Agriculture
Transforming agriculture in Africa

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The potential of property rights to unlock capital and development remains largely unrealised in Africa:

- An estimated 90% of rural land in Africa is not formally documented.
- Just 4% of African countries have mapped and titled the private land in their capital cities.
- Less than 20% of occupied land in sub-Saharan Africa is registered; the rest is undocumented, informally administered and thus vulnerable to land grabbing and expropriation without adequate compensation. [27]
- Up to 60% of national land in sub-Saharan Africa is held under customary or traditional forms of land ownership.

Well-meaning reformers have often neglected the myriad other factors affecting whether titles are useful or not, such as custom, other laws and the capacity of the state to enforce people's legal property rights, and have generally underestimated the ability of vested interests, such as traditional leaders and urban elites, to obstruct reform. [28]

Generally, agricultural reform needs to start by unlocking access to credit that will enable farmers to invest towards higher productivity. With few exceptions, agriculture in Africa generally has low levels of technological advancement, seen in limited irrigation, low levels of mechanisation (as labour is cheap and farmers lack capital) and limited (or no) use of fertiliser. All of these require access to credit. The continent also sees limited use of genetically modified seeds, which are more resilient to disease, slow progress with organic farming, and limited cultivation of indigenous crops that are better suited to the continent.

Credit requires secure and transferable ownership of land, pointing to the need to formalise, regulate and modernise land ownership. Without clarity on ownership, farmers cannot access finance, transfer land or protect themselves against encroachment. [29]

Peruvian economist Hernando de Soto [30] noted that farmers inevitably remain poor if they are unable to leverage their resources and assets to create wealth. Legally protected property rights is the key source of the developed world's prosperity, he argued, and the lack thereof is the reason why many nations remain mired in poverty by the 'tragedy of the commons', where their unregistered assets can be stolen by powerful interests, hurting individuals and broader economic development.

In fact, a comprehensive ‘land grab’ is evident across Africa, particularly in the Nile River basin, which covers an area of 3.18 million square kilometres (from Uganda to Egypt). Companies from several developed nations have acquired fertile Nile-irrigated land for growing food crops, flower, tobacco and biofuels, rearing livestock and logging trees. Most of these deals are agricultural leases and forest concessions. Although some have brought positive benefits to local economies, in most cases the local people suffer because governments prioritise foreign investment and export earnings above the pursuit of local livelihoods.

The World Bank has separately found ‘little evidence of a relationship between increased commercialisation and improved nutritional status.’ [31] Low- and lower middle-income African countries should ideally produce food for domestic consumption before pursuing cash crops for the export market, it argues. To capitalise on the benefits of having an educated and healthy labour force, governments need an unwavering emphasis on achieving food security. Only then should agriculture be pursued to unlock the opportunities to earn foreign exchange.
Endnotes


5. T Lewis, *Transatlantic slave trade*, 2018


14. World Bank, *Aggregated LPI*

15. World Bank, *Aggregated LPI*

16. Embassy of the DR Congo, *Invest in DRC, Agriculture*


19. In 2003, the New Partnership for Africa’s Development (now called the African Union Development Agency) published its Comprehensive Africa Agriculture Development Programme, with ambitious goals, namely to: allocate at least 10% of national budgets to agriculture; reach rural growth rates of 6% annually by 2015; integrate and invigorate regional and national agricultural markets; significantly increase agricultural exports; transform Africa into a ‘strategic player’ in global agricultural science and technology; practise sound environmental and land management techniques; and reduce rural poverty (see: M Fleshman, *Boosting African farm yields*, 2014).

20. The commitment to devote at least 10% of national budgets to agriculture and rural development was also included in the 2003 Maputo Declaration by African heads of state and reiterated in the 2014 Malabo Declaration on Accelerated Agricultural Growth and Transformation in Africa.

