

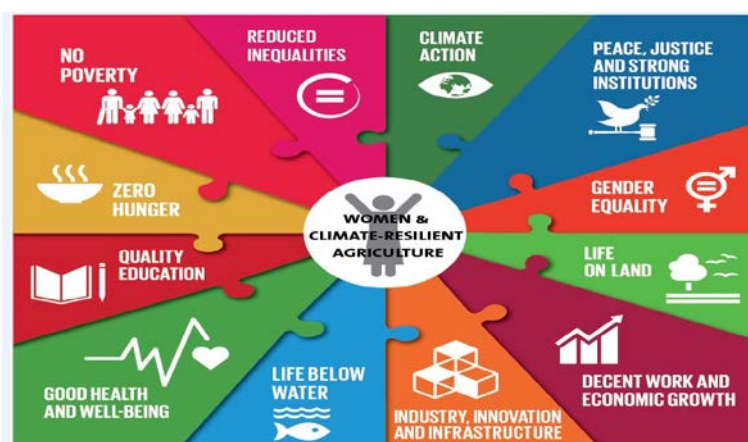
Programme Number:	To be determined	
Geographical Coverage:	Malawi	
Department ID:	To be determined	
Programme Title:	Empowering women through a Climate-resilient agriculture	
Thematic area:	DRF 2: Women, especially those living in poverty and vulnerability are economically empowered and enabled to reap the benefits of development	
Alignment:	SDGs, CAADP, NAP, MDGS 2	
Start date:	To be determined	
Duration:	5 years (2017-2021)	
Implementing Partners:	Ministry of Gender, Ministry of Agriculture, NASFAM, FUM, ICRISAT, FAO, WFP, Local NGOs (CISANET)	
Coverage/Districts:	Balaka, Chikwawa, Phalombe, Thyolo, Salima, Karonga	
Funds:		
Non-Core Funds (total) \$		
Sources:	Open Society Foundation (OSF); Donors; Private Sector/financial institutions	
Amount (US):	6.496.416 USD	
Beneficiaries:	25,000 women farmers	
Signatures:	UN Women	Implementing partners

1. Executive Summary

The agricultural sector continues to be the most important sector in the Malawian economy, as it accounts for 39% of the Gross Domestic Product (GDP), 85% of the labor force and generates about 83% of foreign exchange earnings. Even though women play a critical role in agricultural productivity in Malawi, comprising nearly 70% of the agricultural labour force¹, producing 70% of the household food and performing between 50-70% of all agricultural tasks (MoAIWD, 2011), they face a number of constraints. Women’s agricultural productivity per hectare remains lower than that of men. Systematic gender differences in agricultural productivity continue to persist, mostly due to differences in: (i) access to and use of agricultural inputs, including improved technologies; (ii) land tenure security and related investments in land; (iii) market and credit access; (iv) human and physical capital; and (v) informal institutional constraints affecting farm/plot management.

To mitigate the afore-mentioned constraints that are exacerbated by the negative effects of climate change in Malawi, the “Empowering women through a Climate-resilient agriculture” programme proposes a holistic approach to overcome the existing obstacles. The programme is expected to contribute to the country’s achievement of eight of the seventeen (17) Sustainable Development Goals: Eradicating poverty; fighting against hunger; gender equality; use of renewable energies; innovation and infrastructure; reducing inequalities; combating climate change, protecting terrestrial flora & fauna; peace, justice, and building partnerships to achieve global objectives (figure 1).

Figure 1: Co-development benefits of addressing the gender gap for climate-resilient agriculture



¹ Gender and agriculture program in Malawi: a baseline survey; UN Women, Malawi, Sept 2015. A gender and agriculture baseline assessment for the Districts of Mzimba, Salima and Nsanje

Efforts to address gender differences in climate resilient agricultural productivity could result in tremendous productivity gains. It is estimated that if the gender gap in agricultural productivity in Malawi is closed, there would be an increase in crop yield of 7.3% per annum and a GDP increase of 1.8%. This would translate into a financial gain of approximately 100 million US Dollars, an amount which can lift over 238,000 Malawians out of poverty each year². The implementation of the proposed Empowering Women Through a Climate-resilient Agriculture Programme is therefore strategic as it will have positive impacts on the income and livelihoods of women farmers as well as female headed households.

The five-year Climate Resilient Agriculture Programme will be implemented in six districts in Malawi namely, Balaka, Chikhwawa, Phalombe and Thyolo in the Southern region of Malawi, Salima in Central Region and Karonga, in the northern region. The selected crops are maize which is a staple food and legumes specifically pigeon peas, groundnuts and soybeans.

These districts have been selected because they experience changing rainfall patterns and higher temperatures that have shortened the growing season. Persistent droughts and floods in these districts are eroding assets, leaving people, especially women more vulnerable to disasters. Rainfall is uni-modal and occurs from November to May which varies from less than 600 mm in the Southern region to over 1,800 mm in the highlands.

The programme aims to empower 25,000 Malawian women smallholder farmers who have been exposed to the cyclical effects of El Nino/droughts and La Nina/ floods with the aim of strengthening their resilience to climate change by 2021.

The four pillars of the programme are:

- 1. Supporting reforms for women farmers' greater access to and control over land:** Malawi has recently passed a new land law (in September 2016). The programme will therefore play a key role in advocating for women's representation in land management committees; supporting the capacity building of state institutions responsible for land surveying, land titling, registration and distribution; and supporting the development of gender sensitive land registration systems. UN Women will work to ensure that such efforts are institutionalized by lobbying for the appointment of gender focal persons in different state departments responsible for land management. At community level, the programme will support efforts to

² World Bank. 2015. *The cost of the gender gap in agricultural productivity in Malawi, Tanzania, and Uganda*. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/847131467987832287/The-cost-of-the-gender-gap-in-agricultural-productivity-in-Malawi-Tanzania-and-Uganda>

sensitize traditional leaders as well as other local leaders and government officials on land governance. The targeted communities will be equipped with tools to protect women's rights to land, support assessments of how the customary complaint system can be made gender-sensitive, supporting awareness-raising and facilitating access to information for women, men and communities about existing land related legislation and policies. Furthermore, UN Women, in partnership with FAO, is already implementing other interventions on land governance in some of the targeted districts.

- 2. Improved women farmers' productivity and resilience to climate change:** The programme will focus on increasing women's access to climate-resilient productive assets, technologies and skills to improve productivity and reduce the labor intensity of agricultural activities for women. UN Women will build on its existing partnerships with research institutions such as International Center for Tropical Agriculture (CIAT), and International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) to develop and upscale production of high value/yielding seeds and to link women farmers to extension services, to increase their crop productivity and quality for the market.

The programme will also promote women farmers' access to irrigation and other climate smart agricultural technologies and innovations through capital investment financed by financial institutions. Irrigation will cushion women farmers against the risks of climate change and variability and ultimately enhance food security by offering them an opportunity to engage in agriculture all year round. Some of the irrigation technologies being used by some of the UN Women partners, and beneficial to women farmers are drip irrigation, use of treble pumps, and central pivot irrigation systems, a technology that assists farmers to use water efficiently and improve productivity in the face of drought.

- 3. Implement initiatives that promote women's access to financing:** The programme will build on the efforts that UN Women Malawi has already made with the private sector, especially with the banks, to develop more specific credit products that women entrepreneurs can benefit from. Among these, is the First Discount House (FDH) bank, the first signatory of the UN Women/UN Compact's Women's Empowerment Principles (WEPs), and also the bank responsible for management of the African Guarantee Fund for Small and Medium Enterprises (SMEs). The programme will ensure that women farmers have access to the guarantee fund for the purchase of productive assets. The programme will also focus on promoting agriculture insurance such as all-risk crop insurance, multi-risk crop insurance and others. Other environmental related insurance packages

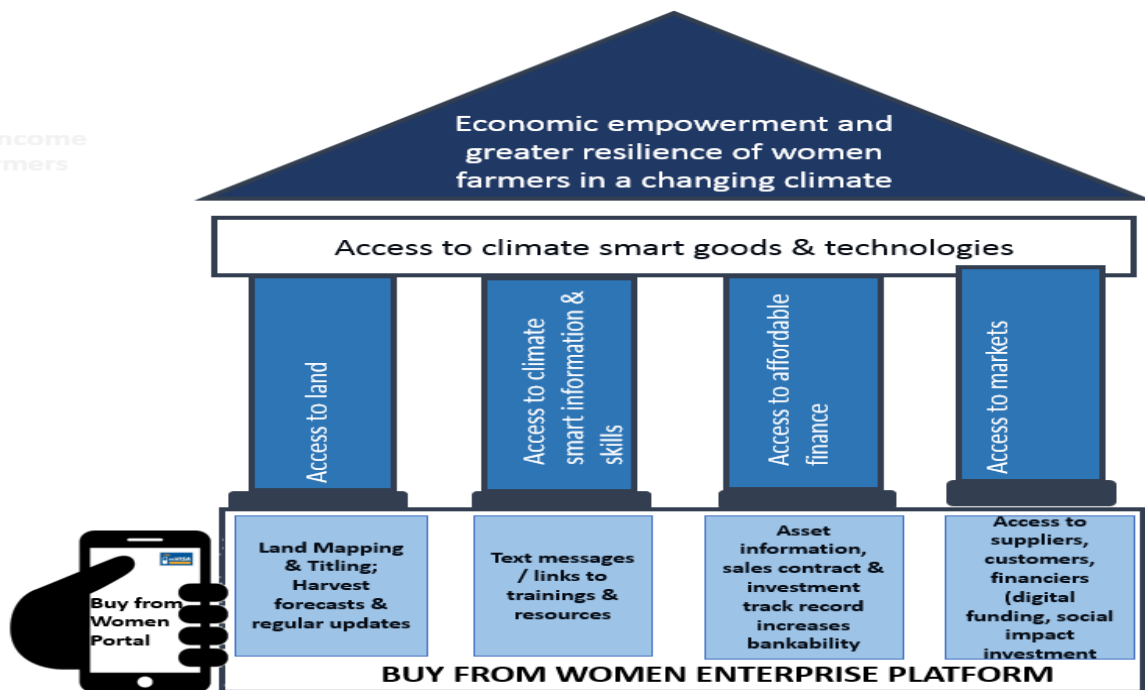
that are tailored to women farmers needs and aspirations will also be explored and promoted to mitigate the risks of loss due to climate change related disasters.

- 4. Supporting women farmers to move up the agricultural value chain:** The programme will further build on the partnership that UN Women currently has with World Food Programme (WFP)'s Purchase for Progress (P4P) to create quotas for women producers to market their products. Using the UN Women buyfromwomen platform, the programme will also link women producer groups to chain stores so that they have a ready market to supply their products to. When the women have the capacity to produce for the market, they will be able to move beyond subsistence agriculture into commercial and high-value agriculture and become more diversified producers who are competitive in both local and global agricultural markets. Efforts would be made to enhance the drying and storage of maize to avoid distress selling.

Programme implementation arrangement and budget

New information & communication technology (ICTs) will be systematically leveraged to facilitate the implementation and scaling up of programme results within and across countries in a highly cost-effective manner. Notably, UN Women will adapt and use its mobile platform, "BuyfromWomen", which has the capacity to link farmers to information, markets and finance by providing a 360 view of their business. Figure 2 summarizes the various digital solutions provided by "Buyfromwomen" to support project implementation.

Figure 2: Digital solutions provided by the "Buyfromwomen" platform



The platform will be deployed as a One Stop Shop for farmers. The platform will link farmers’ groups to seed producers, input suppliers, technology providers and reliable extension services so that they are able to increase the productivity of their crops. In addition, the platform should increase access of women farmers to low cost debt financing to purchase agriculture inputs and technologies. The platform will help them build an economic identity and investment track record that can be appraised by financial intermediaries. It could also facilitate the implementation of land reforms by mapping the plots of land farmed by women and digitally record land titles. Furthermore, it will provide a strong evidence base on the comparative effectiveness of different policy measures to close the gender gap in agriculture.

