

The Review Article: Ethiopian Coffee Production Trend Analysis: Comparison with Major Coffee Producing Countries of The World

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Abstract:

Ethiopia is believed to be the birth place of Arabica coffee and coffee takes a lion share in Ethiopian economy and socio-economic development since it is a prime export commodity in the country. Cognizant of its importance, Ethiopian government made key development plan and strategies to increase coffee production and productivity. As a result, many efforts were made in coffee research and extension in the last five decades; but so far Ethiopia has not attained to fully capitalize its potential in the coffee sector and there is no information on change over years of production and productivity of coffee. FAOSTAT and International Coffee Organization data were used and analyzed by descriptive statistics. Descriptive results depicted that even if coffee productivity is not significantly increased in the last decades, coffee production increased from around 180,000 metric ton in 1993 to 487,808.44 metric ton in 2021. However, still Ethiopia left behind in coffee production as compared to the major world coffee producing countries and its contribution to global coffee production is less than 5% over several years. To change and improve the historical growth trend of coffee production and productivity, it is the responsibility of all stakeholders to support coffee producers to use full package of recommended production technologies and to stump old coffee trees and work on soil and water conservation practices.

Keywords: Coffee, Productivity, production, trend analysis,

1. Introduction

Arabica coffee is origin to Ethiopia and it plays a pivotal role in the socio-economic development of Ethiopia and the rest of the world where coffee is produced and imported respectively. In Ethiopia, Coffee accounts for 2-3% of the gross domestic products (GDP), 29% of total national export (average of the last 10 years) and about 37% of the total agricultural export revenue. Furthermore, a total of 4.7 million small-holders directly involved in coffee production, and about 25 million people directly or indirectly depend on the sub-sector for their livelihoods. Beyond deep-rooted attachment of coffee and the Ethiopian community and its multitude importance to Ethiopia and the world at large, Ethiopia is the world's oldest exporter of coffee that predates 1830[1].

The main coffee producing regional states in Ethiopia are Oromia and SNNP contributing 69% and 29% respectively to national production, and the contribution of other regions is 1% and together they contribute to Ethiopian coffee production[2]. Ethiopian coffee has unique flavors that make it competent in international market and highly demanded in developed countries. Accordingly, they are classified as Spicy for Sidama coffee, Winy for Limu coffee, Fruity for Nekemte Coffee, Floral for Yirgachefe Coffee and Mocha for Harar Coffee[3].

Ethiopian coffee is characterized by different production system such as forest coffee (10%), semi forest coffee (35%), plantation for about 15% (5% government, 10% private), garden coffee (35%) and 5% others [4]. However, recently, some authors are arguing that there are more than the specified coffee production systems in Ethiopia. There are about 35 pure lines and 9 hybrids coffee varieties with respective recommended management practices in Ethiopia. In the country, 95% of coffee production is grown by smallholder farmers and it is inter-cropped with cereals, fruits, ensets and vegetables, mainly in the southern and eastern regions. Coffee in other producer countries such as Brazil and Viet Nam, in contrast, is mainly plantation or estate cultivated, with fewer varieties [5]. Ethiopia ranks first in Africa and 5th in the world in coffee production and FAOSTAT data of 2021 indicate that, the total area under cultivation of coffee in Ethiopia is estimated at 685,294 hectares with average productivity of 0.71t/ha, but the country ranked tenth in the world in coffee exports with about 4.45 percent of the global export market share.

Coffee Productivity Trends in Ethiopia and Comparisons with Major Coffee Producing Countries of the World

Over several years, cognizant of its importance, government of Ethiopia had made many efforts to strengthen the coffee sub-sector through establishing organizations responsible for coffee development and research. Besides the efforts made by different development organizations, Coffee Research Station was established which is now called Jimma Agricultural Research Center (JARC), at Jimma in late 1967 to backup coffee development endeavors with technical assistance in Ethiopia [1]. Since then, JARC has made a significant contribution to the growth and development of coffee sector by delivering improved coffee technologies,

knowledge and information to enhance coffee production and productivity in the country. Through the big efforts made about 35 pure lines and 9 hybrids coffee varieties with average productivity potential of 1.1-2.3t/ha and 2-2.6t/ha respectively were developed and available for specific agro-ecology of Ethiopia. Despite big efforts and huge investments made on coffee research and extension, Ethiopian coffee productivity remains low which is on average between the range of 0.5t/ha to 0.7t/ha from the year 1993-2021[6]. However, Ethiopian coffee yield/ha is still better than other African coffee producing countries such as Kenya, Rwanda, and Tanzania, but significantly lower than many Latin American producers.

