

An Economic Overview of Ginger Production in Ethiopia

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Abstract: *Agriculture is the backbone of the Ethiopian economy. Contributing 42% share in the gross domestic product. 95% vegetables, horticulture products and commercial produced by the smallholder. The history of spices in Ethiopia is an ancient one and spices remain as basic food items of the Ethiopian people. Ethiopia has a world share of 0.4%. Ethiopia is the homeland for many spices. Ginger is one commonly used ingredient in Ethiopian recipe. Ginger plays an important role in contributing to local economy. Actually it has Export potential, Value added to economic growth, it creates lot Job opportunity locally. With a view, this article will provide the overview of ginger production in Ethiopia.*

Keywords: Ginger, Economy and Production

1. Introduction

Ethiopia is located in the horn of Africa (Enc, 2014) and it has approximately 93 Million population (CIA, 2014) recorded second highest in African continent next to Nigeria (World Population, 2014). Ethiopia is one of the fast developing countries in Africa. The small and medium-sized production and distribution is generally considered the engine of economic growth, as well as a means for poverty reduction by virtue of their numbers and their significant economic and social contributions.

Ginger plays a significant role. Ethiopian agriculture contributing 42% share in the gross domestic product (EIG, 2012), Ginger is an important commercial crop. A large majority of 95% vegetables,

Horticulture products and commercial crops like ginger, produced in the country come from the smallholder. Ginger is one commonly used ingredient in Ethiopian recipe.

Agriculture is the backbone of the Ethiopian economy. It provides employment opportunities. The production of these commodities should be encouraged in labor abundant countries like Ethiopia. Ginger plays an important role in contributing to local economy. Actually it has Export potential, Value added to economic growth, it creates lot Job opportunity locally, Linkages with other sectors, Supply capacity Impact on gender empowerment, Accessibility and Government priority on small farmers is the benefit in Ethiopia

2. History of Spices

The history of spices in Ethiopia is an ancient one and spices remain as basic food items of the Ethiopian people. Ethiopia is the homeland for many spices, for example Korarima, long pepper, black cumin, Bishops weed and coriander. The average land covering by spices is approximately 222,700 ha and the production 244,000 ton/annum. At the moment, there are two spice extraction plants in Ethiopia, one public and the other under private ownership. The public spice

extraction plant, the Ethiopian Spice Extraction Factory, has a processing capacity of 180 tons per year. The plant is capable of processing ginger from locally grown ginger root, capsium oleoresin from red pepper, and turmeric. Over 85% of its business is for paprika. The privately owned spice extraction plant in Ethiopia is Kassk Spices and Herbs Extraction PLC. This factory was built in Addis Ababa in 1997 and has a processing capacity of 120 tons per annum. All of the extracted spice is exported overseas for food coloring, flavoring, etc. to Europe mainly Germany, Spain and Italy. Spices cultivation is scattered throughout Ethiopia and is carried out by smallholder farmers. In most cases, traders act as middlemen between farmers and spice extraction factories hiring trucks to collect spices from farm gate or intermediate markets.

3. History of Ginger

The University of Maryland Medical Center writes that ginger has been used in China for over 2,000 years to help digestion and treat diarrhea, nausea and stomach upsets. Ginger has a long history of medicinal use in the preparation of many Ayurvedic formulations, the traditional medical discipline in India, Nepal, America and Europe. In Ethiopia, Ginger locally called Gingibaar. Tea brewed from ginger is a common folk remedy for colds in Ethiopia. This often called Kasherchai. Ginger ale and ginger beer are also drunk as stomach settlers in countries where the beverages are made. Ginger has pungent taste and interesting aroma. It been used since the ancient times as a spice. In addition, ginger has been used historically for its medicinal value in a wide variety of diseases, especially in gastrointestinal disorders, such as constipation, diarrhea, anorexia, colic, dyspepsia, nausea, vomiting, and motion sickness and remains an important cooking spice around the world.