The total cost of implementing this programme is estimated at \$6,000,000 USD. It will be funded based on resources mobilized with technical and financial support from partners.

2. Constraints

Women play an important role in agricultural productivity in Malawi and provide a clear opportunity for the uptake of climate resilient agricultural practices. Women’s low agricultural productivity relative to men is contributing heavily to the underperformance of the sector. This is in part because women, who represent a crucial resource in agriculture and the rural economy through their roles as farmers, laborers and entrepreneurs, almost everywhere face more severe constraints than men in accessing productive resources. These constraints are closely linked with the following issues:

- Access to land and land tenure security

- Access to finance and other funding mechanisms
- Access to inputs and extension services
- Effects of climate change on agricultural productivity
- Participation in agricultural value chains and markets

1. Constraints related to access to land and land tenure security:

Insecure land tenure is one of the most critical disincentives preventing women from investing in climate resilient agriculture related activities. This can be attributed to two main reasons: it weakens women's control over natural resources (especially land), and it denies them the necessary collateral to access investment capital. Furthermore, in Malawi like in many other countries, limited access to and control over land is one of the major challenges that women face in accessing agricultural extension services, which is a key component of practicing climate resilient agriculture and engaging in contract farming. In Malawi, an estimated 2.8 million smallholder farm families cultivate under customary tenure, cultivating about 4.4 million hectares and producing about 80 percent of Malawi's net food and 10 percent of its exports. About 25 per cent of the smallholder households cultivate less than 0.5 hectares of land and 55 percent cultivate less than 1 hectare. Furthermore, the Cost of Gender Gap in Agriculture study conducted in 2015 confirms that the average land holding size for female-headed households is lower (0.803ha) than male-headed households (1.031ha)³. Women, especially widows, are the main victims of agricultural related property-grabbing including land, farm implements and inputs. They endure discriminatory attitudes and practices that favour a male-dominated land tenure system.

2. Constraints related to access to finance and other funding mechanisms:

One key challenge facing women farmers in Malawi is their inability to access the credit needed to procure improved agricultural inputs such as fertilizers, seeds and other technologies to increase yields. The challenge stems from the fact that rural financial programmes are largely designed, crafted and implemented with the male head of household as the intended client and fail to recognize that women are active, productive and engaged economic agents with their own financial needs and constraints. In Malawi like many other countries, creating a bank account in a formal financial institution is the first and most important step towards achieving financial inclusion. Yet only, 34% of adults in Malawi hold bank accounts in a formal financial institution, and only 30% of those formal accounts are held by women compared to 39% held by men, according to the World Bank. In addition, studies in Malawi show that women are 20% less likely than men to have an

³ UN Women, UNDP, UNEP, and the World Bank Group: 2015. The Cost of the in Agricultural Productivity: Costing the gender gap in Malawi, Tanzania and Uganda:

account at a formal financial institution and 17% less likely to have borrowed formally (World Bank, 2014).

Women and men inclusive face challenges in accessing financing tools. Oftentimes these challenges are related to insufficient documentation, physical access, cost and financial literacy. However, for women these challenges are often times doubled or tripled. In a study conducted by UNDP in 2010 UNDP⁴ in the Shire River Basin, 48 percent of interviewed households had never accessed any form of micro credit or cash loan. The situation was worse for female-headed households as only one out of every three (33%) had access to cash loans, in contrast with male headed households where over half (54 percent) had benefited from loans in the past.

3. Constraints related to access to inputs and extension services:

The Department of Agricultural Extension Services (DAES) of the Ministry of Agriculture is by far the largest extension provider in the country. However, government-led extension services have failed to effectively reach women farmers due to a number of reasons. Firstly, extension messages are biased towards smallholders and commercial farmers, where the majority of farmers are men. The modes of communication and structure of extension service delivery are not favourable to women who have low literacy levels and time poverty due to competing domestic activities that take up a vast amount of their time. Extension services are predominantly delivered by men, and though there are efforts to promote the use of ICT to transmit different information to farmers, these remain under developed. Only 14 percent of women as compared to men (18 percent) access extension services in Malawi. Limited access to extension services has resulted in women using lower levels of agricultural inputs, including limited use of improved seeds, inorganic fertilizer and extension services, relative to men. As a result, men see larger improvements in yield, even when they apply the same amounts of inorganic fertilizer as women, suggesting that women may use inferior quality fertilizer, apply it incorrectly or use it at the wrong time.

4. Effects of climate change on agricultural productivity:

Malawi is particularly prone to adverse climatic hazards including dry spells, seasonal droughts, intense rainfall, ravine floods and flash floods. As the country's agricultural sector is based mostly on small rain-fed farms, yields are reduced by droughts and floods and low use of agricultural inputs. Droughts and floods have increased in frequency, intensity and magnitude over the past 20 years and are the leading cause of chronic food insecurity, endemic in many parts of the country. The World Bank estimates that on average, droughts cause GDP losses of almost 1 percent every year. Climate change affects food availability, access, and the much broader issue of food stability. Malawi

⁴ UNDP 2008: Sustainable land management programme document: Global Environment Facility (GEF) and Government of Malawi

happens to be one of the 12 countries most vulnerable to adverse effects of climate change in the world, with very low resilience to climate change (World Bank 2010). The country has already experienced nearly 1°C increase in mean annual temperature, and a 1.5 to 5°C increase is expected by the 2090s. Inter and intra-annual precipitation is highly variable and predicted to become more so under the impacts of climate change. The impacts of climate change are likely to have a significant negative impact on an already food insecure nation. Studies show that the maize based food systems might experience yield losses from 18 percent currently, to 22 percent by 2050 (IPCC 2014).

On 13 April 2016, the President of Malawi Professor. Peter Arthur Mutharika declared Malawi a 'State of National Disaster', for the second consecutive year and called for assistance from the global community. In 2015, the country faced floods which affected 1,101,364 people and displaced closer to 230,000, causing 2.8 million people to face food insecurity in the period from October 2015 to April 2016. The effects of El Nino are the second strongest since 1990. This drop in crop production and the accumulated vulnerabilities have increased the number of people facing food insecurity in 2016, which stands at 6,5 Million (MVAC 2016).

5. Constraints related to women's participation in agricultural value chains and markets:

Women in Malawi tend to be less integrated in value chains than men. Their lack of mobility and thus lack of access to markets, as well as social norms, impede their interaction with value chain actors. Women are often excluded in horizontal linkages (relationships within one stage of the chain, e.g. within one organization, group of producers or self-helping groups) as well as in vertical linkages (relationships with actors of the value chain stages below and above, e.g. with buyers and suppliers). Women who participate in value chains are more likely to manage work and income from productions with low-cost equipment, e.g. knives and bowls in fisheries, due to unequal access to capital and property.

Additionally, although agricultural commercialization continues to create new market opportunities, this market is very difficult for poorer women producers, processors and traders to access because of their inability to meet stringent product and delivery requirements. Most women do not have requisite skills and knowledge of product packaging and marketing and hence their participation is limited to the lowest nodes of the value chain.

3. Programme Rationale

3.1 Agriculture as the main pillar for economic growth in Malawi

The agriculture sector remains the backbone of Malawi's economy as it supports about 85 percent of the population in terms of food and employment. In line with the critical role of agriculture to Malawi's economy, the Ministry of Agriculture together with its partners have developed an investment plan called the Agriculture Sector Wide Approach (ASWAp), a strategy for promoting growth through agriculture and achieving nutrition, food security and poverty reduction. The ASWAp I was implemented during the period 2011 to 2015 and the Ministry of Agriculture, Irrigation and Water Development (MoAIWD) is currently developing a second ASWAp which will guide agricultural investments from 2017 to 2022. The ASWAp I (2011-2015) reflected priorities of the Malawi Growth and Development Strategy II, which is currently under review, and the Comprehensive African Agricultural Development Programme (CAADP) of the African Union.

Agriculture is thus the best strategy for the majority of Malawians to escape poverty. Studies show that income growth generated by agriculture is up to four times more effective in reducing poverty than growth in any other sector. Investments in the agriculture sector are also strategic in addressing gender inequalities, as women make up 70 percent of the agricultural workforce in Malawi.

Maize remains a very important staple crop in the economy and the life of Malawians as it is grown by 97 percent of farming households and accounts for 60 percent of total calorie consumption.

Considering the roles that women play in maize cultivation and provision of food to their households, maize deficits always have negative implications on the lives and livelihoods of women and their households.

Apart from maize, the Malawian government is currently putting in place programmes to diversify agricultural production from maize to achieve food security, nutrition and incomes among rural farmers. Among the crops being promoted for diversification are Legumes such as groundnuts, pigeon peas and soya beans. These crops have also been earmarked in the Malawi National Export Strategy (NES) as Priority Area 1, under Export clusters as high value crops. The Climate Resilient Agriculture Programme will work with women farmers to increase the production of such high value crops.

3.2 The need to address the adverse effects of climate change on agricultural productivity

Due to the high dependence on rain-fed agriculture, Malawi is increasingly vulnerable to climate change, namely floods and droughts. The World Bank estimates that on average, droughts cause GDP losses of almost 1 percent every year with much greater losses for

extreme droughts⁵. The following are some of the observable and projected effects of climate change on agricultural systems in Malawi:

- Mean annual temperature has increased by 0.9 degree Celsius, between 1960 and 2006.
- Frequency of hot days and nights have increased and will increase further.
- By the 2090s, mean annual temperatures is expected to increase by between 1.5 and 5.0 degrees Celsius.
- Rainfall projections do not indicate great changes to the 2060s, though there is large variability in projections (-13 percent to +13 percent)
- Projections suggest decreases in dry season rainfall and increases in wet season rainfall
- Projections show increases in how much of the overall rainfall comes in heavy rainfall events by 2060

Consequently, in many parts of the country, the crop varieties and species currently grown by farmers cannot tolerate these stresses and shocks, with resultant losses in productivity, and potentially negative consequences for food security and incomes, in an already food insecure nation. The maize based food systems continues to experience yield losses which are predicted to rise from 18 percent currently, to 22 percent by 2050 (IPCC 2014).

3.3 The need to tackle nutrition and food insecurity at household and national level

Due to climate variability and the resultant low agricultural productivity, Malawi continues to rely on food imports and food aid, with an estimated 40 percent of the country's population unable to satisfy its caloric needs of 2,200 kilocalories per day and 55 percent of rural population suffering from chronic food insecurity. It is estimated that over 50 percent of rural households run out of food between 4 and 6 months after harvest and have to seek opportunities of earning supplementary income to purchase food on the market. As a result of this, many communities have resorted to the use of various coping strategies to obtain food, including selling of assets. For instance, the results of the 2016 Malawi food security assessment⁶ indicate that a minimum of 6.5 million people, or 39 percent of the country's projected population of 16.8 million, will not be able to meet their annual food requirements during the 2016/17 consumption period. This represents an increase of 132 percent compared with the corresponding figure of 2.8 million people for the 2015/16 consumption period. In order to ensure that the affected people survive up

⁵ Malawi Country Profile - World Bank, 2014.

⁶ The Ministry of Finance, Economic Planning and Development, through the Malawi Vulnerability Assessment Committee (MVAC), carried out an annual food security assessment exercise during May 2016. The exercise was aimed at assessing the food security situation in the country, and determining the number of people who are likely to be food insecure during the 2016/17 consumption period.

to the next harvest period without disrupting their socio-economic livelihoods, the total humanitarian food assistance that is required is estimated at the equivalence of 493,000 metric tonnes of maize⁷. By also focusing on legume production, this programme will contribute towards the diversification of cropping systems in Malawi, allowing women and their households to achieve food security, nutrition, and incomes, while ensuring the sustainable use and restoration of soil fertility. The promotion of legumes under the Climate Resilient Agriculture Programme will also contribute to the government's agenda of moving Malawians from poverty and hunger through resilience building initiatives.

