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**Future coffee farmers – the challenge of
generational change in rural areas in African
countries**

Background

In accordance with Article 34 of the International Coffee Agreement 2007, the International Coffee Organization is required to provide Members with studies and reports on relevant aspects of the coffee sector. This document contains a study on Future coffee farmers – the challenge of generational change in rural areas in african countries.

Action

The Council is requested to take note of this document.

FUTURE COFFEE FARMERS THE CHALLENGE OF GENERATIONAL CHANGE IN RURAL AREAS IN AFRICAN COUNTRIES

I. Introduction

1. While in most coffee-producing countries smallholders are growing old, young people are less and less inclined to follow in their parents' footsteps and engage in coffee farming. However, the rural youth which is often better educated and more entrepreneurial than the parental generation is thus seen as the potential driver of change in the agricultural sector. For example, young people are more likely to adopt technological innovations and implement modern farming techniques which are crucial to increase the productivity in the coffee sector. This is particularly true in view of new challenges faced by the sector such as climate change. Hence, there is concern in the coffee industry that the lack of a new generation of young growers could negatively affect the supply of high quality coffee beans.

2. While there is a growing body of literature on generational change in rural areas, so far there are no specific studies in the coffee sector. The purpose of this study is to review existing evidence and discuss the findings in the context of the coffee sector with a specific focus on selected Sub-Saharan African countries.

3. This study sheds light on current and future economic and social factors which make farming in general as well as coffee production in particular less attractive than alternative income generating activities in rural or urban areas. The importance of young people as agents of change towards a modern agricultural sector is examined. Finally, it examines the necessary steps to improve the attractiveness of coffee farming for young people and what can be learned from other agricultural sectors.

II. The demographic and economic transformation of the Sub-Saharan Africa

4. The African continent is currently undergoing a demographic transformation as population growth rates are among the highest in the world. It is estimated that by 2050, the population will have doubled, reaching 2.5 billion inhabitants, equivalent to 25% of the future world population (UN, 2015). The African countries are not only home to the fastest growing but also to the youngest population with 70% of the inhabitants below the age of 30 (UNICEF, 2008). Since the 1960s there has been a trend towards urbanisation and it is estimated that by 2030 more than two thirds of the population will live in cities and peri-urban areas (UN, 2014).

5. Besides impressive demographic dynamics, over the past decade the African continent has also seen strong economic development. According to World Bank data, between 2005 and 2014 the GDP grew on average by 10.7% per annum, more than the rate during the preceding decade. In the past five years, growth rates were between 5-10% annually in Ethiopia, Tanzania, and Uganda. So far, the economic development has largely taken place without industrialisation seen on other continents. The economy is also characterised by a high degree of informality as 9 out of 10 rural and urban workers engage in informal employment. The informal sector accounts for 55% of the GDP in the countries of Sub-Saharan Africa (African Development Bank, 2013). As a result, the economic growth has not translated into widespread employment. Underemployment or joblessness remain high, especially among the youth (World Bank, 2009). Besides the export of natural resources, the economies still depend to a large degree on agriculture which according to World Bank data remains the single-most important source of income and employs more than 60% of the labour force in countries such as Ethiopia, Tanzania, and Uganda.

6. Agriculture continues to be strategic for the development of economies. With rising income levels, domestic consumption shifts towards high-value agricultural products, providing local producers with new market opportunities (FAO, 2014). At the same time global demand for agricultural output steadily increases. For example, it is expected that if current growth rates continue, by 2025 the demand for coffee could increase by another 35 million bags from currently around 150 million bags. Hence, the agricultural sector provides prospects in the future despite many structural issues which presently significantly constrain the development of the sector.

III. Why young people are less inclined to pursue a future in farming?

7. Despite the opportunities in the agricultural sector the youth is becoming less interested in pursuing a future in farming. Sociological research suggests that in the perception of a large share of rural dwellers in African countries, farming is associated with low economic returns, high labour intensity and overly hard work as a result of still limited mechanisation. Additionally, the transport and communication infrastructure in rural areas is relatively poor compared to urban agglomerations, constraining the social life of young people. Hence, a livelihood based on farming is not in line with the aspirations of young people who on average are better educated than their parents and through the use of media and information technology are more exposed to information on modern urban lifestyles (Anyidoho et al., 2012; Tadele and Ayalew, 2012; White, 2012).