Figure 1 indicates, in Ethiopia, coffee productivity reflects static growth from 1993-2021 with an average value of 0.7t/ha and an increase in coffee production in the last three decades comes mainly from both area expansion and the good agro-ecology of the country [7]. Low productivity of coffee in Ethiopia is said to be caused by a combination of several factors such as natural calamities such as land degradation, poor soil and water conservation practices, and disease, demographic factors, socio-economic factors, weak extension services, lack of stumping old coffee trees, production system and lack of knowledge on the efficient utilization of available technologies, lack of access to basic agricultural inputs like fertilizer, chemicals such as herbicides and fungicides[8] ;[9]; [10]. However, from 2018 onwards, the government of Ethiopia has started different initiative to increase coffee production and productivity in the country. Stumping old age coffee trees and uprooting and replanting and cluster farming are among some of the recent government initiatives implemented to increase coffee production and productivity in Ethiopia.

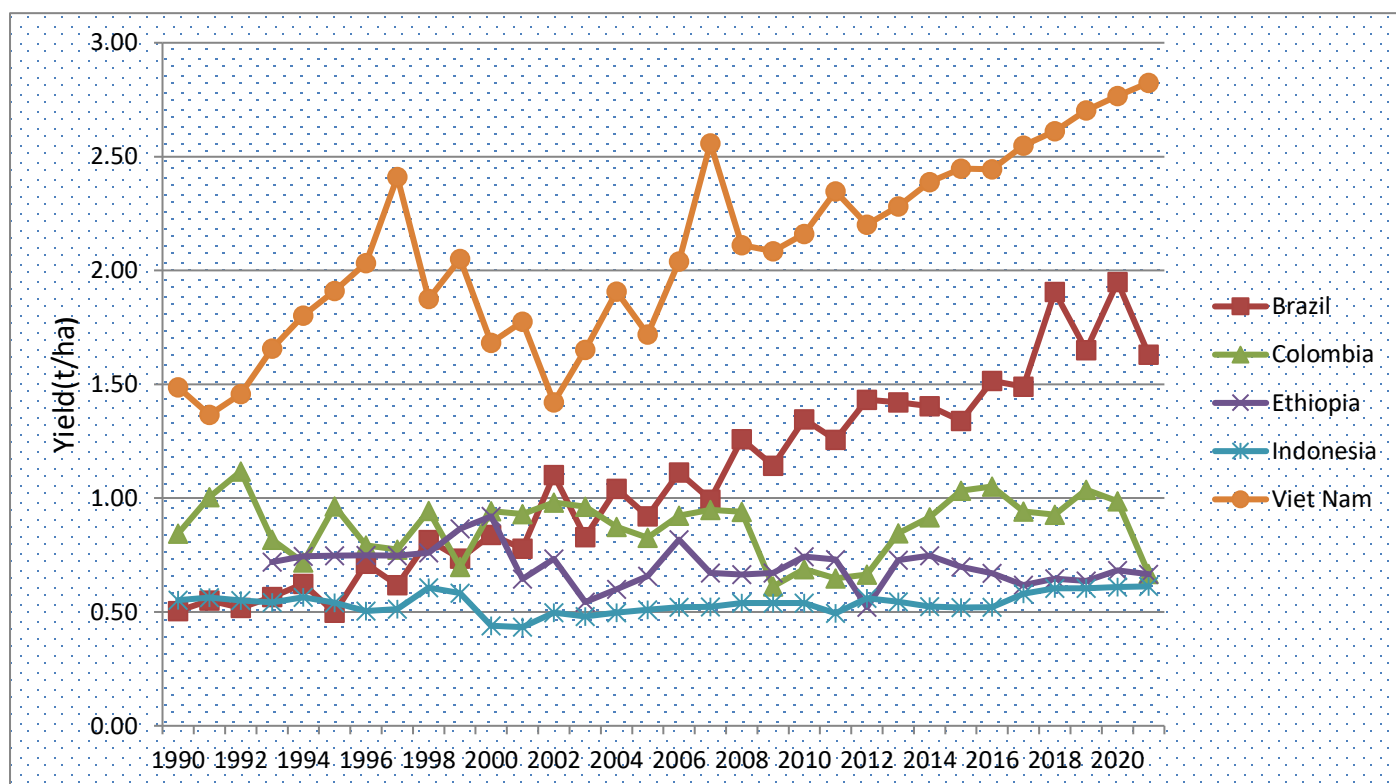


Figure 1: Coffee productivity in Ethiopia and comparison to the rest major world producing countries ((t/ha)

Coffee Production Trends and the Share of Ethiopia in Global Coffee production

In the year of 1990-2019, world coffee production showed a significant increasing trend with remarkable fluctuation and from 1990 to 2019, total coffee production has increased by 176.8% globally from 5.6 million MT to 9.9 million MT. The major reasons responsible for this remarkable global coffee production increase were, almost all of the most important coffee producers (Brazil, Colombia, Indonesia, Ethiopia, etc.) have increased their production. On the other hand, Vietnam as a new world power has appeared in the global map of coffee production increasing its coffee production significantly in the period 1990-2019[6] and nowadays, Vietnam is the second most important coffee producer of the world with 30.5 million bags in 2019.