3.4 The need to empower women farmers and build their resilience against the negative effects of climate change

In Malawi, women are traditionally the pillar of food security and nutrition, making sure that their families have enough to eat even when times are tough and harvests fail. Women produce different types of crops like beans, groundnuts, millet and sorghum which could be sold for profit and provide an excellent source of nutrition and income. However, climate change, in the form of more extreme weather, less predictable seasons or severe heat and drought, have serious implications on women and their households since they rely on agriculture for their survival.

Unless the specific challenges that women and other vulnerable groups meet in increasing agricultural productivity are resolved and their resilience to climatic shocks is built, rural women farmers will continue to be trapped in the vicious circle of poverty and food insecurity. In order to build women's resilience to climatic shocks, the programme will tackle some of the issues that limit women's agricultural productivity.

4 Strategy and Expected Results

UN Women will implement a flagship programme on climate resilient agriculture in Malawi, with the overall goal of ensuring that women farmers are economically empowered and resilient in a changing climate. The "Women's access to land and productive resources for a climate change resilient agriculture" programme is aligned with UN Women's Strategic Plan, "Women, especially the poorest and most excluded, are economically empowered and benefit from development."

The programme is also aligned to the National Agriculture Policy as well as the Agriculture Sector-Wide Approach Programme (ASWAp). The theory of change is based on the premise that: 'If women farmers in Malawi realize rights to land and secure land tenure;

⁷ The figures stated above relate to the total food requirement for the vulnerable population only. This is lower than the maize consumption deficit of **790,000 metric tonnes** affecting **8.4 million people**, as reported by the Ministry of Agriculture, Irrigation and Water Development based on the Second Round Crop Estimates released in April 2016.

(2) if they have equal access to productive resources, information, training, services and technologies for sustainable farming; (3) if they attain the financial capacity to invest; and participate fully in value chains and markets; then (4) they will be economically empowered and resilient in a changing climate; because (5) the root causes and drivers of gender gaps in agriculture will have been removed’.

The programme will focus on the following key outcomes and outputs⁸:

Outcome 1: Women’s access to land and land tenure security are improved

The focus will be to remove barriers to women’s rights to access to land and to assist in the implementation of the new land law. This outcome also seeks to strengthen the voice and decision-making capacity of women farmers so that the security of women’s land tenure is increased.

Output 1.1; Gender-responsive land laws, policies and frameworks developed and implemented for women’s access to land

Malawi has recently passed a new land law. Following this, the programme will continue to work closely with the Ministry of Lands, Housing and Urban Development to popularise the new land law and ensure that the law is implemented in a gender responsive way to promote women’s access to land. The programme will use the FAO Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries, and Forests in the context of national Food Security, to promote women’s access to land. The guidelines will be used to build capacity of CSOs to lobby for gender responsive management and governance of land by duty bearers, while at the same time building the capacity of land management officers and traditional leaders to use the guidelines to ensure gender responsive governance and management of land. Furthermore, the programme will also build capacity of the planning and budgeting officers in the ministry of Lands to ensure that gender related activities within the land law are properly funded and implemented.

Output 1.2 Land registry institutions and land governance systems are in place to promote women’s access to land

The new land laws propose the establishment of land management committees at traditional authority levels. The programme will closely work with the Ministry of Lands and district councils to ensure that the terms of references for the establishment of these committees are gender responsive and promote inclusion and participation of women in those committees at all levels. The programme will also ensure that tools used for titling, and registration of land are gender sensitive and that monitoring and evaluation systems

⁸ A comprehensive theory of change is provided as Annex 1

use gender disaggregated data at all levels. The programme will also ensure that all reporting systems are able to provide information on progress on the implementation of the land law and land management system are able to bring out challenges in relation to women's access to land.

Output 1.3 Strengthened agency and voice of women farmers to engage in relevant land policy and decision-making processes

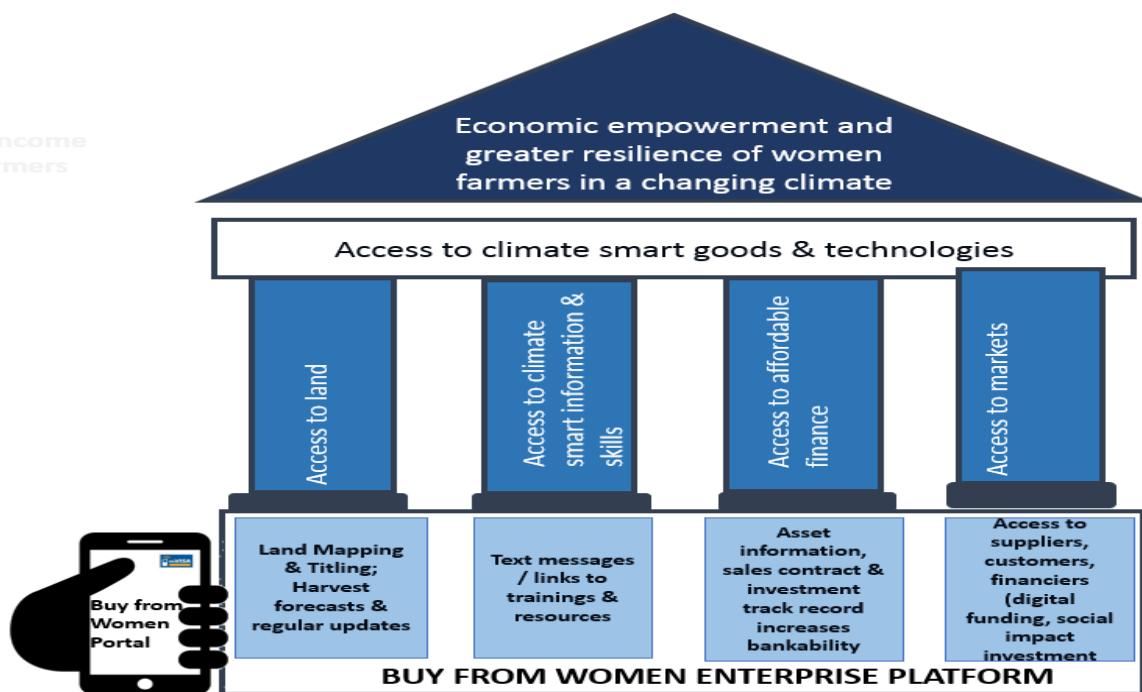
The programme will continue to work with women groups to mentor them and ensure that their lobbying and advocacy skills are strengthened. The programme will also promote South –South learning and sharing of experiences with other countries. The programme will not only strengthen advocacy capacity of these women groups but will also ensure that such practices help identify gaps in land governance policies and processes for further review. The programme will continue to use media campaigns and edutainment initiatives to expose weaknesses in law and practice and to ensure that implementation of the new land law benefits all gender categories in society in terms of access to land.

Outcome 2 – Women have access to information and innovative technologies.

Output 2.1: Deployment of digital platform to strengthen relationships between stakeholders in the value chains

The impact of Information and Communication Technologies (ICT) in improving the competitiveness of the agriculture value chains is very promising. Notably, growth and penetration of mobile ICT in rural areas (especially mobile phones) offer new opportunities to enable farmers to join the formal market and thus increase household incomes in vulnerable communities.

UN Women has developed a mobile platform called "BuyfromWomen" which allows to link farmers to information, markets, and finance, by providing a 360 view of their business. In close consultation with women farmers and supply chain actors, the platform will be adapted to the specific requirements of Malawi. Based on an in-depth market and partner analysis, a minimum viable product will be co-created with all stakeholders and then scaled up. The platform will also be able to provide a forecast of marketable surplus expected based on the size of the land and information provided by women farmers. BuyfromWomen also has the potential to be linked to block chain technology and investment platforms for social impact to increase funding opportunities.



Output 2.2 Innovative agricultural technologies are disseminated

The growth and penetration of mobile ICT in rural areas (especially mobile phones), and innovations in the electronic media to support education and training (e-learning), also represent new opportunities to increase development of human and social capital. Interventions will promote the "culture" of the use of ICT through the "e-learning" as well as skills development. Capacity building will target three levels: institutional, local and individual.

At the institutional level, the focus will be on how partners use ICT to improve the production and the collective sharing of content, such as social media training opportunities. Locally, our goal is to empower communities through applications demand-driven, user-friendly and integrated. At the individual level, the project will strengthen the capacity of farmers to adopt and use these applications to agriculture.

Meteorological data adapted to climate change will be disseminated and popularized through computer systems involved in supporting the agricultural sector.

Output 2.3 Improved access to extension service for women farmers

In Malawi women face numerous challenges to access agricultural extension services. The extension officer to farmer ratio of 1: 750 Households means that the country has very few extension officers to reach out to rural farmers. In this case commercial farmers are prioritised at the expense of small holder farmers who produce the bulk of food

consumed in the country. The programme will therefore work to increase extension personnel by training additional lead farmers.

Lead farmers will be chosen from hard working rural farmers and who are exemplary in terms of productivity. These lead farmers will be trained and become trainer of trainers and will closely work with women producer groups in terms of transferring skills and technologies. Most of the lead farmers to be trained will be women to ensure that cultural barriers to accessing male extension officers by women is reduced. The programme will continue to work with the Department of Agriculture Extension Services to develop radio programmes, use yellow Mobile Van and other ICT platforms to increase women's access to agricultural extension information.

The programme will also closely work with the Ministry of Environment and Natural Resource Management, metrological department to provide farmers with weather information in simplified terms so that they can effectively use this information to plan their agricultural work. It is hoped that such information will be strategic in terms of helping farmers to make decisions regarding planting, type of crops, and so on.

Outcome 3 – Women Farmers' increased access to financing mechanisms

Another barrier to the growth of women's income through entrepreneurial or farming activities is women's limited access to business management capacity and access to financing. As such, the focus of this outcome area is to increase women's access to affordable and appropriate financing services and products, business skills and agriculture insurance, to enhance their participation in agricultural supply chains.

Output 3.1 A credit line is set up to provide funding to women farmers living in the programme intervention areas

Under the Women's Economic Empowerment Principles (WEPs) UN Women will foster the partnership with financial institutions to establish specific credit lines for women farmers. The programme will build on these efforts to link women producer groups and associations to these credit lines. The credit lines will support potential high value crops and business niches that are profitable for women producer groups. Capacity building and mentorship will be provided to women producer groups to manage these credit lines and to profit from them.

The programme will also work with the Ministry of Gender, Children and Social Services to lobby for more financial facilities to assist women that are ready to grow their cooperatives and enterprises. More dialogue will be undertaken with other development partners and financial institutions such as the African Development Bank through its African Guarantee Fund, on how specific credit lines can be developed for women farmers with specific agricultural enterprises.

UN Women will closely work with First Discount House (FDH) bank, the first signatory of the UN Women/UN Compact's Women's Empowerment Principles (WEPs), and also the bank responsible for management of the African Guarantee Fund for Small and Medium Enterprises (SMEs) to ensure that women have access to this funding mechanism.

Output 3.2: Women's financial literacy skills are strengthened

The programme will closely work with Ministry of Gender, Children and Social Services to provide financial literacy programmes to rural women farmers. These programmes will be teaching women about business enterprise development.

Of recent the private sector, especially the banks in Malawi, in partnership with the Ministry of Finance and Economic planning have established National Financial Literacy programme. Each year the banks together with Malawi government hold financial literacy awareness events throughout the country. The programme will link up with such on-going programmes to explore entry points to provide financial literacy to women farmers. The modules that are currently used for capacity building in this area will be translated into local languages so that they can be used even in rural areas. Financial literacy education will be an integral part of the programme to ensure that women farmers are continuously mentored to effectively manage finances for their businesses ventures. The programme will also ensure that the modules are tailor made to the different activities that women farmers are involved in.

