

**MORE ABOUT PARALLEL SESSION:  
DOUBLE AGRICULTURAL PRODUCTION AND INCOMES IN ETHIOPIA**

**Agricultural transformation in Ethiopia: Trends and Challenges**

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The role of agriculture in economic development has been a point of discussion linked with the debate on alternative development pathways. In this regard, following the fall of Derge regime in 1991, Ethiopia has been following the agricultural development-led industrialization (ADLI) pathway, which emphasizes the importance of agriculture leading to industrial growth. This implies a pathway of ensuring consistent increase of the growth the agriculture sector in absolute terms, which facilitates increased growth other sectors (industry and services) along with expected trend in relative decline of the contribution of agriculture to output and employment. Commencing in 2005, the ADLI strategy has been implemented through consecutive five year plans with the latter two growth and transformation plans (GTP) clearly having looked into options for transformation of the agricultural sector in particular and the economy in general. In addition, a number of efforts have been put in place to support this transformation. In this regard, the establishment of the Ethiopian Agricultural Transformation Agency (ATA) in 2011 as a dedicated body to coordinate and support the implementation of the agricultural transformation agenda set by the government indicates the high level attention given to ensure the transformation of the sector. The transformation agenda is more related with the removal of prioritized bottlenecks while mobilizing the critical stakeholders to implement interventions most effectively. In addition, development partners' supported project based initiatives have played crucial role in support of agricultural transformation. For example, the sesame business network (SBN), a project based intervention dealing with sesame, which is one of the major export crops for Ethiopia. The project has facilitated a gradual shift of the sesame sector to a more commercial sector resulting in improved productivity and quality of sesame. Similarly, the Ethiopia-Netherland trade for Agricultural Growth project (ENTAG) has been dealing with facilitation of the development of effective agricultural markets for improved competitiveness, which is a pre-requisite for transformation.

In this paper, we look into the trends in the agricultural transformation using key indicators of transformation, which are trends in: (i) agriculture's output share (Agricultural GDP/GDP), (ii) agricultural labour and land productivity, (iii) the composition of agricultural output, (iv) contribution of smallholder vs. commercial farms, and (v) the trends in the integration of domestic agriculture with the international markets (trends in agricultural export) The association of key policy measures with the observed trends are also documented. The trend analysis is based on secondary data related with performance of the economic sectors and agricultural sub-sectors including the cereal, pulse and oil crops as well as livestock ranging from 2000 to 2017.

**Share of Agriculture in the economy and employment:** the contribution of agriculture sector to the overall GDP of the country has declined from 50.5% in 2007 to 36.3% in 2017 leaving the dominant contribution to services with 39% and industry with 24.4% in 2017 fiscal year. This implies a positive trend in the composition of economic sectors where the contribution of agriculture has been declining while there has been growth of the sector in absolute terms. In terms of employment, the proportion of the total workforce engaged in agriculture has declined from 79.2% in 2007 to 68.2% in 2017. These trends are highly associated with the fast economic growth of the service sector and also industry compared to the agriculture sector

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**Agricultural labour and land productivity:** There has been an increasing trend in labour and land productivity for cereals and pulses and to some extent for oil crops. However, for other commodities considered as cash crops, there was no evident increase both in land and labour productivity levels. The evidence for cereals and pulses is clearly aligned with the attention given to these crops in terms of research and development support.

**Composition of agricultural output:** In terms of the composition of the subsectors of the agriculture to the agricultural GDP (crop, livestock and forestry), the crop subsector shows a dominant role in its contribution to the agricultural GDP ranging from about 60% to 70%. In terms of the composition of the crop subsector, the trend analysis shows that there is very limited shift to high value commodities as cereals still play dominant role in Ethiopian agriculture in terms of both land allocation and overall contribution to the total agricultural production. There is no also an evidence trend that shows the shift to the production of export commodities relative to commodities for domestic consumption. These trends indicate the limited transformation in the composition of the agricultural output and sustaining of more or less the same composition of the type of agricultural commodities produced.

**Contribution of smallholder vs. commercial farms:** though there is some increase over the years, the role of commercial farming in Ethiopia is still very limited and very specific to few agricultural commodities. The data for 2015 production season indicates that the overall contribution of commercial farms in the total cultivated areas is estimated to be only 5.4% whereas it is 18.4% in the total agricultural production. The highest participation of commercial farms is in sugarcane production followed by oil crops and coffee.