Ginger, the underground stem, or rhizome, of the plant *Zingiber officinale* Roscoe, is a medicinal plant that has been widely used in almost all countries in the world. Ginger has herbal medicine value. The main pharmacological characteristics of ginger and compounds include immuno-modulatory, anti-tumorigenic, anti-inflammatory, anti-

apoptotic, anti-hyperglycemic, anti-lipidemic and anti-emetic actions. Ginger is also a strong anti-oxidant and may either mitigate or prevent generation of free radicals.

4. Global Scenario

The history shows, India, China, Indonesia, Nigeria, the Philippines and Thailand are currently the main producers. India alone produced 232,510 t in 1996-97 on 70,910 hectares, and exported 28,321 tons in 1997. However, Indian exports decreased to 6,580 t in 2000-2001, and 8,000 t in 2001-2002. The International Trade Centre 23 data show that China and Thailand were the major exporting countries in 1998-2000. China seems to be the preferred provider for Korea, while Pakistan buys most of its ginger from India. Indonesia also provides ginger to Malaysia, and Hong Kong before it became part the People's Republic of China. Brazil is the third exporter of dried ginger. The three leading exporting countries in 2000 were China, Thailand, and Brazil.

Table 1: Top Five Ginger Producing Countries

Sl No	Country	Ginger Production 2011 (metric tons)	Percentage to Total
1	India	702,000 metric tons	34.6%
2	China	388,886 metric tons	19.1%
3	Nepal	216,289 metric tons	10.6%
4	Nigeria	160,000 metric tons	7.8%
5	Thailand	152,630 metric tons	7.5%

Source: FAOSTAT Data, 2014

Ginger has a long history of use in South Asia both in dried and fresh form. The Hindu epic 'Mahabharata' describes a meal where meat was stewed with ginger and other spices. In the 'Manassllasa' literature written is the largest ginger producing state, accounting for about 33 per cent of the total production in India.

5. Production of Ginger in Ethiopia

The history of spices in Ethiopia is an ancient one and spices remain as basic food items of the Ethiopian people. Ethiopia has a world share of **0.4%**.(Factfish). Ethiopia is the homeland for many spices, for example Korarima, long pepper, black cumin, Bishops weed and coriander. The average land covering by spices is approximately 222,700 ha and the production 244,000 ton/annum. At the moment, there are two spice extraction plants in Ethiopia, one public and the other under private ownership. The public spice extraction plant, the Ethiopian Spice Extraction Factory, has a processing capacity of 180 tons per year. The plant is capable of processing ginger from locally grown ginger root, capsium oleoresin from red pepper, and turmeric. Over 85% of its business is for paprika. The privately owned spice extraction plant in Ethiopia is Kassk Spices and Herbs Extraction PLC. This factory was built in Addis Ababa in 1997 and has a processing capacity of 120 tons per annum. All of the extracted spice is exported overseas for food coloring, flavoring, etc. to Europe mainly Germany, Spain and Italy.

Ginger cultivation in Ethiopia started during 13th century. Arabs introduced it from India. Ethiopia is the gate way for

many Asian and many East European Countries. Yellow and brown areas of Ethiopia are most suitable. Yellow area is Low rainfall or irregular climate and Brown area is Large grazing areas with irregular climate. Ginger cultivated in many places in Ethiopia. The Specific area in Ethiopia has identified as Bahir Dar, Dejen, Debere Markos, Kola Dega Damot, Metekel and Agew Mider, Gamo, Galeb and Hamer Bako, Gofa and Kulo Konta, Wabe, Dolo and Genale, Sidama and Arero Gimbi, Nekemte, Horo Guduru and Arjo and All regions of Ilubabuor and Jima Zone.