Output 3.3: Agricultural insurance tailored to women farmers' needs are developed and promoted

In Malawi, there have been pilot projects aimed at promoting agricultural insurance, such as weather index-based Insurance. Review of the pilot project, which was funded by the World Bank, but implemented by the banks such as OIBM and Micro Finance Bank and the National Association of Smallholder Farmers in Malawi (NASFAM) indicates that such interventions are very strategic in promoting small holder productivity in the face of climate change. The programme will therefore work with different companies and micro finance institutions to upscale the implementation of Weather Index Based crop insurance for women farmers.

Other insurance modalities such as crop insurance, all-risk crop insurance, multi-risk crop insurance and specific crop insurance would be the major focus. The programme will also work with UNDP and UNEP to explore other environmental related insurance packages that are tailored to women farmers' needs and aspirations, so that they can benefit from them and strengthen their resilience against climatic shocks.

Outcome 4 - Access to markets and value-added activities

Output 4.1: Sales contracts are promoted to secure more opportunities for women

The programme will build on the partnership that UN Women currently holds with WFP on Purchase for Progress (P4P) to secure quotas for women producers to market their products.

Further, through dialogues with the private sector, the programme will identify specific firms, chain stores, and companies to explore opportunities to join the buyfromwomen platform and sign contracts with women producers so that they have ready market to supply their products.

Considering that most of the chain stores in Malawi import agricultural products such as ground nuts and pigeon peas, priority will be given to increased production of these crops by women producer groups in Malawi.

The preferred implementation route is to select farmers organized into cooperatives. This allows buyers to reduce their transaction costs as they negotiate future delivery contracts with organized groups and not individual farmers and allows women farmers to strengthen their collective bargaining power.

With the futures delivery contracts, major buyers would specify minimum floor prices, deadlines and quality specifications, so that farmers can plan beyond the farm gate. These contracts have a catalytic effect on the value chain for women farmers' access to extension services, quality inputs, finance and post-harvest handling services.

Information recorded through the platform also enable farmers to establish economic identity and access to financing to diversify their activities in the future.

Output 4.2: Women's capacities in selling, branding, certification, marketing, and packaging are reinforced

Even though maize remains the main staple food for most Malawians as well as legumes that are used for both food and incomes, safe storage, and packaging has presented a big challenge to the farmers. High post-harvest losses (up to 30%) have made food security and income poverty reduction difficult to achieve at the household level despite increased production following government initiatives such as the Farm Input Subsidy Programme.

The programme will also focus on building capacity of women producer groups in processing, grading, branding, certification and packaging to ensure that their products are attractive and competitive at both local and global markets. By closely working with the Malawi Investment Trade Centre to produce training materials, and train women on marketing, packaging, labeling, conducting market surveys and seeking out new market outlets. This will allow women to produce in compliance with buyers standards.

The programme will assist increasing the visibility of their value added products (groundnuts and soya beans) through buyfromwomen platform and appropriate advertising, including production of labels indicating that the product was developed by women producers and competitive packaging.

The women farmers will also participate in National Agriculture Fairs. By attending, the women will be able to promote their products and create contractual relationships.

5 Results and Resources Framework

Strategic Statements	Indicators	Baseline	Target	Means of verification
Program Objective: 25,000 Women Farmers in Malawi are Economically Empowered and Resilient in a Changing Climate by 2021	• # of women farmers with access to resilient agricultural techniques	0	25,000	Integrated Household Surveys from NSO.
	• % women farmers with access to land	0	50%	
	• % women farmers with access to financing mechanisms	5%	100%	Programme evaluation report.
IMPLEMENTATION				
Outcome 1: Women's Access to Land and Land Tenure Security are improved	• % increase in number of women in the targeted districts holding land certificates/title deeds.	32 % (FAO 2015, Agric Census)	80%	Agricultural Census, and FAO data
	• Number of measures implemented to protect women's land rights	0	1	Programme evaluation reports.
Output 1.1: Gender-Responsive Land Laws, Policies and Frameworks are developed and implemented	• # gender sensitive land policies enacted	1 (Land Act)	3	Parliamentary reports
	• # gender sensitive policies in place & implemented	0	1	Evaluation reports
Output 1.2. Land Registry Institutions and Land Governance Systems are in Place to	• % of women who able to access land registry services at all levels	10%	80%	Mission Reports,

Promote Women's Access to Land	<ul style="list-style-type: none"> % of local authorities that promote women's access to land 	0	80%	Programme Evaluation Reports
Output 1.3 Strengthened Agency and Voice of Women Farmers to Engage in Relevant Land Policy and Decision-Making Processes	<ul style="list-style-type: none"> # women involved in advocacy forums on land issues at all levels 	0	25,000	Baseline Report, Programme Evaluation Report
	<ul style="list-style-type: none"> % representation of women in land management committees 	0	50%	
Outcome 2: Women Farmers have Access to Information and innovative Technologies	<ul style="list-style-type: none"> % increase in agricultural productivity for women smallholder farmers 	10%	80% Increase	World Bank Reports on Closing the Gender Gap. Evaluation reports
Output 2.1: Deployment of digital platform to strengthen relationships between stakeholders in the value chains	<ul style="list-style-type: none"> % of women farmers on the platform Buyfromwomen platform deployed # contractual buying relationships signed 	0 0 0	80% 1 10	Evaluation report (mid-term and final evaluation of the project)
Output 2.2: Innovative agricultural technologies are disseminated	<ul style="list-style-type: none"> % women adopting new technologies for skills development # women in targeted districts accessing agriculture information through mobile. 	0 0	80% 25,000	Baseline survey report, Evaluation reports
Output 2.3: Improved Access to Extension Service for Women Farmers	<ul style="list-style-type: none"> % of women farmers accessing extension services % women lead farmers who are extension agents 	10% 10%	100% 50%	Programme Study Reports
Outcome 3: Women Farmers' increased access to financing mechanisms	<ul style="list-style-type: none"> # women farmers in the intervention areas who had access to funding for the crop season 	0	25,000	Evaluation report (mid-term and final evaluation of the project)

Output 3.1: A credit line is set up to provide funding to women farmers living in the programme intervention areas	<ul style="list-style-type: none"> \$1M credit line dedicated to women farmers 	0%	100%	Programme Evaluation Reports
Output 3.2: Women's financial literacy skills are strengthened	<ul style="list-style-type: none"> # women farmers trained in financial education 	0	25,000	# women farmers trained in basic financial education
Output 3.3: Agricultural insurance tailored to women farmer's needs are developed and promoted	<ul style="list-style-type: none"> % women beneficiaries of the support program in target areas who buy agricultural insurance 	0	100%	Evaluation report (mid-term and final evaluation of the project)
Outcome 4 - Access to markets and value-added activities	<ul style="list-style-type: none"> % women farmers selling through contractual relationships 	0	50%	
Output 4.1: Sales contracts are promoted to secure more opportunities for women	<ul style="list-style-type: none"> % of women cooperatives selling crops through the buyfromwomen platform # of women participating in the WFP Purchase for Progress programme 	0 0	50% 12,500	Evaluation report (mid-term and final evaluation of the project) Partners' semi-annual report on procurement contracts
Output 4.2: Women's capacities in selling, branding, certification, labeling, marketing, and packaging are reinforced	<ul style="list-style-type: none"> Training material developed in local languages on marketing, packaging, labeling and standards % women farmers in the programme intervention areas who attend national trade fairs 	0 5%	1 50%	Evaluation report (mid-term and final evaluation of the project)

6. Partnership and management arrangements

6.2 Partnerships

UN Women in Malawi has a strong country presence and established networks of local and national partners. Activities will be implemented in partnership with other UN Agencies, NGOs, government officials and policy-makers, traditional and customary authorities, civil society organizations (CSOs), multilateral and regional development banks, academia, national financial institutions and commercial and agricultural banks, private sector companies, media and women’s producer groups and co-operatives. The programme will leverage on existing interventions and expertise in the country, as it endeavours to transform women from producing for livelihood/food security to higher productivity, value addition, commercialization and markets. This will also serve as a sustainability mechanism, as these partners have the potential to institutionalize the initiatives in their current operations and future programming. Below is a table outlining key partnerships that will be leveraged for this programme:

Outcome area	Key interventions of the program	Partners
Women’s land tenure security is increased	<ul style="list-style-type: none"> Disseminate new land laws, Advocacy on gaps in the laws, Provide technical and advisory support in the review and development of social profiles at district level, monitoring of new law) Gender analysis of tools and systems for registration, Capacity strengthening of land registry institutions, increase women’s awareness on land registration application procedures, Engage communities, building capacity of community committees including traditional and religious leaders, Disseminate information on land laws at grassroots level Conduct dialogues on social and customary barriers to land, 	<ul style="list-style-type: none"> Local NGOs under LandNet: Key in the dissemination of the new land law, advocacy on gender related gaps in the law, monitoring the implementation of the new land law, advocacy on cultural barriers to accessing land by women. Local Land Committees under Traditional leadership: Key in the implementation of the new law. Ministry of Local Government: key partner in the review and development of social profiles at district level. FAO: Key partner in technical analysis of policies and laws, including the use of Voluntary Guidelines on Tenure of Land to be used by land committee on management and governance of land.

Outcome area	Key interventions of the program	Partners
	<p>promote men and boys engagement, (leadership training and mentorship, awareness on land laws, south to south exchange, media/edutainment campaigns; advocacy with policy makers)</p>	<ul style="list-style-type: none"> • Local NGOs and Associations: Advocacy, information and capacity building activities for women on newly introduced rural land management measures and mechanisms
<p>Women smallholder productivity increased and physical burden of agricultural work reduced</p>	<ul style="list-style-type: none"> • Increase proportion of women with access to appropriate technologies and innovations (machinery, storage methods, improved seeds, fertilizers, pest control), stocktaking of existing technologies and support dissemination, support to research institutions and innovators to develop and roll-out appropriate technologies, promotion of ICT-based technologies). • Improve production methods, conservation agriculture, soil restoration, organic manure, tree planting, wetland conservation, post-harvest methods; • Improve access to food and nutrition information for women and adolescent girls through mobile technologies) 	<ul style="list-style-type: none"> • Airtel: Key in providing mobile based platforms for dissemination of relevant agri-related information to farmers. • CIAT: Key partner in developing, prototyping and disseminating technologies to rural farmers including 3D technologies. • Ministry of Agriculture, Department of Agricultural extension services (DAES): Key in disseminating the technologies and providing technical and regulatory support • FAO: Key partner on Farmer Field School and Farmer Business School for nutrition and increased food production • NASFAM: Key to community mobilization, Household approaches to adoption of good agronomic practices. • Farm Radio and Mediae: Disseminate information on weather, climate change and other strategic data to farmers through edutainment initiatives
	<ul style="list-style-type: none"> • Increase proportion of trained women extension workers, support strengthening network of lead farmers and field agents 	<ul style="list-style-type: none"> • Airtel: Key in the development of mobile based platforms for disseminating information to women farmers

Outcome area	Key interventions of the program	Partners
	<ul style="list-style-type: none"> • Use of ICT and mobile-based platforms to strengthen extension support including provision of timely weather and climate information, early warning systems and market information • Use of edutainment platforms to disseminate relevant agricultural information • Policy research and advocacy to quantify and value women's unpaid care work in agricultural productive systems including time use and household surveys, dissemination of survey findings and implementation of recommendations, male and boys engagement, community dialogues on women's unpaid care work) 	<ul style="list-style-type: none"> • Ministry of Agriculture, Department of Agricultural Extension services (DAES); key in training of women extension officers and lead farmers. • Department of weather and climate change; key partner in accessing weather related information and disseminating to farmers
<p>Opportunities for women farmers to move up the agricultural value chain promoted</p>	<ul style="list-style-type: none"> • Promote financial literacy for women farmers, micro-finance, savings and loan groups, mobile banking, agency banking, crowd funding platforms, seed capital, awareness on crop insurance, sensitization/dialogue with financial institutions to develop gender responsive products and services for women farmers) • Capacity development of women farmers on business skills, 	<ul style="list-style-type: none"> • Ministry of Industry and Trade: Training and registration of producer groups into cooperatives • Ministry of agriculture, DAES: Training producer groups in financial literacy • Banks: Developing gender responsive products and services for women and providing rural women farmers with finance, loans and credits. Some of the financial institutions that will be targeted include FDH, National Bank and NED bank. • Oxfam: Key partner in raising awareness on crop insurance • TEVET: Technical and vocational training to rural women farmers

