GLOBAL MARKET OUTLOOK OF SESAME SEEDS AND COMPETITIVE OPPORTUNITY FOR TANZANIA

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Key Message

- The presence of polyunsaturated fatty acids in sesame oil makes it an important oilseed crops due to its excellent health effects;
- Productivity in African countries is at an average of 300 -500kg/ha while China is leading globally with productivity of 1,312Kg/ha;
- Globally India is considered as main exporter while China is a main consumer;
- Lack of access to finance, weak farmers organizations, poor use of GAP and use of improved seeds are among challenges that hamper prosperity of sesame subsector in Tanzania.
- To this end strengthening of farmers associations, training them on GAP, improving capacity of research institutions to develop high yield seeds and access to financial services are considered as short-term intervention to liberalize sesame subsector. The long-term intervention suggested is to establish Tanzania Edible Oil Development Board (TEODB) that will be held responsible for development of edible oil subsector.

1. Introduction

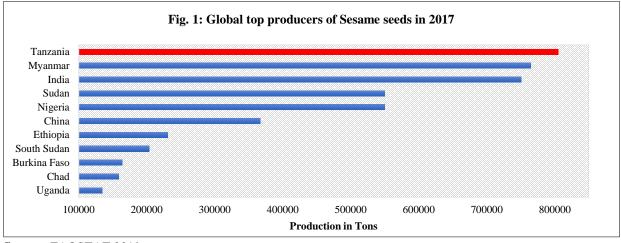
The world of sesame seed market is a billion-dollar industry that supports the livelihoods of millions of farmers throughout the world. In different countries, sesame is used in wide range of applications; the most important one is edible oil. As the world population increases, demand for high-quality edible oils continues to grow. The presence of polyunsaturated fatty acids in sesame oil makes sesame an important oilseed crops due to its excellent health effects. The oil has antioxidant properties formed during roasting which increases its storage quality by preventing oxidative decay. Sesame oil is especially important in the Far Eastern cuisine, mainly Japan and China. Sesame is also used for confectionery, biscuit and bakery industry. In Middle East sesame is used in Tahini industry (a traditional Middle Eastern paste) that is made from hulled sesame seed and is rich in protein. It is further used in pharmaceutical ingredients.

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2. Global Production and Marketing

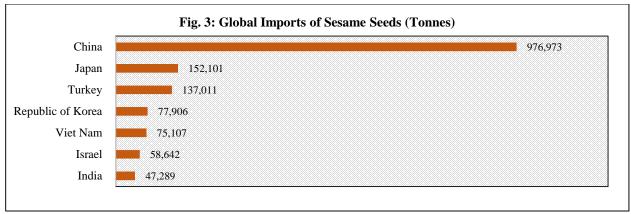
In 2017 global production of sesame was recorded at 4.6 million tonnes which is equivalent to 53 percent increase of production from what was recorded in 2012. The average productivity in most African countries ranges from 300 to 500kg/ha; but under good management and applications of good agricultural practice it reaches as high as 3,000kg/ha. In global perspective, the leading producer of sesame seeds has been varying from country to country. In 2017, Tanzania was recorded as leading producer followed by Myanmar, India, Sudan, Nigeria and China as five top producers of sesame seed in the world (*Figure 1*).



Source: FAOSTAT 2019

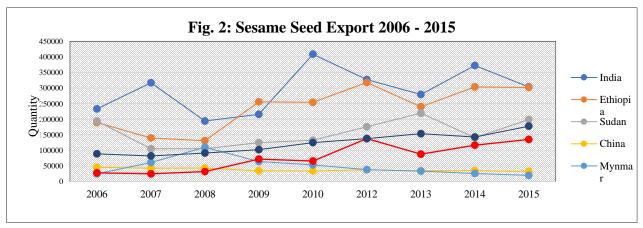
Production of sesame seeds is carried out by smallholder farmers who operates in a small scale characterized with low use of fertilizers and other agricultural inputs, poor use of mechanization, and low productivity. In Ethiopia for example, smallholder's sesame seeds producers depend on intermediaries, due to the small quantities to be sold and lack of efficient market information system. Further to that, there is weak farmers organizations which has no control of the price, instead prices are based on forces of demand and supply, and do not reflect current international market prices.

