

## Large Scale Mechanized Farming Will Boost Sub-Saharan African Food Production and Employment

: Boost Sub-Saharan African Food Production and Employment

Ernie J. Burgher and SitiTalkBlog

From *The World Bank* reports agriculture accounts for employing 65% of Africa's labor force and accounts for 32% of the Gross Domestic Product (GDP). Sub-Saharan Africa is basically a continent of small holders and its environments are terribly sensitive. At comparatively low population densities ancient ways begin to degrade the soil and threaten future production. Climatic and environmental realities result, except within the humid zones, in frequent crop failures from drought or dry spells within the planting season. Most Sub-Saharan African soils are derived from extremely weather worn granite and gneiss parent material. Soils are therefore coarse with low contents of fine clay particles and organic matter and are deficient in most nutrients, particularly nitrogen and phosphorus. The water holding capability of Sub-Saharan African soils is poor so precipitation leaches out soluble nutrients. Soil organic matter is quickly decomposed underneath high temperatures except within the cooler highlands. Once vegetation is taken away water and wind erosion remove the top soil, the surface crusts simply and is then sealed against infiltration. From the year 2000 the Sub-continent has seen a spike in food prices largely because its food supply growth proportionally less than its population growth. Just within 2000-2010 when global food prices increased by 170% staple food prices grew in some sub-Saharan African countries like Somalia and Uganda by 1300% and In 2016 Nigeria has seen prices in consumer products grow by 50%.

Following reports from the Food and Agricultural Organization (FAO), farmers from sub-Saharan Africa have over the past 20 years experienced incommensurate or poor agricultural performance because of shrinking farm sizes and inequitable land-distribution patterns, depleted soils and limited use of fertilizer and soil amendments (either organic and inorganic), unreliable rainfall and lack of irrigation capacity, and limited access to improved varieties and seed distribution systems. All these became possible because of old farming methods, that make use of rudimentary tools and bad agricultural practices like; clearing farms by burning the grass. To enable high production growth, farmers in sub-Saharan Africa must embrace new methods of farming, incorporate technology to their farming and make use of fertilizers. In regular business a in farming the more input of investment higher output is a guarantee.

Sub-Saharan governments should promote large scale mechanized farming and farmers should embrace it because compared to other parts of the world land is cheaper in Africa. Towns in Sub Saharan African countries grow in a nuclear manner, this means the population density is higher at the center of town, leaving the outskirts with land as big as the cities, and towns are connected by vast uninhabited land. These lands at the outskirts will go at relatively cheaper prices and farmers can use them for large scale farming.

The sub continent is a huge importer of rice, wheat, sugar, maize, soybean and other staples. There is, therefore, a ready domestic market which is available for whatever is produced on large mechanized farms. The sub continent has more than 1000 km of shore line making it easy to export products to the rest of the world, with close proximity to the United States, West Asia, the European Union and The

United Kingdom freight cost is drastically reduced and this will increase cost competitiveness. Today buyers in high-income countries demand certification of social and environmental sustainability, even for 'bulk commodities' such as soy, sugarcane, and palm oil, smallholders may find it harder to compete.

Going through The World Bank data sub-Saharan Africa has an annual population growth of about 30% and youth unemployment at 59.9%. This implies that there is no shortage of labor from the sub continent and with the work force supply way above demand it also implies that there will be very cheap labor available for farmers who indulge in large scale mechanized farming. This will drastically curb unemployment rates and increase development.

Sub-Saharan Africa should take advantage of technology and the nature of farming which is changing in favor of large farms. Recent innovations in crop breeding, tillage, and information technology make labor supervision easier and reduce diseconomies of scale of large operations. Genetically modified varieties have facilitated broad adoption of zero tillage in Latin America and by reducing the number of steps in the production process allowed management of larger areas. Information technologies such as satellite mapping and crop models reduce the advantage of local knowledge and experience in tactical farm decisions. Large farms that employ professional managers may also enjoy an efficiency advantage under conditions of rapidly changing markets and technologies, especially for new crops and new areas.

Sub-Saharan Africa suffers poverty, high youth unemployment and under development, agriculture remains the easiest means of taking its people out of poverty. The unfortunate thing in current circumstances is that the sector is one of the most evolving in recent times in terms of technology incorporation and production output. In order that the current sector catches up with the rest of the world, governments have to quadruple efforts in developing the sector. The international community and organizations like the Food and Agricultural Organization have to promote international partnership among large mechanized farm owners and small scale farmers. This partnership should promote a cheaper exchange of technology and training of the small scale farmers.

---

Ernie J. Burgher is a bi-lingual freelance journalist and author, and speaks English and French. Ernie writes for [SitiTalkBlog](#).

Copyright [SitiTalkBlog](#). All rights reserved.

[SitiTalkBlog](#) is focused primarily on Africa's socio-economic and political issues, scientific and medical topics, as well as global current issues and news. [SitiTalkBlog](#) also highlights positive entertainment as long as it has the potential to cause us to think and take positive actions. The blog is geared towards sensitizing people to take constructive actions and engineer practical solutions

Reprint and Re-distribution Permission: Any and all parts of this original article may be reproduced as long as the author and [SitiTalkBlog](#) and References and links are cited and maintained as in the original publication. No part of the original article may be modified or used for commercial purposes, and no additional authors may be added or cited except as indicated "Ernie J. Burgher and [SitiTalkBlog](#)" in the original article.

## **References & links**

<http://global-growing.org/en/content/ten-facts-about-agriculture-sub-saharan-africa>

<http://www.fao.org>

<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/0,,contentMDK:21935583~pagePK:146736~piPK:146830~theSitePK:258644,00.html>

<http://www.nap.edu/read/12832/chapter/11>

<http://punchng.com/consumers-groan-as-food-prices-rise-by-50/>

[http://siteresources.worldbank.org/DEC/Resources/84797-1288208580656/7508096-1288208619603/Deininger, Byerlee Large Farm Small Farm Debate P&S PAPER.pdf](http://siteresources.worldbank.org/DEC/Resources/84797-1288208580656/7508096-1288208619603/Deininger,_Byerlee_Large_Farm_Small_Farm_Debate_P&S_PAPER.pdf)

<https://www.wider.unu.edu/publication/rise-large-farms>

<http://www.africanglobe.net/business/advantages-large-scale-commercial-farming-africa/>

<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/EXTPUBREP/EXTSTATINAFR/0,,contentMDK:21106218~menuPK:3094759~pagePK:64168445~piPK:64168309~theSitePK:824043,00.html>

[\*Recent Economic Changes and Their Effect on Production and Distribution of Wealth and Well-Being of Society\*](#)

<https://wle.cgiar.org/thrive/big-questions/does-farm-size-really-matter-africa/african-agriculture-does-farm-size-really>

[http://siteresources.worldbank.org/DEC/Resources/84797-1288208580656/7508096-1288208619603/Deininger, Byerlee Large Farm Small Farm Debate P&S PAPER.pdf](http://siteresources.worldbank.org/DEC/Resources/84797-1288208580656/7508096-1288208619603/Deininger,_Byerlee_Large_Farm_Small_Farm_Debate_P&S_PAPER.pdf)