Outcome area	Key interventions of the program	Partners
	<p data-bbox="451 218 932 464">promotion of household approach, vocational training, capacity development for women farmers on using new technologies and applying local and indigenous knowledge</p> <ul data-bbox="407 520 932 1482" style="list-style-type: none"> <li data-bbox="407 520 932 1058">• Undertake market studies, promote fair trade, link private companies with women small holders and producer groups, promote private sector commitment through WEPs, promote gender-sensitive public procurement, support to women in informal cross-border trade, support to women to access local and international markets in high potential value chains e.g. high value vegetables and oil-seeds. <li data-bbox="407 1066 932 1482">• Support women's leadership and participation in producer groups and cooperatives, promote use of digital technology to connect farmers, increase access to machinery and technologies to move from production to aggregation, processing and distribution, storage facilities and training) 	<ul data-bbox="954 218 1482 1866" style="list-style-type: none"> <li data-bbox="954 218 1482 296">• NASFAM: Popularizing the household approaches. <li data-bbox="954 304 1482 506">• Ministry of Gender, Children, Disability and Social Welfare: Supporting women's capacity building, their basic education and literacy <li data-bbox="954 514 1482 890">• Ministry of Industry and trade: Developing regulatory tools and frameworks for linking women to national and international markets, providing training of cooperatives on marketing, packaging, labelling (organic products, fair trade) and marketing channels <li data-bbox="954 898 1482 1016">• Office of the Director of Public Procurement: Promote gender-sensitive public procurement <li data-bbox="954 1024 1482 1310">• Malawi Confederation of Chambers of Commerce and Industry (MCCCI): Linking women to local markets, registration for their participation in trade fair, Promotion of WEPs to its membership <li data-bbox="954 1318 1482 1562">• Processors: Malawi Mangoes, Rab Processors, People's Trading Centre, Mzuzu Coffee, Kwithu Kitchen, NASFAM providing markets to rural women farmers <li data-bbox="954 1570 1482 1730">• WFP: Linking rural women farmers to markets through Patient Procurement Platform (PPP) <li data-bbox="954 1738 1482 1866">• Malawi Stock Exchange (MSE) and Auctions Holding Commodities Exchange

Outcome area	Key interventions of the program	Partners
		<p>(AHCX): Hold ‘ring the bell’ for gender equality event</p> <ul style="list-style-type: none"> • Chain Stores like Chipiku, Game and Shoprite: Providing markets for fruits and vegetables to rural women farmers • Action Aid International: Mobilizing women through women’s forum in terms of motivating them to join producer groups and cooperatives

6.3 Partnership and Management Arrangements

UN Women will be responsible for the overall implementation and management of the programme. In close collaboration with other key UN partners, Government Ministries and other relevant stakeholders. A Programme Management Unit (PMU) headed by a programme coordinator will be set up to manage the programme. The programme coordinator will be supported by a team composed of:

- An expert on land governance
- An Agronomist to manage agricultural productivity in the face of climate change
- A Monitoring and Evaluation officer
- A programme Assistant and
- A finance Assistant

A steering committee and a technical committee comprising of implementing partners’ representatives will be set up. The steering committee will be providing guidance to the programme team/technical committee on the implementation of activities. To the extent possible, UN Women will use this flagship programme as the basis for engagement with Government and other development partners on Gender and Agriculture programming including under the ASWAp framework and will push for the integration of the proposed key outcomes and outputs in the design of other programmes (in particular the 2nd phase of ASWAP). UN Women will organize regular interagency and multi-stakeholder forums to build synergies, ensure coordination, and review progress in the implementation of activities including sharing of relevant experiences and good practices that could be scaled up or replicated. Among the proposed organizations likely to be part of the steering committee are;

- The Ministry of Agriculture, Irrigation and Water Development
- Ministry of Lands, Housing, and Urban Development
- Ministry of Gender, Children and Social Welfare

- Development partners such as RNE, WB, Irish AID
- Local NGOs implementing partners such as NASFAM, FUM, CISANET
- UN Agencies, such as FAO, WFP, UNDP
- The private sector
- Research Institutions such as CIAT and ICRISAT

6.4 Financial Management

UN Women will be responsible for arrangement of fund management services, including:

- Receipt, administration and management of donor contributions
- Transfer of funds approved to Partner Organizations
- Consolidation of statements and reports, based on submissions provided by programme partners
- Synthesis and consolidation of the individual annual narrative and financial progress reports submitted partner organizations for submission to donors.

6.5 Monitoring, Evaluation and learning

A comprehensive Performance Monitoring Framework (PMF) will be developed within the first quarter of programme implementation and will form an integral part of the programme. The PMF will highlight all performance indicators, data sources, collection methods and the frequency of data collection, responsible actors, baselines and targets for each result. This PMF will result from collaboration with key programme partners and with technical support from the monitoring and evaluation section of UN Women. Five levels/ areas of M&E will be included in the PMF: (1) monitoring of activities, (2) financial monitoring, (3) progress on programme management, (4) annual programme review, (5) mid-term and final evaluation (s). Information from monitoring will inform the process of programme implementation, while the evaluation will give lessons for future programme development and implementation.

The PMF will also be informed by a comprehensive baseline analysis which will be conducted of the multi-faceted situation of women farmers and the various other stakeholders and development actors involved, including “who is doing what” across the outcome areas. This process is intended to contribute to the development of a country-specific strategy and work plan to address the gender gap in agriculture and will also support improved data and statistics on women’s access to secure land tenure,⁹

⁹ According to Doss (2015), “There exist virtually no recent, comparable, nationally representative data across African countries that contain information on women’s landownership and control or management...Rigorous, well-defined, and contextually relevant measurement of gender disparities in ownership and control of land, implemented in population-representative surveys that are embedded within countries’ statistical systems, will be essential to future efforts to reduce gender gaps in bundles of rights associated with landownership.”

productivity and labour time, access to financial services and loans, and participation in agricultural extension services and cooperatives (including in alignment with the SDGs) in order to track and assess progress and results.

Table: Monitoring and Evaluation Framework

Types of M&E	Frequency	Areas of M&E
Monitoring of activities	Quarterly/ Semi-Annual	Outcome, output, and implemented activities
Financial management	Monthly	Financial commitment, funds disbursement, financial allocation vis-à-vis to delivery targets
Progress on programme management	Quarterly/ Annual A schedule proposed by the donor requirements	Progress of the programme in terms of activity implementation
Programme review	Annually	Review of activities, deliverables, targets and adjustments or adaptation needed. This will be done at country level involving all the programme's staff and implementing partners, selected government officials from relevant ministries and relevant staff of UN Women

6.5 Communication, Advocacy, Knowledge Management and Networking

UN Women will develop a comprehensive communication strategy to streamline the information, key messages and policy positions, and offer guidance on:

- How partner organizations will communicate on the programme
- How to influence the UN's programming agenda and the donor community to prioritize support to climate resilient agriculture using the knowledge generated through the programme
- How to conduct gender sensitive participatory communication for the district and community level activities.
- How to document business cases and best practices, and package the knowledge for the general public. Also social media platforms such as Face book and Twitter could be used as very effective communication and advocacy tools to engage the wider public through news' updates, threads of discussions and pictures.

Beyond the communication strategy, the programme will include a strong knowledge management component to ensure that information about the project, experiences and lessons learnt will be shared among all relevant stakeholders. This also includes the setting up of a community of practice on gender and climate resilient agriculture.

Annexes

Annex 1: Theory of change

Annex 2: Budget

Annex 3: List of buyers

Annex 4: Profile of maize production in Malawi

Annex 5: Profile of legume production in Malawi

ANNEX 1: Theory of Change

Goal	<p>32,000 Women Farmers in Malawi are Economically Empowered and Resilient in a Changing Climate By 2021 <i>If women farmers in Malawi are able to access land and land tenure security is increased; (2) they have access to information and appropriate agricultural technologies; if (3) they attain the financial capacity to invest; and participate fully in value chains and markets; then (4) they will be economically empowered and resilient in a changing climate; because (5) the root causes and drivers of gender gaps in agriculture will have been removed.</i></p>			
Outcomes	<p>1. Women’s Access to Land and Land Tenure Security are Increased</p> <p><i>(If barriers to women’s access to land are removed; and if an enabling legislative framework, supported by strong technical capacities are in place and if the agency and decision-making capacity of women farmers is strengthened, then women’s land tenure security will increase because discrimination against women to own, control and use land is removed)</i></p>	<p>2. Women farmers have access to information and appropriate communication technologies</p> <p><i>(If women’s access to information and appropriate communication technologies, agricultural equipment/machinery, and access to climate resilient productive assets, is improved then their productivity will increase and also the labour intensity of agricultural activities for women will be reduced).</i></p>	<p>3. Women Farmers’ increased access to financing mechanisms</p> <p><i>(If women have access to affordable and appropriate financing services and products, markets, business skills and insurance then they will have opportunities to move up the value chain because bigger barriers to their increased productivity will have been removed)</i></p>	<p>4. Access to markets and value-added activities</p> <p><i>(If women have access to skills and capacities to package, label and markets their products, then they will have opportunities to participate in international markets of high value added niches).</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Outputs</p>	<p>1.1 Gender-responsive land laws, policies and frameworks developed and implemented for women's access to land</p> <p><i>(gender-based budgeting, dissemination of new land laws, advocacy on gaps in the laws, monitoring of new law, technical and advisory support in the review and development of social profiles at district level)</i></p>	<p>2.1 Deployment of digital platform to strengthen relationships between stakeholders in the value chain</p> <p><i>(Increase proportion of women with access to appropriate technologies and innovations (machinery, storage methods, improved seeds, fertilizers, pest control), stocktaking of existing technologies and support dissemination, support to research institutions and innovators to develop and roll-out appropriate technologies, promotion of ICT-based technologies)</i></p>	<p>3.1 A credit line is set up to provide funding to women farmers living in the project intervention areas</p> <p><i>(e.g. promote financial literacy for women farmers, micro-finance, savings and loan groups, mobile banking, agency banking, crowd funding platforms, seed capital, awareness on crop insurance, sensitization/dialogue with financial institutions to develop gender responsive products and services for women farmers)</i></p>	<p>4.1: Sales contracts are promoted to secure more opportunities for women</p> <p><i>(Capacity development of women farmers on negotiating contractual relations with large buyers, including private sector, manufacturers, exporters)</i></p>
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<p>1.2 Land registry institutions and land governance systems are in place to promote women's access to land</p> <p><i>(gender analysis of tools and systems for registration, capacity strengthening of land registry institutions, increase women's awareness on land registration application procedures)</i></p>	<p>2.2 Women's access to innovative and labour saving agricultural technologies is enhanced</p> <p><i>(increasing women's access to climate resilient productive assets, technologies and skills to improve productivity and reduce the labour intensity of agricultural activities for women.)</i></p>	<p>3.2 Women's basic education and financial literacy skills are strengthened</p> <p><i>(Improve women's literacy and financial skills, through holding financial literacy events, going beyond training women how to read and write and provide them with specific skills and information relating to agricultural production, business enterprise development, food processing and nutrition. Continuous mentoring to effectively manage finances for their businesses ventures).</i></p>	<p>4.2: Women's capacities in selling, branding, certification, marketing, and packaging are reinforced</p> <p><i>(women farmers capacity to package, label, and seek out new market outlets, capacity to identify needs in terms of equipment to improve the quality of packaging, capacity to increase visibility of their products, capacity to participate in national and international trade fairs)</i></p>
<p>1.3 Social and customary barriers to women's equal land rights and access are removed</p> <p><i>(engagement/advocacy with communities, capacity building of community committees including traditional and religious leaders, dissemination and popularizing land laws at grassroots level, community dialogues on social and customary barriers to land, promote men and boys engagement)</i></p>	<p>2.3 Women's access to locally-adapted, high yielding seeds and production equipment is promoted</p> <p><i>(Ensuring that women are aware of the importance of using climate resilient productive assets through various extension mediums such as the use of improved seed, conservative agriculture, use of drought resistant crops and varieties etc.)</i></p>	<p>3.3 Agricultural insurance tailored to women farmer's needs are developed and promoted</p> <p><i>(Support promoting agricultural insurance, such as weather index-based Insurance, explore other environmental related insurance packages that are tailored to women farmers needs and aspirations, so that they can benefit from them and strengthen their resilience against climatic shocks)</i></p>	