Availability of high yielding seeds is important for prospects of the crops. Seeds variates that are recognized for its high yield includes *Humera*, *Gondor* and *Wollega* type which are well known in the world markets. On one hand, the *Humera* and *Metema* sesame seeds are suitable for bakery and confectionary purposes due to their white color, sweet taste and aroma. The high oil content of the Wollega sesame gives it a major competitive advantage for edible oil production.



Source: FAOSTAT 2019

For the past ten years, India was recorded as leading global exporter of sesame seeds followed by Ethiopia and Sudan (*Figure 2*). The top five importing countries as recorded in 2016 were China, Japan, Turkey Republic of Korea and Vietnam (*Figure 3*).



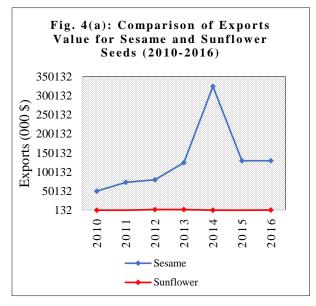
Source: FAOSTAT, 2019

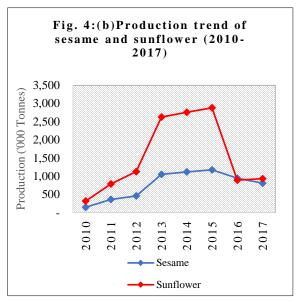
3. Competitive Opportunity for Tanzania in Sesame Subsector

In Tanzania Sesame is one of crops whose importance and benefits has neither not tapped adequately nor reached a wider community. In 2016 Tanzania's total edible oils consumption was estimated at 570,000 metric ton, while total domestic production was estimated at 210,000 metric ton with sunflower production accounting for 83%, cottonseed 5%, and palm 2%. All other edible oils together constituted 10% of national production. While the country is struggling to increase domestic production of edible oil in order to cover existing deficit of 360,000 metric ton; production of sesame seeds has given little attention as compared with other mentioned seeds whose production is promoted widely. Nonetheless the existing edible oil industries is concentrating on refinery of the mentioned oil seeds with little attention on sesame seeds.

Production of sesame seeds which is practiced by smallholder farmers; is characterized with little uses of agricultural practices which reduces productivity. The statistics recorded in 2013 indicates that the average productivity of sesame seeds was around 667Kg/ha which is twice as less than China whose reproductivity was around 1,312Kg/ha.

In comparison with sunflower seeds which account for 83% of all edible oil in the country, its production has constantly increasing with insignificant contribution of forex through exportation. Unlike sunflower seeds which is largely processed domestically; large quantity of sesame seeds is exported to the rest of world and generate significant amount of forex [Figure 4 (a) and (b)]





Source: FAOSTAT, 2019

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4. Conclusion and Recommendations

Tanzania has a huge untapped potential of increasing production and productivity of sesame seeds taking into account availability of favorable and suitable land for production. Despite of having a renowned research institutions (Naliendele) for development of high yield seeds, productivity of sesame seeds has continuously remained low compared to best practice. To this end, Tanzania is in a better position to tap the opportunity of existing global market by increasing domestic production and subsequently increase foreign currency. There are several possibilities of unlocking the prominent challenges for sesame production which includes poor access of finance to sesame smallholder farmers, poor organization of farmers association which leads to distortion of farmgate price as a results of disjoint bargaining power. The short-term recommendations arise from this policy is that:

- Government to improve capacity of research institutions in development and multiplication of high yield resistant seeds and distribute the same to farmers;
- Ministry of Agriculture in collaboration with Local Government Authority and private sectors to impart knowledge to farmers on good agricultural practices;
- Local Government Authority should facilitate establishment/strengthening of farmers associations to access joint services;
- State owned development bank in collaboration with other financial institutions facilitate provision of credit facilities to unlock existing financing gap along value chain.

The long run recommendation is that; as for other strategic crops, the country should advocate establishment of *Tanzania Edible Oil Development Board* that will coordinate, oversee and regulate all operations of the subsector so as to ensure the country is self-sustained with edible oil and that the subsector contributes to economic growth of the country