21. On aggregate, Africa spends only 5–7% of national budgets on agriculture, although a 2018 study found that 11 African countries did manage to allocate 10% or more of their budgets to agriculture in some years since 2005, with Ethiopia, Kenya, Mozambique and Sierra Leone achieving 6% agricultural

22. AllAfrica, Communique: Africa food security leadership dialogue, August 5, 2019

23. IPPMedia, Value add in Africa: First steps in a long journey, 2019; also see: African Cashew Alliance, About us

24. The world cocoa industry is worth more than US$100 billion annually; also see: Y Adegoke, Why Europe dominates the global chocolate market while Africa produces all the cocoa, 2018; D Philling, The African farmers taking on big chocolate, Financial Mail, 16 December 2019; H Fofack, Overcoming the colonial development model of resource extraction for sustainable development in Africa, 2019


29. See: F Mugira and A McGinnis, Sucked dry, Daily Maverick, 2021


31. World Bank, Agriculture in Africa: Telling facts from myths


33. World Bank, Agriculture in Africa: Telling facts from myths

34. In contrast to the tripling in growth cited earlier, this was an improvement across the entire country, so the growth is understandably much smaller; see: JY Lin, The Household Responsibility System in China’s Agricultural Reform: A Theoretical and Empirical Study, Economic Development and Cultural Change, 36:53, 1988, S199–S224

35. China-Africa Project, Chinese and African agriculture have a lot more in common that most people think: Interview with Xinqing Lu, Associate Programme Officer for Alliance for a Green Revolution in Africa, 3 December 2019

36. OEC, Brazil

37. GL Galford, B Soares-Filho and CEP Cerri, Prospects for Land-use Sustainability on the Agricultural Frontier of the Brazilian Amazon, Philosophical Transactions of the Royal Society B, 368:1619, 2013, 20120171.

38. L Abboud, The robot revolution down on the farm, 2018


40. R Kimani and P Bosire, FarmDrive, 2019

41. In most of rural Africa, precise location of a farm is objectively unknown so the location is determined via a series of SMS questions (e.g. time to walk to different primary schools). The more schools a farmer is familiar with in their area, the easier it is to hone in on their specific location.

42. J Bird, 'Smart' insurance helps poor farmers to cut risk, Financial Times, 5 December 2018; also see, for example, https://agrocenta.com/ and https://www.zenvus.com/.

43. World Food Programme & Oxfam America, The R4 Rural Resilience Initiative, 2011
44. S Gebre, AGRA plans to invest $500 million in African seed companies, Bloomberg, 7 September 2016

45. The Alliance for Food Sovereignty in Africa and its allied organisations argue that 'AGRA has unequivocally failed in its mission to increase productivity and incomes and reduce food insecurity, and has in fact harmed broader efforts to support African farmers.' See: Various co-signatories, Open letter: The Green Revolution in Africa has unequivocally failed, 15 September 2021


47. Ammonia manufacturing contributes 1% of worldwide carbon dioxide emissions. See LK Boerner, Industrial ammonia production emits more CO2 than any other chemical-making reaction. Chemists want to change that, *Chemical & Engineering News*, 15 June 2019


49. Indorama Petrochemicals, About IEPL, Port Harcourt


54. Food and Agriculture Organization, Food wastage: Key facts and figures

55. InspiraFarms, Our team

56. The improvements in yields are similar in magnitude to the improvements seen in South Asia between 1980 and 2020, and in a similar timeframe. Indeed, South America achieved a much more rapid increase between 2000 and 2010, moving from roughly 7.8 tons per hectare to about 11.8 tons.

57. Chart 14 presents the reduction in extreme poverty in African countries across the low- and middle-income categories. The reduction in extreme poverty in Seychelles, Africa's only high-income country, is negligible.

58. The contribution of agriculture as a proportion of the Seychelles' economy, the continent's only high-income island state, was about 4% in 2019.

59. Some of these constraints can be overcome through technology, such as the use of precision irrigation and application of precise amounts of fertiliser exactly where they are required. Then there is also the potential of vertical farming, which could produce 180 m tons of food globally, according to some analysts.


61. Food and Agriculture Organization, Government expenditure on agriculture, 2019


63. Intergovernmental Panel on Climate Change, Working Group II: Impacts, adaptation and vulnerability, 2018


65. The International Institute of Tropical Agriculture does particularly impressive work in this regard. See: https://www.iita.org/
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