	<p>1.4 Strengthened Agency and Voice of Women Farmers to Engage in Relevant Land Policy and Decision-Making Processes</p> <p><i>(leadership training and mentorship, awareness on land laws, south to south exchange, media/edutainment campaigns; advocacy with policy makers)</i></p>	<p>2.4 Improved access to extension service for women farmers</p> <p><i>(increase proportion of trained women extension workers, support strengthening network of lead farmers and field agents, use of ICT and mobile-based platforms to strengthen extension support including provision of timely weather and climate information, early warning systems and market information; use of edutainment platforms to disseminate relevant agricultural information)</i></p>	<p>3.4 Agricultural Insurance Tailored to Women Farmer’s Needs are Developed and Promoted</p> <p><i>(Support promoting agricultural insurance, such as weather index-based Insurance, explore other environmental related insurance packages that are tailored to women farmers needs and aspirations, so that they can benefit from them and strengthen their resilience against climatic shocks)</i></p>	
Assumptions	Lack of land is a structural cause of gender inequality- Secure tenure can be individual or collective- Women’s secure land tenure is an important collateral for success	Gender gap exists for agricultural practices, information and technologies – New technologies and tools will save women’s time and be less physically intensive Political will and supportive social norms to recognize the importance of unpaid care work	Gender gap in women’s access to financing markets and in the value chain	Greater access to markets and moving higher in the value chain will increase incomes.
Risks	Social/cultural attitudes and political will on equal land rights, cannot be changed – Equal rights in laws are not translated into practice	Uncertain acceptance of new technologies and practices- women’s unpaid domestic and care work reduce time for learning new technologies	Social/cultural/political/trade barriers to women accessing finance and having preferential access to markets	Social/cultural/political/trade barriers to women accessing finance and having preferential access to markets

ANNEX 2: Budget

Outcome	Outputs	Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Women's access to land and land tenure security are increased	1.1 : Gender-responsive land laws, policies and frameworks developed and implemented	Design and implement a dissemination plan for the new Land Act targeting women farmers	124,063	99,063	50,000			273,125
		Conduct gender responsive, planning and budgeting trainings for officers in Ministry of Lands, Agriculture, and selected CSOs.	74,063	74,063	50,000			198,125
	1.2 : Land Registry Institutions and Land Governance Systems are in Place to Promote Women's Access to Land	Review and engender terms of references for selecting members of land committees to promote inclusion and participation of women.	75,000					75,000
		Engender tools used for titling, and registration of land, and also making sure that land management, monitoring and evaluation systems collect and use sex disaggregated data	150,000	150,000				300,000
	1.3: Strengthened Agency and Voice of Women Farmers to Engage in Relevant Land Policy and Decision-Making Processes	Train and mentor women groups to ensure that their lobby and advocacy skills around land rights are enhanced	75,000	50,000	25,000	10,000		160,000
		Promote South-South learning and sharing of experiences with other countries on women's access to land.	25,000	25,000	25,000			75,000
Sub-total Outcome 1			523,125	398,125	150,000	10,000	-	1,081,250
8% Indirect Support Costs (GMS)			41,850	31,850	12,000	800	-	86,500
Total Outcome 1 Budget			564,975	429,975	162,000	10,800	-	1,167,750

Outcome	Outputs	Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Outcome 2: Women farmers have access to information and innovative technologies	2.1: Deployment of digital platform to strengthen relationships between stakeholders in the value chains	Select women cooperatives to be included in the buyfromwomen platform	74,063					74,063
		Deployment of the buyfromwomen platform	524,063					524,063
	Output 2.2 Innovative agricultural technologies are disseminated	Use the platform to disseminate good practices on maize seeds, climate smart technology and fertilisers	69,063	69,063	30,000	25,000	10,000	203,125
	Output 2.3 Improved access to extension service for women farmers	Train lead farmers to mentor other women farmers through their producer groups	50,000	50,000	50,000	50,000	50,000	250,000
		Promote Radio and use yellow Mobile Van to increase women's access to climate resilience agronomical practices	100,000	100,000	75,000	40,000	10,000	325,000
	Sub-Total Outcome 2			817,188	219,063	155,000	115,000	70,000
8% Indirect Support Costs (GMS)			65,375	17,525	12,400	9,200	5,600	110,100
Total Outcome 1 Budget			882,563	236,588	167,400	124,200	448	1,411,198

Outcome	Outputs	Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total	
Outcome 3 – Women Farmers' increased access to financing mechanisms	Output 3.1: A credit line is set up to provide funding to women farmers living in the project intervention areas	Select by tender the financial institutions for the implementation of the credit line for women farmers	10,000	10,000				20,000	
		Fund \$1M credit line for women farmers	500,000	500,000				1,000,000	
	Output 3.2: Women's financial literacy skills are strengthened	Develop training modules for enhancing financial literacy for women farmers and translate them in local languages accessible with digital technology	124,063	74,063				198,125	
		Conduct business management and financial literacy for women farmers	174,063	174,063	75,000	75,000	75,000	573,125	
	Output 3.3: Agricultural insurance tailored to women farmers' needs are developed and promoted	Design and implement a communication campaign to disseminate of agri-insurance products to women farmers	50,000	50,000	10,000	10,000	10,000	130,000	
		Fund in partnership with private sector the launch specific insurance products for women farmers	150,000	75,000	50,000	20,000	20,000	315,000	
	Sub-Total Outcome 3			1,008,125	883,125	135,000	105,000	105,000	2,236,250
	8% Indirect Support Costs (GMS)			80,650	70,650	10,800	8,400	8,400	178,900
Total Outcome 1 Budget			1,088,775	953,775	145,800	113,400	672	2,302,422	

Outcome	Outputs	Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
4. Access to markets and value-added activities	4.1: Sales contracts are promoted to secure more opportunities for women	Establish contractual relationships with WFP, and private sector firms and chain stores for women producers	10,000	10,000	10,000	10,000	10,000	50,000
		Support women to participate in national and international trade fairs	74,063	74,063	50,000	50,000	50,000	298,125
	4.2: Women's capacities in selling, branding, certification, labeling, marketing, and packaging are reinforced	Train women on packaging and labelling and marketing	124,063	124,063	100,000	100,000	100,000	548,125
		Design and implement marketing campaign to increase visibility of their value added products through buyfromwomen	50,000	50,000	50,000	50,000	50,000	250,000
Sub-Total Outcome 4			258,125	258,125	210,000	210,000	210,000	1,146,250
8% Indirect Support Costs (GMS)			20,650	20,650	16,800	16,800	16,800	91,700
Total Outcome 1 Budget			278,775	278,775	226,800	226,800	1,344	1,012,494

Total Budget Summary

UN Women Malawi - ANNEX 2 - Budget-Climate Resilient Agriculture, (CRA) Flagship Programme Initiative (FPI)		
OUTCOME 1	Women farmers access to land and land tenure security are increased	1,081,250.00
OUTCOME 2	Women farmers access to information and innovative technologies	1,376,250.00
OUTCOME 3	Women Farmers access to financing mechanisms	2,236,250.00
OUTCOME 4	Women Farmers access to markets and value-added activities	1,146,250.00
	Total cost of outcomes (1-4)	5,840,000.00
	Programme Monitoring and Evaluation (3% of Total Project Cost)	175,200.00
	Support cost (GMS - 8%)	481,216.00
	Total Budget	6,496,416.00

ANNEX 3: Profile of maize production in Malawi

Maize is by far the most important staple food in Malawi. Per capita consumption of maize is 133 kg, and it accounts for over half (60%) of the caloric intake of households in Malawi. Among the countries of eastern and southern Africa, Malawi is the only country that is more dependent on maize as a source of calories. For other countries in the region, maize generally contributes 20-35% of the caloric intake. Thus, it is not surprising that maize is the focus of food security policy in Malawi. Cassava and sweet potatoes are also important staple food crops in Malawi. Cassava contributes 7% of total caloric intake, while sweet potatoes and potatoes contribute 8% (see Table 1). In addition, being more drought-resistant than maize, cassava and sweet potatoes become particularly important in low-rainfall years.

Commodity	Quantity consumed (kg/person/year)	Daily caloric intake (kcal/person/day)	Share of caloric intake (percent)
Maize	133	1154	54%
Cassava	89	161	7%
Potato*	88	163	8%
Others		647	31%
Total		2125	100%

Figure 1: Important staple food in the diet of Malawi
* FAO data combine potato and sweet potato.

Rice and wheat products together contribute less than 4% of caloric intake, but they are the preferred staples among urban and high-income households. In contrast, cassava is considered a poor man’s crop, and consumption is concentrated in the cassava growing regions of the country.

Production and trade of main staple foods

In Malawi maize production is rain-fed and is usually grown during the rainy season that starts around November and ends in April. Malawi, typically a self-sufficient maize producer, had poor crop performance in 2014/15 growing season due to a late and erratic start of the growing season, followed by damage from severe flooding in the southern half of the country, and periods of extended dryness across most of the country for the latter half of the season. As a result, maize production for the 2014/15 season decreased by

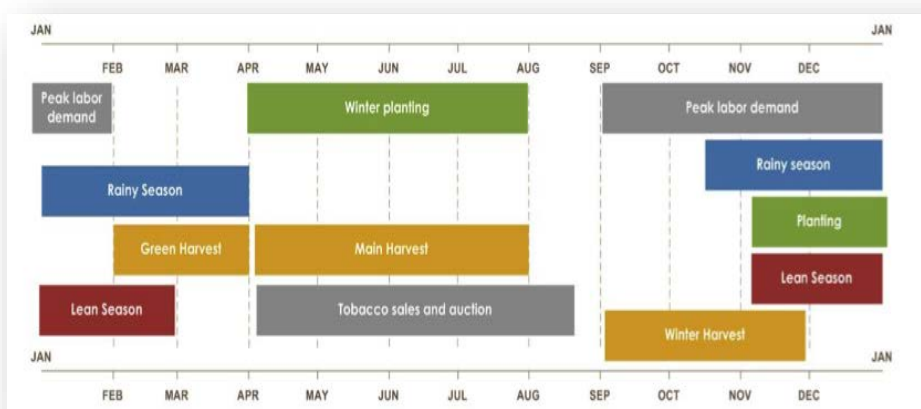
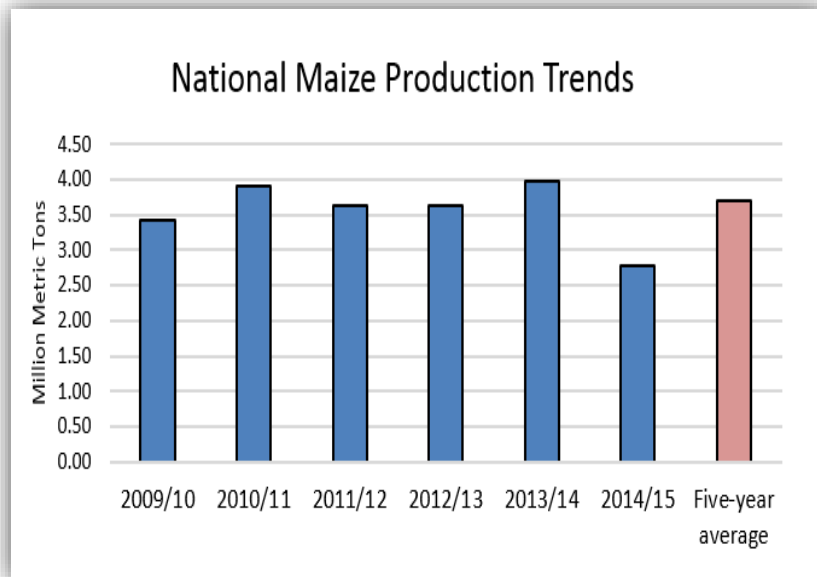


Figure 2: Maize Production and Harvest times in a season

approximately 25 to 30 percent compared to the previous season and the five-year average. The country only produced an estimated 2.8 million metric tonnes, with a production shortfall of 123,340 metric tonnes to meet the annual maize requirement for the country of 3 million metric tonnes. Prices increased by more than 10 percent during the harvest and post-harvest period, providing an early indication of thin market supplies.