By the same trend, as indicated in figure 2, in the year of 1993-2021, Ethiopian coffee production showed an increasing trend with fluctuations over the years. In the years specified, total coffee production in the country has increased by 171% that is from 180,000 MT in 1993 to 487,808.44 million MT in 2021[5]. In Ethiopia, even if coffee productivity shows constant growth trends, remarkable increase in coffee production over years comes mainly from both area expansion and the good agro-ecology of the country [6]. From 2010 onwards, there is a significant coffee production growth and the year from 2010-2019 was a period when Agricultural Growth Program (AGP) was implemented in Ethiopia in which coffee sector was supported to increase its production and productivity.

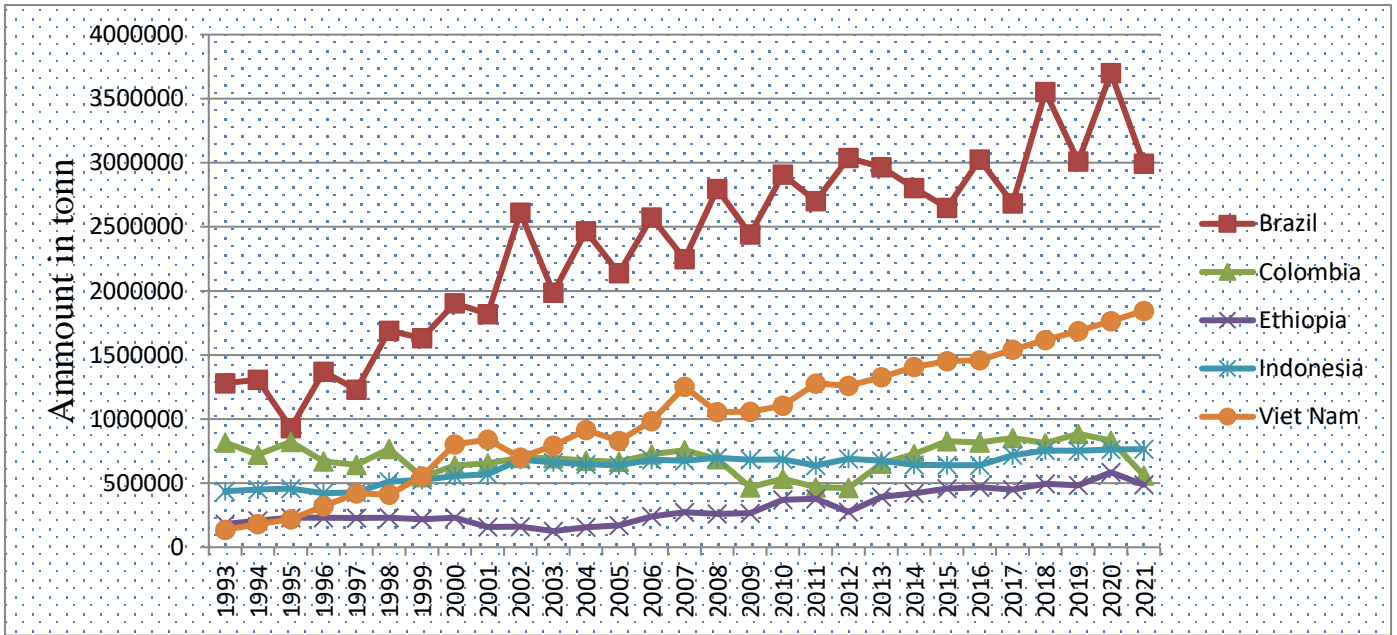


Figure 2: Coffee production in Ethiopia and comparison to the rest major world producing countries (MT)

In line with the remarkable overall growth of global coffee production, the concentration of the major producers has also increased dramatically. As Figure 3 shows, the share of top three producers (in 2019; Brazil, Vietnam and Colombia) was 62.28%, while the share of the Indonesia and Ethiopia was around 13 % and the share of Ethiopia alone was 4.45%. From the years 1993-2021, the share of Ethiopia to world coffee production was increased from 3.12% to 4.45% with 42.6% increment over the years. It should, however, be noted here that the while Ethiopia is the largest coffee producer and exporter in Africa, its contribution to global coffee production is significantly low as compared mainly to Latin American countries. Figure 3 depicted that during 2019, Brazil rank first in coffee export (35.27%) followed by Vietnam (18.47%), Colombia (8.54%), and Indonesia (6.93%) of world coffee production.