**Conclusions:** considering the observed trends for the key four indicators presented, there is still a lot a long way to ensure transformation as the observed trends show limited transformation. Some of the key factors for the slow process of transformation are poor performance of systemic issues mainly related with (i) poor research-extension linkages, (ii) poor performance of the national seed system, (iii) inefficiency of the agricultural extension system, and (iv) poor performance of agricultural markets. These factors are recognized by the public sector and also the development partners where we see a number of public and development partners' supported mainstreamed programs and project based interventions.

Better performance is observed in terms of the consistent decline in the proportion of agricultural GDP linked with the growth of the service and industry sectors while maintaining growth of the agricultural sector in absolute terms and in the role of agriculture in the total employment, and in increased labour and land productivity for the major agricultural commodities (cereals, pulses and oil crops). Given the observed trends in the agricultural transformation in the country, it will be important to note the following key issues:

- The dependence of the sector on crops sub-sector mainly on cereals and pulses that are mainly produced under rain fed condition, limits the exploitation of the potential in transforming the sector;
- Limited market demand for quality production and value addition of raw commodities;
- The contribution of livestock sub-sector is still low given the country's potential in livestock resources; and

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- The integration of the agricultural sector to the international market is limited to the few agricultural commodities. The potential agricultural commodities for which the country is endowed with are not yet contributing to the agricultural export are the horticulture and livestock sub-sector.

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The Dutch-funded CASCAPE project plays an ‘incubator’ role in Ethiopia’s Agricultural Growth Program (AGP), with the objective to catalyse development of sustainable farming systems and improved livelihoods. Ethiopia’s population will approximately double between the present and 2050. In five highlands clusters (Mekelle, Addis Ababa, Hawassa, Jimma, Bahir Dar) agricultural technologies are tested with farmers in two ‘intensive’ districts. They can be anything between variety testing or promoting labour-saving technologies, and on any crop deemed relevant for the area. What the farmers consider as ‘best fits’ is then scaled up to 11 extensive districts. Hence a total of 55 districts is covered. There, CASCAPE supports the extension service active under AGP in explaining and promoting the best fits. The approach has led to a large information base on farm households and improvements in crop and soil management for each intensive district, leading to best fit selection. Secondly, an approach has been developed to scale up ‘best fits’, underpinned by knowledge of drivers of adoption. A recommendation mapping tool is developed to support the approach with geographically explicit data. The project should impact positively on agricultural production, on farm income, nutrition and equity, and on sustainable use of natural resources.

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What is the role of the seed industry in addressing the SDGs, and in particular SDG2? What are the industry’s drivers for improving smallholder farmer productivity?

Quality seeds play a vital role in improving crop yields, climate change resilience and crop disease resistance. Smallholder farmers in many emerging markets do not have adequate access to quality seeds. Improving access is a key component of achieving SDG2. Seed companies are well positioned to develop, produce and market seed varieties of high quality that meet current demands.

The Access to Seeds Index measures and compares seed companies on their efforts to improve access to seeds for smallholder farmers. By doing so, the Index provides insight in the role the seed industry can play in increasing the agricultural productivity of smallholder farmers in a sustainable way. The Index initiates a more informed discussion between stakeholders, untangling private sector contribution, decision making processes and initiating partnership development. The Index is published every two years by the Access to Seeds Foundation, an independent organization supported by the Bill & Melinda Gates Foundation, the Dutch government and AgriCord. The second Index is scheduled for publication late 2018/early 2019.

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Evidence based on system changes with the subtheme:  
Double the agricultural productivity and the incomes of small-scale food producers (SDG 2.3) in Ethiopia

Four presentations, 15 minutes each, 5 minutes reflections, and 10 minutes general discussion

Facilitator: Irene Koomen

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1. Seed
  - 15 min presentation by Sanne Helderma (Access to Seeds): The role of the seed industry in addressing SDG2
  - Reflection by Dr. Amsalu Ayana (ISSD Ethiopia)
2. Agronomic practices (production practices and role of extension)
  - 15 min presentation by Dr. Eyasu Elias (CASCAPE project): The CASCAPE approach: from local technology testing to regional food security improvement
  - Reflection by Geert Westenbrink, Ministry o
3. Agricultural transition
  - 15 min presentation by Dr. Dawit Alemu (BENEFIT Partnership): Agricultural transformation in Ethiopia: Trends and Challenges
  - Reflection by Jan Willem Molenaar, Aid Environment
4. Concluded by a panel discussion with statements from the audience

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