8. In most areas of Sub-Saharan Africa, rural livelihoods are relatively diverse as farming households do not solely depend on agriculture. Non-farm activities provide additional

income which is often instrumental to provide working capital for crop production and livestock farming. Income diversification is also important to manage agricultural risks, e.g. those related to weather shocks. As off-farm employment is often limited in rural areas, (seasonal) migration to urban centres has become increasingly important (Barrett et al. 2001).

9. The drivers behind the migration decision are usually a mixture of lack of opportunities in rural areas (push factors) and labour demand in urban areas (pull factors). Push factors mainly apply to rural poor and are linked to their inability to support the livelihoods through agricultural or other rural activities. While in principle the young generation is well placed with on average higher formal education and more entrepreneurial thinking than their parents, a number of constraints remain as the youth is often disproportionately affected by limited access to finance and access to land. Specifically, the financial literacy of young people is often lower compared to the older generation (Xu and Zia, 2012). Moreover, in areas where arable land is already occupied by growers (i.e. no additional land can be cultivated), parents have become the main source of farmland, as it can be observed for example in parts of Ethiopia. Against the background of high population growth rates and small landholdings of the parental generation, the land which can be obtained via inheritance or gift is often too small to secure a livelihood for the rural youth, ultimately triggering a migration (Bezu and Holden, 2014).

10. Pull factors, in contrast, apply to those young people from well-endowed or land-rich households who are better educated and aspire to access salaried employment with higher economic returns (Bezu and Holden, 2014). The interplay of push and pull factors have made rural-urban migration an essential part of the livelihood strategies of young rural dwellers (World Bank, 2012).

11. When young people leave the villages and move to cities, the average age of the remaining rural population increases. Data from the World Bank which has recently become available for three coffee-producing countries in East-Africa – Ethiopia, Tanzania, and Uganda – reveals that on average household heads in rural areas tend to be older than their peers in urban areas (Table 1). The dataset, which is based on a representative sample of the population in each of the three countries also allows to identify coffee farmers. Hence, it is also examined whether coffee farmers are structurally different from other growers with respect to their age. The analysis shows a mixed picture: the heads of coffee growing households in Tanzania and Uganda are on average 5-6 years older than those of households who do not produce coffee while no difference could be found in Ethiopia. Based on this empirical evidence it is cautiously concluded that the coffee sector faces a more pronounced phenomenon of ageing farmers than other agricultural sub-sectors.

Table1: Average age of rural and urban household heads in three African countries

Country	Urban		Rural (non-coffee households)		Rural (coffee households)	
	n	Age	n	Age	n	Age
Ethiopia	691	44.05	2,102	46.42 ^a	923	46.68 ^a
Tanzania	1,786	42.34	2,988	46.61 ^a	230	51.29 ^{ab}
Uganda	549	44.98	1,751	45.05	496	51.09 ^b

^a Indicates a statistically significant difference between the urban population and the reference groups (at 95% confidence level).

^b Indicates a statistically significant difference between coffee-producing and other rural households (at 95% confidence level).

Note: The analysis is based on World Bank LSMS-ISA data: 2010-11 wave for Ethiopia; 2010-11 wave for Uganda; 2011-12 wave for Tanzania.

12. While many studies point towards increasing disinterest in farming among the rural youth (e.g. White, 2012), some studies also indicate that the perception of agriculture improves in certain countries. For example, Tadele and Ayalew (2012) find that the farming sector in Ethiopia is undergoing change and modernisation leading to higher productivity and increased standard of living of rural households. This development also translates into improved perceptions regarding the desirability of farming. This finding is consistent with the view that the economic returns of agriculture and coffee farming are positively correlated with the social status and thus desirability of farming as a livelihood.

IV. Implications of an ageing population of growers for coffee production and the value of young people in the coffee sector

13. In view of the low economic returns and social status of farming, it is not surprising that the rural youth explores alternative livelihood options. However, there can be negative implications for the development of the agricultural sub-sectors including coffee, if young people are uninterested in (coffee) farming and a future in rural areas.

14. Young people act as important agents of change. There is a well-established body of literature pointing at the higher propensity of young people to adopt technical innovations and implement new production techniques. This is partly because young growers are on average less risk averse than older farmers. Young people are also able to amortise the investment costs as well as the costs of learning over a longer time span which is particularly relevant for tree crops such as coffee (Wakeyo and Gardebreek, 2013; Bravo-Monroy et al., 2016).