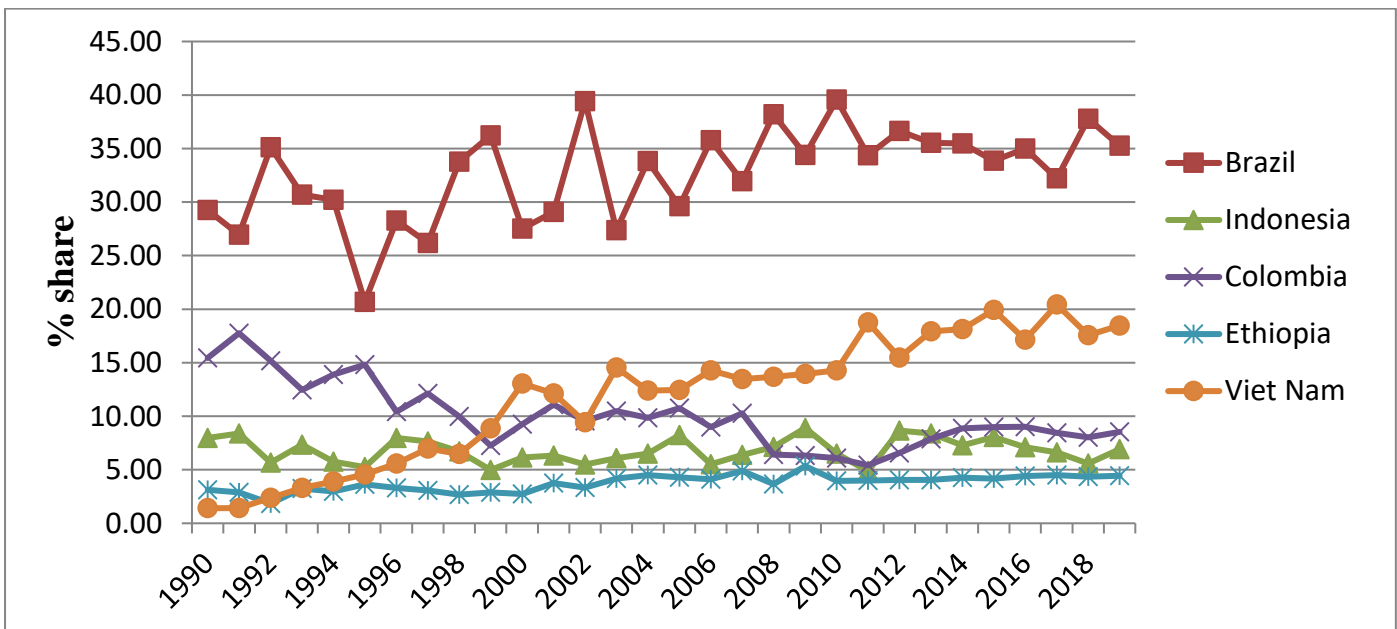


Figure 3: Coffee production shares of top producing countries (1990-2019)

2. Conclusion and Recommendation

In Ethiopia, coffee production is increasing over years and this increasing trend is assumed to be due to area expansion and good agro-ecology of the country. However, despite wide opportunity of coffee production, so far Ethiopia has not attained to fully capitalize its potential in the coffee sector. Trend analysis result of three decades available data depicted that smallholder farmer's coffee productivity in Ethiopia is very low which is on average 0.7t/ha. However, Ethiopian coffee yield/ha is still better than other African coffee producing countries such as Kenya, Rwanda, and Tanzania, but significantly lower than many Latin American producers. Low productivity of coffee in Ethiopia is said to be caused by a combination of several factors: natural calamities such as land degradation, poor soil and water conservation practices, and disease, demographic factors, socio-economic factors, weak

extension services, lack of stumping old coffee trees, production system and lack of knowledge on the efficient utilization of available technologies, lack of access to basic agricultural inputs like fertilizer, chemicals such as herbicides and fungicides. However, from 2018 onwards, the government of Ethiopia has started different initiative to increase coffee production and productivity in the country. Supporting coffee producers to use full package of recommended production technologies and to stump old coffee trees and work on soil and water conservation practices are therefore, the major pillars seeking a due attention to fully exploit potentials of the specific coffee producing regions in Ethiopia.

3. References

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