During 2011, Endrias Geta of Haramaya University and Asfaw Kifle of AARC, SSSNRP conducted a survey on Production, Processing and Marketing of Ginger in Southern Ethiopia, concluded that, Ginger has been produced as an important commercial horticultural crop in southern Ethiopia. Farmers produce different varieties and apply traditional management practices. External support in promoting improved varieties and management practices is almost nonexistent. Ginger product markets are very volatile and price fluctuations create a disincentive for farmers in the production of the crop. Thus, researchers have to assist farmers in indentifying improved varieties with desirable market traits, appropriate agronomic and post-harvest management practices including drying methods, sorting and grading techniques, as well as processing technologies. Extension workers and other development practitioners have join hands with the farmers in addressing marketing problems such as: easing barriers to entry into markets by organizing ginger producers into producers and marketing cooperatives.

6. Demography

Ethiopia is one of the largest in area coverage and population holdings 88 million. Ethiopia experienced wide altitudinal variations from 1000 to 3000m. There is also wide climatic variations like high rain fall areas in the central, western, southern and south western parts of the country, though there is only two distinct seasons dry and rainy seasons which is common to tropical counters of the of the world. To the contrary, there are dry or arid areas in the northern, north eastern and eastern parts of the country.

7. Feasibility for production

Ethiopia has an immense potential to develop intensive horticulture on Small-scale as well as on commercial scale. Girma Abera Jibat of Oromiya Agricultural Research Institute reported some of the favorable factors that contribute to overall investments in Ethiopia. They are like, proximity to lucrative markets, agro-climatic suitability and rich water resources for diversified irrigated agriculture, Growth/rise of demand for horticultural crops, particularly in urban areas, diversified agro-climatic conditions that facilitate the diversification of The crops, the high productivity of horticultural crops as compared to cereals, export possibilities of these crops are very encouraging and if fully exploited, these crops are highly remunerative and would be undoubtedly help to improve the standard of living of small-scale resources poor farmers. Despite an enormous potential and a favorable environmental and Socio-economic advantage, horticulture is relatively under developed. The

margin of the current achievements, in terms of area and output is a small development compared to the possible level that can be attained.

8. Opportunity in Ethiopia

The Government of Ethiopia is promoting agro-industrial projects and has declared spices as focus area for development. As plant species spices have a wide possibility of being cultivated in different agro ecological zones of the country. Financial services by banks and micro-credit institutions and transportation and related logistic infrastructure are necessary. The spice subsector is amongst the important crops that fit within the strategy of commercialization of agriculture. Spice crops already widely traded internationally have a high potential for expansion and diversification of export earnings of Ethiopia. Support of policy incentives that enable exporters to implement modern processing techniques and machinery starting from Pre Harvesting to Post Harvest processing. An increasing number of buyers/Traders/Oleoresin Extraction Companies, Pharmaceutical Manufacturers, choose to buy spices directly from Ethiopia. The Ethiopian Institute of Agriculture Research (EIAR) is conducting research pertinent to the spices subsector in some of its specialized and semi specialized research centers such as: Tepi (which is major spices research centre), Araca (primarily concerned with ginger), Jimma (primarily concerned in coffee but also some spices) & Bako (in essential oils). (NABC study)

9. Challenges in Ethiopia

Netherlands-African Business Council identified many challenges. The Challenge of cultivation practice and technique are highly based on knowledge that passed from generation to generation, and the production level is low. In need of an efficient spice value chain service delivery mechanism. Innovate technologies (farm management, drying, storage) and spice agricultural research needed. Post-harvest handling of the product is inadequate: poor and re-used packaging, storage in unclean sheds and next to e.g. chemicals, much up- and offloading, bumpy transport. Irregular supply and variable quality of spices produced from forest and agricultural landscape. Weak role of private commercial investors in spices production. Weak business linkage among stakeholders in the chain including farmers, traders, processors and meso-level support institutions and macro level regulatory and enforcement institutions. Increasing role and importance of unlicensed brokers in the trading of spices in the market. Weak marketing system not stimulating production and marketing based on enforceable quality standards. Lack of value addition in terms of major agro processing activities in spices. Price volatility due to changes in demand and supply in local and overseas markets. Lack of organized market information service to the different actors in the spices farm-to-market chain. Challenges to channel the spices products to the international market through market promotion and creation of market links.

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