

Increase in Domestic Demand of Edible Oil and Potential Opportunity of Increasing Sunflower Seeds Production in Tanzania

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Key Message

- *Sunflower is rich in vitamin B complex which are essential for a healthy nervous system and good source of phosphorus, magnesium, iron, calcium potassium protein and vitamin E;*
- *While Africa contributes only 10% of global production; yield per ha in Tanzania is only 37% yield in China;*
- *83% of sunflower seeds produced in Tanzania is consumed domestically, yet the country is facing shortage of edible oil;*
- *Poor extension services, none use of improved seeds, lack of financing, mismatch between supply of seeds and production capacity, outdated pressing technology are constraints facing sunflower subsector;*
- *Joint address of these constraints will have multiplier effects to wider community including employment creation reduction of income poverty.*

1. Importance of Sunflower seeds

Sunflower is one of the most important oilseeds crops worldwide. The crop is rich in vitamin B complex which are essential for a healthy nervous system, it is good source of phosphorus, magnesium, iron, calcium potassium protein and vitamin E. The crop is adaptable over a wide range of environments and therefore it is widely cultivated in South America, Asia and in a small quantity in Africa. In addition to edible oil sunflower provides high quality feed for livestock, its by product after oil refinery provides high nutritious feed for animals.

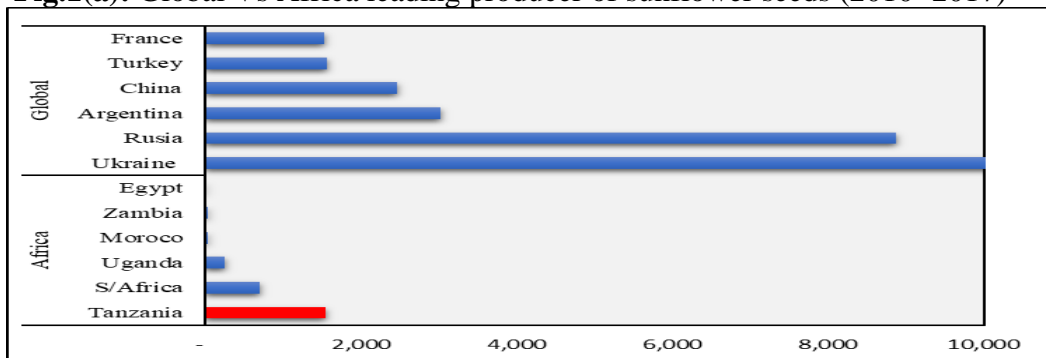
2. Global Outlook of Sunflower production and productivity

Globally the sunflower seed production has depicted increasing trend in the last ten years with highest production of 47.8 million tones recorded in 2017. In the last eight years (2010 -2017) Ukraine was recorded a global highest producer with an average of annual production of 10.3 million tones, during the same period, Tanzania came ahead of other African countries with average of annual production of 1.53million tones. (Fig. 1a).

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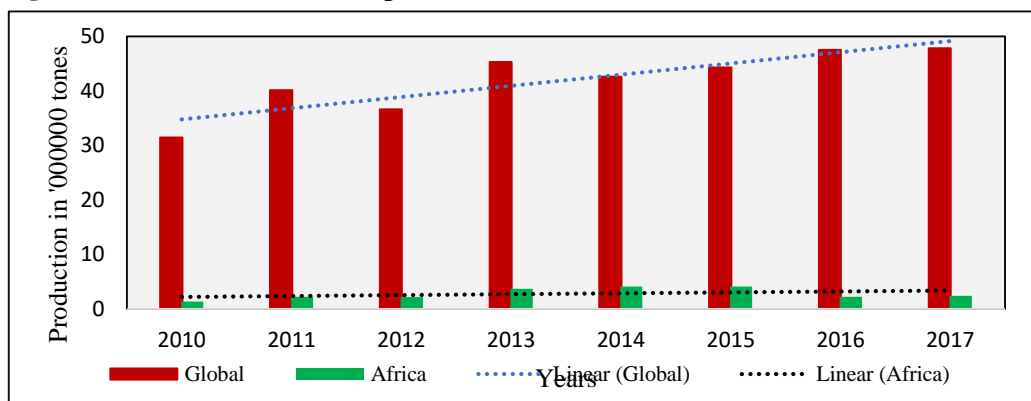
Fig.1(a): Global Vs Africa leading producer of sunflower seeds (2010 -2017)



Source: FAO STAT(2019)

Despite of endowed with good and supportive weather for sunflower production, Africa is contributing less than 10% of global production with declining trend over time. (Fig 1b). On average the yield per ha for best practice country is above 20,000hg/ha. According to FAOSTAT (2017) China recorded the highest productivity of 28,515hg/ha followed by France and Ukraine with 27,598 hg/ha and 20,188hg/ha respectively.

