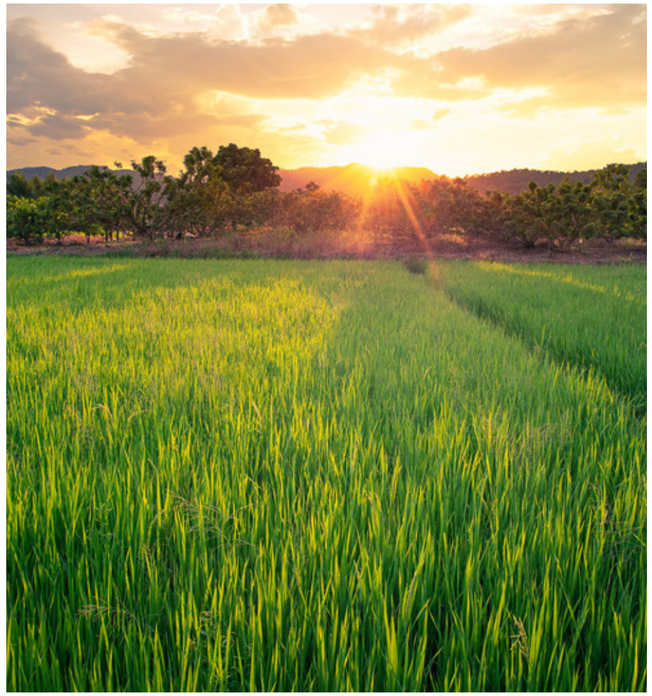
INTRODUCTION

Malawi is considered to be one of the least developed countries in the world with a population of approximately 21 million people.

Agriculture remains the country's most important sector, with 85% of the population highly dependent on it. (World Bank,2021)
The Agricultural sector currently accounts for about 42% of GDP.



According to Food and Agriculture Organiztion(FAO), 66% of women are working in Agriculture
Despite this, the country's economy keeps falling since the COVID-19 pandemic.

PROBLEM STATEMENT

The country’s dependency on agriculture and therefore women as key players in the sector, has increased in the recent past.

Even though women’s contribution to agriculture is outstanding, their access and control of production and support services is very poor. (African Development Bank, 2019)

There is therefore need for economic empowerment on women to increase their access to and control over productive agricultural resources

Digital skills will help them to adapt to innovative farming practices which increases food production and therefore GDP.

PROJECT OBJECTIVES

- To empower female farmers through digital skills and innovation
- To help farmers gain digital skills in agriculture through AI
- To enhance employment opportunities in agriculture sector
- To incentivise adopting best farming practices through digital services

DIGITAL SKILLS AND INNOVATION IN AGRICULTURE

There is need for fundamental IT Literacy for agriculturists in Malawi.

New and emerging digital skills must be clearly articulated practically during the delivery of digital skills agriculture training

The digital skills area include cybersecurity, Artificial intelligence(AI), mobile technologies and digital marketing.

The innovation tehnique includes mobile applications which assists farmers with production and marketing

The sample size is 100 female farmers from different rural areas in Malawi
To address this problem, the project develops a digital tool/mobile application

METHODOLOGY

- It’s aim is to empower Malawi’s farmers, mostly females, through technology
- The digital tool provides farmers with specialised recommendations based on field data, weather forecasts and crop growth using AI.
- The app also monitors soil nutrient levels and water levels. Since most farmers don’t own smart phones, the application will transmit personalized messages.

CONTINUATION

- The application will also help farmers to have access to financing and markets

- The digital training program will aim at improving farmer’s productivity by enlighting the importance of AI in Agriculture

RESULTS

- Blockchain technologies will be used to track plant information from the farms
- IoT will be used to track soil moIsture, temperature through sensors

Digital skills training will result in knowledge in cybersecurity, IoT, Artifical Intelligence (AI), mobile technologies and digital marketing. This will enhance farm automation which helps farmers use drones to monitor their crops and check water levels

- It will be easy to check the geographic information in agriculture
- Many farming activities will be done by agriculture robots(Agribots), maximizing productivity and saving resources.

CONTINUATION

- Farmers will make more informed decisions, adjust strategies and implement precision agriculture techniques.
- The mobile application will make it easy for farmers to have access to all the information necessary for farming.
- This will enable them to reach out to their potential buyers or consumers
- High productivity will lead to higher yields which will increase the GDP
- Overall, the project will lead to a digitalized agricultural economy, pushing the economic growth higher.

CONCLUSION

- Malawi’s is expanding and as a result, new innovations in agriculture have become necessary.
- The agriculture sector is dominated by women but most of them don’t have access to and control of production.
- Digital skills like AI, cybersecurity and IoT and a digital tool will boost the farming system in Malawi.
- This will improve the livelihoods of female farmers by making them more effective on the ground, and earn a better income for their families.