15. Consequently, when the youth is missing as catalyst of change, innovations find their way into the sector more slowly. Delayed adoption of new technologies results in economic inefficiency. Compared to a scenario where innovations are disseminated quickly, delayed adoption would result in forgone productivity growth across the sector. These dynamics do not only apply to coffee farming but are also experienced in other crops, e.g. in the cocoa sectors of Cameroon and Ghana (Anyidoho et al., 2012; Reuters, 2014). Less productive farms are also detrimental to a broader economic development in rural areas, especially in view of the strategic importance of the agricultural sector.

16. Against the backdrop of new challenges arising, the adverse effect of limited adoption of new technologies can be exacerbated. The ability to innovate is increasingly important as the impact of climate change becomes more visible posing a severe threat to coffee production. Studies show that rising temperatures, higher pest pressure and more frequent weather shocks require farm-level responses. Growers need to adapt to the changing environment by adopting new technologies including new and more resistant varieties as well as advanced crop management practices. The likelihood of adoption is higher for better educated young farmers (Zuluaga et al. 2015).

V. How to respond to the challenge of generational change in rural areas and increasingly engage the youth in the coffee sector

17. The question of generational change applies to most agricultural sub-sectors in a similar way. The key factor to involve the youth in the agricultural sector in general and the coffee sector in particular is to increase its attractiveness as a livelihood strategy. The realised income levels need to enable the young farmers to invest in their own future and that of their children. If this can be ensured, engaging in agriculture will become a viable option for young urban dwellers.

18. To this end, the relative economic viability of growing coffee compared to other agricultural crops or non-agricultural income generating activities needs to be increased. A more favourable business environment in rural areas needs to be created by addressing long-standing constraints to farming. At the same time where necessary specific attention needs to be given to factors which disproportionally affect young people.

19. Specifically, rural transport and communication infrastructure needs to be upgraded in order to ease the access to markets and information thus directly benefiting smallholders. Also public funding of agricultural research and development, for example of coffee varieties which are better adapted to the impact of climate change, should be reviewed, especially in view of the high economic returns of 40-60% (Alston et al., 2000). Institutions which are often weak in rural areas need to be strengthened in order to increase market efficiency (Saenger et al. 2014).

20. Additionally, it is required to improve the basic education through better formal schooling in rural areas which also emphasises the value of agriculture. The level of skills on farms need to be enhanced through provision of effective extension services, facilitating the dissemination of enhanced production methods.

21. Moreover, access to finance needs to be improved as the youth remains underbanked (Xu and Zia, 2012). Specific programmes which are designed to improve the financial literacy among young people are an important step as modernisation of farms requires investments. For coffee as a tree crop with long investment cycles, it is necessary to provide farmers with tools to incur the upfront costs and with strategies to mitigate price risks.

22. Finally, access to land for young people should be enhanced by facilitating farm succession and creating efficient rental markets. Examples from Colombia show that in absence of effective social policies, private initiatives can play a role in strengthening older farmers' saving activities and allow for a timely retirement and succession of the younger generation (The Guardian, 2014).

VI. Conclusion

23. While farming remains strategic for most countries, there are a number of constraints which negatively affect productivity levels and thus the profitability. The resulting low and volatile farm income can translate in a low social status of agriculture, especially in the eyes of the better educated and more entrepreneurially orientated youth.

24. Against this backdrop, it is not surprising that farming as a livelihood option is becoming less attractive for young rural dwellers. The lack of young people taking an interest in agriculture can have a negative impact on the sector. The youth is an important agent of change in rural areas which could drive modernisation of agriculture. The empirical evidence from three East African countries suggest that urban dwellers on average are younger than their rural peers. Heads of coffee farming households are older on average than the remaining rural population. Hence, while the generation question seems to be a general characteristic of rural areas, the coffee sector seems to be more affected by the issue of ageing farmers. Further research is needed to identify the drivers behind this demographic pattern.

25. The response to the decreasing relative attractiveness of farming as a livelihood choice should comprise a broad approach to improve farm productivity with the aim of increasing the economic return. Through infrastructure investments, building skills, improved access to finance and land an environment needs to be created which is conducive to farming. Some specific measures need to be taken which address the tree crop nature of coffee in order to increase the relative profitability and thus attractiveness of coffee farming compared to other agricultural activities.

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