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In 2016, the country experienced extended dryness which has decimated the country’s capacity to produce enough maize for consumption. Because of low production of maize in the periods 2014/2015 and 2015/16, the country anticipates low exports and high imports relative to production. The country anticipates imports averaging 63 thousand tons, or 3% of apparent consumption, while exports will be less than 6% of production. Thus, it is clear that in general, maize is a non-tradable crop in Malawi so prices are determined largely by domestic supply and demand.

In the 2014/15 season, low productivity was highly felt in the southern Malawi, with production deficit of 500,000 metric tonnes. However, in the traditionally surplus central and northern areas, maize market supplies were normal. Average national prices were higher

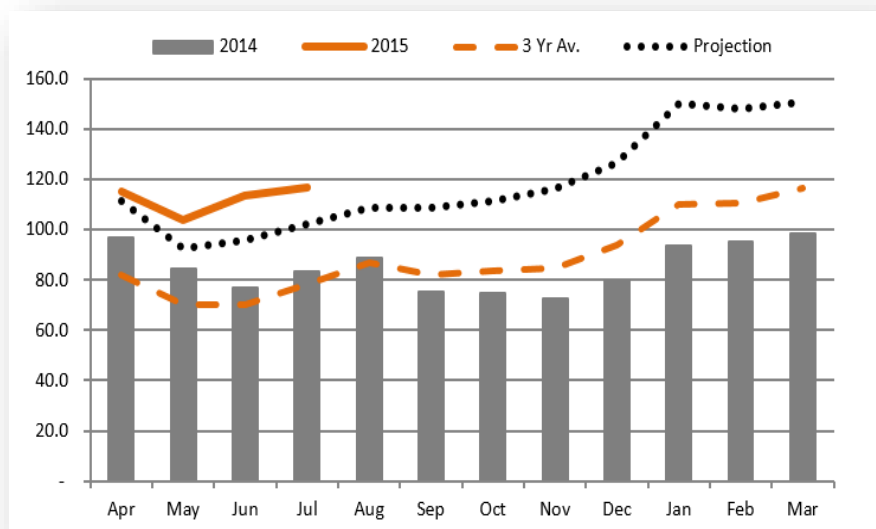


Figure 3: National Average Maize pricing trends in 2015

than normal in the post-harvest period. Some maize prices were as much as 60 percent above the three-year average.

In the 2015/16 season, maize prices averaged about 118 MWK/kg, compared to the previous season (2014/15) price of 84 MWK/kg, and 90 MWK/kg in 2013. This year's farmer selling price is about 29 percent higher when compared to last year's selling price. With national production down by 30 percent when compared to the previous year, it is assumed that this increase in producer prices will likely only benefit larger farmers that usually sell their maize. Smallholders that produced some maize will likely hold on to it for their own consumption and sell other crops like pulses, rice, and sweet potatoes.

The situation related to maize production pauses an opportunity to build women's economic empowerment in that, if women's capacity to produce more, through their producer groups and cooperatives, they are likely to have more maize which they can consume but also sell. In this case they can take advantage of the maize scarcity to produce more for the market. However, they require to be supported with irrigation technologies, improved seeds and pesticides as markets are readily available for maize.

Agro-ecological Zones where maize is grown in Malawi

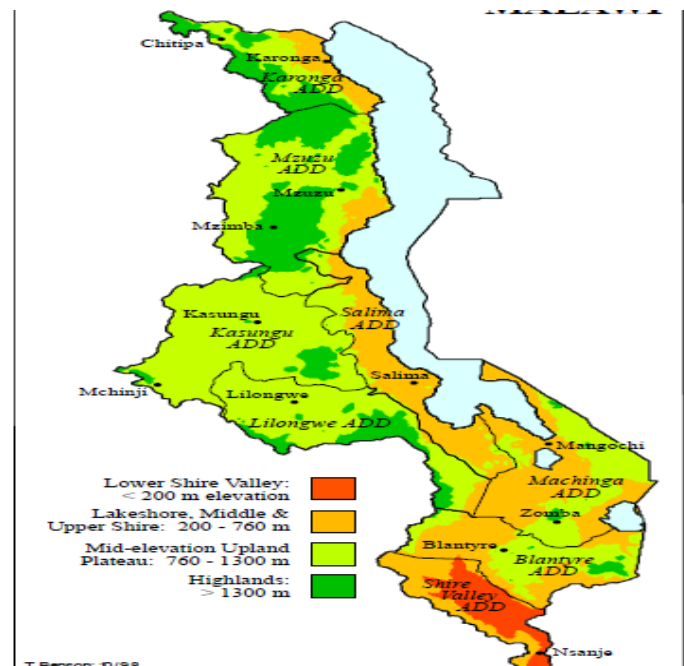
It is cultivated on 60% of the planted land in Malawi and accounts for 60% of the calorie consumption in the country. Maize is likely to do well where the soils are good and nutritious, good climate and enough rainfall.

In Malawi maize is grown in four zones. The first zone is mid-altitude areas. This is the main maize growing area and most favorable in Malawi. Moderate temps and Soil generally well drained & medium textured, except some Kasungu plains which are sandy. Due to medium rainfall pH is well balanced. In these areas, with appropriate amendments good yields are possible.

The second zone is low altitude areas.

The lake shore areas have alluvial soils and high temperatures (18-29°C), and generally high Ph (alkaline). Sandy soil requires heavy fertilization which erratic rains may lead to

Figure 4: Districts where maize is grown in abundance in Malawi



water-logging. The third zone is Shire Valley. Has a short rowing season (60-90 days) and low and erratic rainfall and high temps (20-32 °C). The fourth zone is high altitude. Soils often leached hence acidic, >1300 mm rainfall. Cool temperatures (15-26 °C) mean slow growth, prolonged exposure to weeds, diseases and insect pests

Annex 4: List of large Maize buyers/manufacturers with which contractual sales can be negotiated

Large buyers/manufacturers	Profile	Contact details
Agricultural Development and Marketing Corporation (ADMARC)	Agricultural Development and Marketing Corporation (ADMARC) was established as a statutory corporation under Chapter 67.03 of the Laws of Malawi. ADMARC through its vast network of markets buys agricultural produce from both traders and smallholder farmers. The major crops being; Seed Cotton, Rice, Groundnuts, Beans, Soya beans, Pigeon peas, Maize	Tsiranana Road on Limbe Zomba Rd P.O. Box 5052, Limbe Tel:+265 (0)1 840 044/840 500 Fax: +265 (0) 1 840 486 Email: admace@admarc.co.mw
National Association of Smallholder farmers in Malawi (NASFAM)	The largest independent smallholder-owned membership organisation in Malawi. NASFAM functions are split into Commercial and Development activities. These provide members with both the commercial and development services they need. Commercial services include improved access to output and input (e.g. seed and fertiliser) markets and expanding range of value-addition opportunities. NASFAM also buys a variety of produce in large quantities like rice, groundnuts, maize, soya beans from farmers	City Centre <i>P.O Box 30716,</i> Lilongwe, Malawi Tel: +265 1772866 Fax:+265 1770858 Email: <i>nasfam@nasfam.org</i>

<p>Farmers world Limited</p>	<p>Farmers World Ltd (FW) and Agora Ltd service the central, north and southern regions through their numerous retail outlets. Farmers World also provide linkages between farmers and urban consumers of farm output commodities such as maize, soya beans, groundnuts, sunflower and pulses in large quantities. Most of these commodities are bought to supply forward contracts with local grain processors and export customers. The rural farmer is given the opportunity to sell his produce to a formal buyer that is compliant to good practices set down by the company and the trade regulations set out by Government.</p>	<p>Kanengo area P.O Box 1631, Lilongwe Tel: +265 1710,180 Fax:+265 1710951 Email:farmersworld@farmersworld.net</p>
<p>National Food Reserve Agency (FRA)</p>	<p>The National Food Reserve Agency (NFRA) manages the strategic grain reserves by holding ready resources in the form of physical grain stocks and funds necessary for use through normal marketing channels to help reduce the impact of the failure of the private sector to respond to market signals and to make adequate provisions to satisfy national requirements for grain.</p>	<p>Kanengo Silos Complex Kanengo Industrial Area Private Bag B450 Lilongwe 3 Malawi Tel: +265 1 713 092</p>
<p>Chibuku Products Ltd.</p>	<p>Chibuku is a commercial sorghum beer based on the traditional Umgombothi homemade African beers, the main grains used are malted sorghum and maize but may also contain millet. Chibuku buys produce especially maize from farmers.</p>	<p>Chibuku Delamere House, 5th Floor Victoria Avenue P. O. BOX 4 Blantyre Blantyre</p>

<p>Rab Processors</p>	<p>Founded in 1983, Rab Processors Ltd is a leading player in the Agro Industry in Malawi and specializes in exports of agricultural produce grown in Malawi and provision of farm inputs which are key requirements in Malawi's Agro-Based economy besides production and distribution of a range of food and non-food products. Rab is a pioneer of nutritional, fortified food products in Malawi.</p>	<p>P.O Box 5338 Limbe, Malawi Tel: +265 (0) 1 845 200 +265 (0) 1 845 221 Email:info@rabmw.com</p>
<p>Central Poultry</p>	<p>Central Poultry is Malawi's largest processor and marketer of chicken. Central Poultry is a fully integrated broiler producer that breeds and rears its own livestock which it feeds from its own feed mills, processes, distributes and markets fresh and frozen chicken as well as commercial eggs.</p>	<p>Central Poultry PO Box 340, Lilongwe, Malawi Tel: +265 72 6818 +265 72 7594 Email:caps@globemw.net</p>

ANNEX 5: PROFILE OF LEGUME SECTOR IN MALAWI

Legume production in Malawi

Malawi is one of the major legume producing countries in southern Africa. The common legumes grown in Malawi, include: Groundnuts, pigeon peas, soybean and common beans. Production for these legumes has increased over the years.

The graph clearly illustrates the different production trends for the mostly grown legumes in Malawi. Production for all the legumes has increased tremendously over the years, with groundnut dominating. The trend also shows that cowpea production declined greatly.