Fig.1(b): Trend of Sunflower production Global Vs Africa (2010 -2017)



3. Sunflower Industry in Tanzania

The sunflower seed industry in Tanzania is characterized with smallholder farmers operating in a low and medium scale. It is the crop which is considered as the source of income for some of smallholder households as it provides employment at the SME level through pressing of sunflower oilseed and sells of by products for animal feed. Over 50% of crop grown countrywide mainly comes from four regions of Dodoma, Kilimanjaro, Manyara and Singida. Lack of irrigation in the country makes the crop heavily dependent of rain fed with little use of fertilizers and improved seeds which results into low little productivity. Comparatively, China is leading globally with the

highest productivity of (28,515hg/ha), while Tanzania recorded yield of 10,449 hg/ha (FAOSTAT,2017). This yield is equivalent of to 37% of what China is producing per ha.

The interesting question to ask ourselves is that; why China has managed to reach that level of productivity that we have not? and what specific factors that contributed to that yield that lacks within our country. Empirical studies indicate that improving sunflower sector would help immerse reduction of income poverty for many small-scale farmers.

According to Dalberg (2017), the growth rate of national edible oils consumption is projected at 7%, and is mostly attributed to a growing population, along with increased incomes and consumer preferences. Nonetheless, Tanzania's total edible oils consumption was estimated at 570,000 MT in 2016; of which 64% is palm, 30% sunflower, and 2% cottonseed. In the same year, total domestic production of edible oils was estimated at 210,000MT which indicates a deficit of 360,000MT that has to be imported. Of total domestic production, sunflower accounts for 83%, cottonseed 5%, and palm 2%. All other edible oils together constitute 10% of national production.

The statistics indicates that palm oil is consumed at the highest rate (64%) as compared to sunflower oil (30%), the large part of domestic palm consumption is imported implying high spend of forex for importation due to the fact that palm oil is the cheapest and most available edible oil though its domestic production is less than 2% of the total edible oils production. The higher forex spending to cover a deficit of 360,000MT can be reduced significantly through increase of domestic production of sunflower seeds. This increment will have multiplier effect not only on increase of edible oil but will create employment to different segment of population and contribute in reduction of income poverty.

4. Constraints facing Sunflower Subsector in Tanzania

Despite the conducive environment for sunflower seeds development, the production part of value chain is faced by low productivity due to low use of fertilizers and use of low yielding seeds, low acreage because of lower priority assigned, low investment in the sector as sunflower is done traditionally rather than commercial because of low

motivation by farmers, poor extension services, unreliable markets of sunflower seeds, and even where the market exists, it offers unprofitable farmgate price. The yield of edible oil pressed from the seeds is still low because of poor application of GAP, use of unimproved seed varieties with high yield and high oil contents. The constraints that are directly associated with processors includes mismatch between capacity and supply of sunflower seeds, electricity supply especially in rural area, poor quality of oil refined due to use of outdated technology and poor packaging. These factors threaten small and medium scale processors who are unable to compete with large processors in the industry

5. Conclusion and Recommendations

Country's population which increases exponentially implies increase in demand for edible oil. However, the current production of all oil seeds together is not enough to fulfil the ever-increasing domestic demand. Tanzania stands a good chance of increasing production of sunflower oil for domestic consumption and exports the surplus to the rest of the world. The excess amount of forex that are used to pay for imports of crude oil and existing deficit between domestic demand and what market can supply calls upon a joint effort to address challenges associated with sunflower subsector. The short run recommendations arising from this policy brief is that:

- a) The Central Government should empower Tanzania Agricultural Research Institute (TARI) to develop seeds varieties that are pest resistant, with high yield and high oil content;
- b) The Local Government Authority in collaboration with non- governmental organizations and private sector should strengthen provision of extension services on GAP to enable transformation of farmers from traditional to commercial way of farming in order to improve production and productivity;
- c) The state-owned Tanzania Agricultural Development Bank to catalyse provision of credit facility that will unlock constraint in a value chain of focus whether production, farm inputs, mechanization or processing. TADB should take a leading role by encouraging other financial institutions to increase its loan portfolio to agricultural sector; and
- d) Government in collaboration with private sector to organize farmers into cooperative groups to enable them to access joint services aiming to increase production that will eliminate existing mismatch between supply of sunflower

seeds and production capacity of pressing/oil refinery machine which in turn will increase farmers income for poverty alleviation.

The long run recommendation is that; the country should advocate establishment of *Tanzania Edible Oil Development Board* that will coordinate, oversee and regulate all operations of the edible oil subsector to ensure country's self-sustained with edible oil and significant contribution of economic growth of the country.