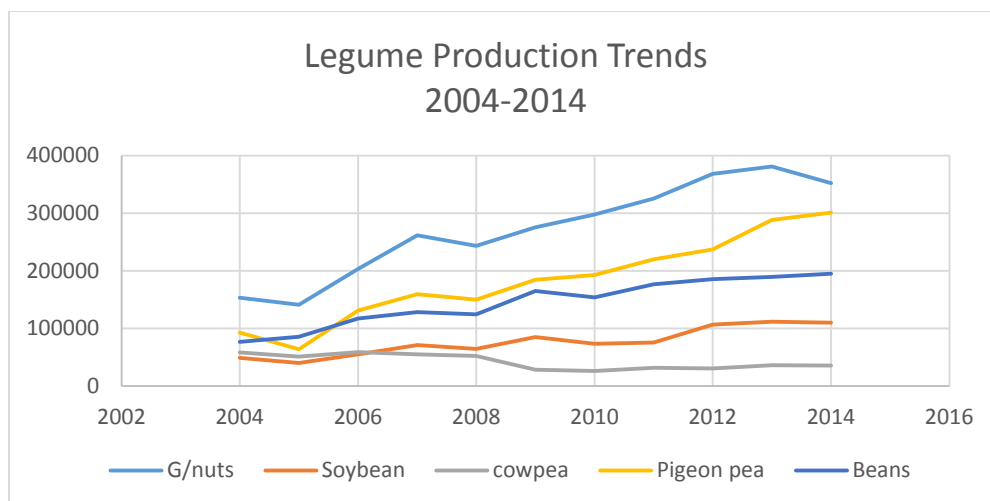


Figure 1: Legume production Trends in Malawi: Computed by Author using Secondary Data from FAOSTAT

Groundnut

Groundnut (*Arachis hypogaea*) is an important legume crop in the smallholder agriculture in Malawi, providing approximately 25% of the agricultural income. Groundnut is an important component of the national food supply, which makes tremendous contributions to improving household food security. It does not only have nutritional and dietary value, groundnut also provides cash to farmers; enrich the soil with nitrogen through biological nitrogen fixation; and its haulms can be used as fodder and fuel (MITC Mw.,2014).

Additionally, groundnut thrives under low rainfall and poor soils and is adapted to tropics, subtropics and warm temperate regions between 40°N and 40°S latitude and rainfall ranges of 500-600mm. Germinates best at temperatures between 20°-35°C. Groundnuts grow best in well-drained, red-colored, yellow-red and red, fertile, sandy to sandy loam soils. Saline soils are not suitable because groundnuts have a very low salt tolerance.

The average annual cultivated area of groundnut during 1991-2006 (171 thousand hectares) accounted for 27% of the total land grown to legumes. Annual groundnut production during the same period accounted for 28% of Malawi's total legume production. The area under groundnut cultivation was about 14% of the area under maize cultivation (Simtowe et al., 2009).

Although produced in the entire country, the central and southern Agricultural Development Divisions (ADDs) of Kasungu, Lilongwe, Kasungu, Machinga, and Blantyre are the major production areas. 70% of the crop is grown in the central region. Also grown in plains of the following districts: Lilongwe, Kasungu, Mchinji, Mzimba, Salima, Balaka, Ntchisi, Dowa and Thyolo.

Retail nominal prices of shelled and unshelled groundnut increased at an annual rate of about 15% between 1999 and 2008. The average annual nominal retail price for unshelled groundnuts increased from MK 26/kg in 1999 to about MK 100/kg in 2008. The average annual price for shelled groundnuts rose from MK 46/kg in 1999 to MK 160/kg in 2008. However, the monthly prices were highly volatile during this period with a coefficient of variation of 36% and 37% for shelled and unshelled groundnut, respectively. Export prices for shelled groundnuts from Malawi declined substantially after 2001. Prices dropped from about US\$ 600 /ton in 2002 to about US\$ 200 /ton in 2006, which might also have contributed to the drop in export volumes from Malawi. In the 2008 season, it picked up to US\$ 1200/ton.

In terms of marketing of legumes in Malawi, wholesale trade is dominated by males, with 82% of all traders at this level. At retail level, female traders make up about half of all traders: the market-counting exercise, conducted across all identified markets prior to the national legumes market-mapping survey, showed that 477 out of 974 traders (49%) were female, while the market-mapping exercise itself resulted in a 51% female share at retail. There is no evidence that the gender balance at retail varies systematically across crops, ranging only from 47% female for pigeon pea to 53% female for cowpea. The dominance of males at wholesale and the slight dominance of females at retail is a common pattern throughout east and southern Africa, likely reflecting more limited access to capital for females that prevents most of them from entering the wholesale trade.

Common Bean

Common Bean (*Phaseolus vulgaris* L) is another common legume grown in Malawi. It is an important source of protein for many people both in rural and urban areas. Beans are high in calcium, magnesium, have large amounts of vitamin B, iron and zinc which are essential for immune function in humans. Common bean is also a source of income to many small-scale farmers who happen to be major producers. Beans just like groundnuts improves soil fertility.

In 2012, common bean area was estimated at 243,700 ha and production at 127,464 MT. In the major bean growing areas, from 74% to 90% of farmers grow beans as their main cash. About 35% of the production is marketed contributing about 25% of total household income for over 68% of the households who sell their surplus. Both production and demand for beans in Malawi are rising, with an annual growth rate of 4% between 2002 and 2011 in production. Projections for 2014-2020 suggest continued growth in both national demand and production. Common bean experiences high fluctuations in production associated with high variability in rainfall conditions, often resulting in excess demand. There is an indication of demand for improved high-yielding common bean varieties to stabilize yield

Production areas (agro-ecological Zones)

Beans do very well in places of high, medium and low altitudes. Beans do not adapt along the lakeshore and in the Shire Valley as such they are less farmed in those areas. The commonly preferred varieties are the large seeded, red or red speckled, and the sugar (cream-striped) type. Common varieties include Phalombe (local variety), Kholophethe (sugar 131), Maluwa (CAL 113) and Napilira (CAL 143). Below is a table indicating common bean production areas in Malawi.

Key partners in the Common bean value chain

The key partners in the production of legumes in Malawi are summarized in the table below:

PARTNER	ROLE
Department of Agricultural Research Services; Ministry of Agriculture and Food Security	Variety development , evaluation and release; production of breeder and foundation seed
ICRISAT	Provide improved pigeon pea germplasm/breeding populations; capacity building through training; research on effective methods for technology dissemination
Seed Services Malawi	Seed systems support; helping collaborating NGO's and CBOs with quality seed production/ monitoring
Department of Crop production; Ministry of Agriculture and Food Security	Provide guidance in crop production technologies and associated packages
NASFAM	Capacitate farmer field schools to impart knowledge and skills for increased production on-farm
Farmers	End-users of technologies in terms of high yielding varieties, management practices.
Agro-processors (Export Trading, Grain Traders & Processors Association)	Marketing and value addition

Seed Traders Association of Malawi	Coordination of pigeon pea seed trade to ensure quality delivery
Legume Platform (Legumes Development Trust)	Promote production and marketing of pigeon pea

Soybean is one of the most important crops in Malawi. It is a versatile grain legume because it has a variety of uses. Soybean is rich in protein, vegetable oil and essential minerals. This crop has the ability to fix atmospheric nitrogen and therefore, improves soil fertility. Soybean is increasingly becoming popular and serving as an alternative food and cash crop. The area under soybean production as well as productivity are increasing in Malawi due to government policies on value addition, domestic use and crop diversification. (DARS,2013).

Consequently, there is a significant expansion of the soybean industry within Malawi and with substantial demand for export market. Despite its importance and potential, the crop faces a number of major challenges which include short shelf life, poor crop production practices, diseases particularly soybean rust and effects of climate change.

Agro-ecologies

Soybeans are well adapted for production in all agro-ecological zones in Malawi. Malawi is agro-ecologically divided into 8 agricultural development divisions (ADDs). Five main landforms are evident in most of these agro-ecologies namely: Highlands, Escarpments, Plateau, Lakeshore, Upper Shire Valley and the Lower Shire Valley. The Plateau represents three quarters of Malawi at elevations of 750-1300 masl. Although the major soy-bean production districts are concentrated in the plateau, soybean virtually grows well in all agricultural development divisions. Soybean also grows well in warm, moist conditions with rainfall of 550-850 mm, well distributed over the growing season. Soybeans can also be grown under irrigation. If grown under irrigation planting should be done between May to June in low lying dry areas. It should be noted that soybean yields are reduced when grown off season due to photoperiod sensitivities of the crop. Yields are adversely affected by temperatures rising above 30° C or falling below 13°C for long period during flowering stage. This is detrimental to the formation of flowers and seed.

New improved varieties under commercial production include: Makwacha, Nasoko, Ocepara-4, Soprano, Solitaire, Squire and Tikolore. Soybean production trends in Malawi Research results show that soybeans are well adapted for production in all agro-ecological zones in Malawi. Soybean yields are still low as farmers obtain 40% less (800

kg/ha): Developing improved varieties with market preferred traits therefore remains a viable pathway. Soybean production in Malawi has fluctuated over the years

Pigeon Pea

Pigeon pea is the most versatile grain legume grown by smallholder farmers in Malawi for both local consumption and export. It ranks third among the important legume crops after groundnut and beans. The crop is now planted on 196,516 ha producing about 216,716 tons of pigeon pea between 2010 and 2012 (Ministry of Agriculture Crop estimates data, 2012) up from a total of 78,000 tons produced per year between 1991 and 2006. These statistics clearly show that there is a great potential to increase production and expand area of pigeon pea in Malawi.

Although the crop is now grown in all the agricultural development divisions (ADDs), Blantyre and Machinga ADDs remain major growing areas accounting for more than 90% of the total area under pigeon pea cultivation. Farmers prefer growing pigeon pea either as an intercrop or pure stand because it provides food at the time when all the other legumes have been harvested from the field. It provides cash to the farmers and it is one of those legumes that can be produced with fewer inputs. Available estimates indicate that 65% of the pigeon pea produced is consumed on-farm, 25% is exported, while 10% is traded on the domestic markets. It also provides fodder/feed for livestock and has the potential to improve soil fertility. The crop is deep rooted as such it is adapted to withstand the intermittent or terminal droughts depending on the type of varieties grown.

Agro-ecologies

Blantyre and Machinga agricultural development divisions in the southern region of Malawi are traditionally major pigeon pea growing areas accounting for 92% of the total pigeon pea area, and contributing up to about 20% of farmer's income. Pigeon pea is widely grown as an intercrop with maize in southern Malawi, but it is mainly grown as a boundary marker in northern Malawi, although lately pigeon pea has developed great potential in Karonga and Chitipa districts. In the central region, Salima, Kasungu, Lilongwe and Mchinji districts have seriously taken up cultivation of medium-maturing varieties.

ACRONYMS

ADMARC	Agricultural Development and Marketing Corporation
AHCX	Auctions Holding Commodity Limited
ASWAp	Agriculture Sector-Wide Approach
AU	African Union
CAADP	Comprehensive African Agricultural Development Programme
CARE Intl.	Cooperative for Assistance and Relief Everywhere
CIAT	International Centre for Tropical Agriculture
CISANET	Civil Society Agriculture Network
DAES	Department of Agricultural Extension Services
DCAFS	Donor Committee on Agriculture and Food Security
FAO	Food and Agriculture Organization of the United Nations
FDH	First Discount House
FFI	Formal Financial Institutions
FUM	Farmer's Union Malawi
GDP	Gross Domestic Product
GoM	Government of Malawi
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IHS	Integrated Household Survey
LUANAR	Lilongwe University of Agriculture and Natural Resources
MCCCI	Malawi Confederation of Chambers of Commerce and Industry
MFB	Micro Finance Bank
MFIs	Microfinance Institutions
MGDS	Malawi Growth and Development Strategy
MSE	Malawi Stock Exchange
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
MoENRM	Ministry of Environment and Natural Resource Management
MoFEPD	Ministry of Finance, Economic Planning and Development
MoGCDSW	Ministry of Gender, Children, Disability and Social Welfare
MoIT	Ministry of Industry and Trade
MoLG	Ministry of Local Government
MoLHUD	Ministry of Lands, Housing, and Urban Development
MVAC	Malawi Vulnerability Assessment Committee
NASFAM	National Smallholder Farmer Association of Malawi
NGO	Non-Governmental Organisation
NSO	National Statistical Office
OIBM	Opportunity International Bank of Malawi
OSF	Open Society Foundation
P4P	Purchase for Progress
RNE	Royal Norwegian Embassy
TEVET	Technical, Entrepreneurial and Vocational Education and Training
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
USD	United States Dollar

VSL Village Savings and Loans
WB World Bank
WEPS Women's Empowerment Principles
WFP World Food Program