



ASSESSING AFRICA'S REAL

Potential for Agriculture



How practical and political barriers limit food production.







WRITTEN BY HOWARD G. BUFFETT

Africa is a vast continent with more diversity in agricultural production than likely any other continent in the world. It is also a continent that was shortchanged on soil fertility during the periods of soil formation.

As a result, less than 10 percent of Africa has what is considered high-quality soils, including the lower third of West Africa; parts of East Africa; and areas within several countries in southern Africa including Zambia, Zimbabwe, South Africa and Mozambique.¹

Africa has unique ecosystems such as the savannah of the Mara and Serengeti, the volcanoes of Virunga, and the Afromontane and coastal forests from western to eastern Africa. It has vast wildlife corridors traversing multiple countries, oftentimes combining significant national parks.

These areas need continued protection against misuse, improper exploitation and unsustainable agricultural expansion. The Food and Agriculture Organization (FAO) estimates that 65 percent of agricultural land throughout Africa has been degraded by human activity.² The Montpellier Panel – a prominent group of agriculture, ecology and trade experts from Africa and Europe – estimates that these degraded soils are too damaged to sustain viable food production.

A number of organizations and institutions have analyzed Africa's potential for agriculture using different methodologies and assumptions. The actual amount of available and appropriate arable land and its potential productivity is critical to Africa's food security interests and the question of whether Africa can feed itself in the future.

But land availability is only part of Africa's food security story. We set out to understand how the practical barriers farmers face in their daily operations, as well as the political barriers that affect achieving change at scale, undermine Africa's real potential for agriculture.

¹USDA Natural Resources Conservation Service, World Soil Resources, Soil Survey Division, 1996.

 $^{^2\}mathrm{Turning}$ the tides of soil degradation in Africa: capturing the reality and exploring opportunities. July 10, 2003. FAO

INFORMATION PROVIDED BY A GRANT FROM THE HOWARD G. BUFFETT FOUNDATION

As a farmer, I am regularly amazed at how frequently non-farmers are charged with producing analyses and recommending solutions that will have tremendous influence on the issues farmers face. It is the equivalent of asking a non-medical person to perform surgery. Just as trained doctors are best equipped to perform medical procedures, farmers are best equipped to understand the issues farmers face, and they are best equipped to participate in developing practical solutions that work in the real world, not in hypothetical situations. When hypothetical solutions drive policy, it is a recipe for failure.

Therefore, we present this analysis to challenge current assumptions and to be realistic about the challenges we face to accomplish a goal we all want to achieve: an African continent with strong, vibrant agriculture. It will require smallholder farmers as part of the solution and a continent that embraces a Brown Revolution to rebuild its soils.

Current commitments by governments and donors are not enough. If we do not treat African soils with more practical and sustainable approaches and base African policy on serious commitments to address and overcome existing barriers, then we will fail farmers.

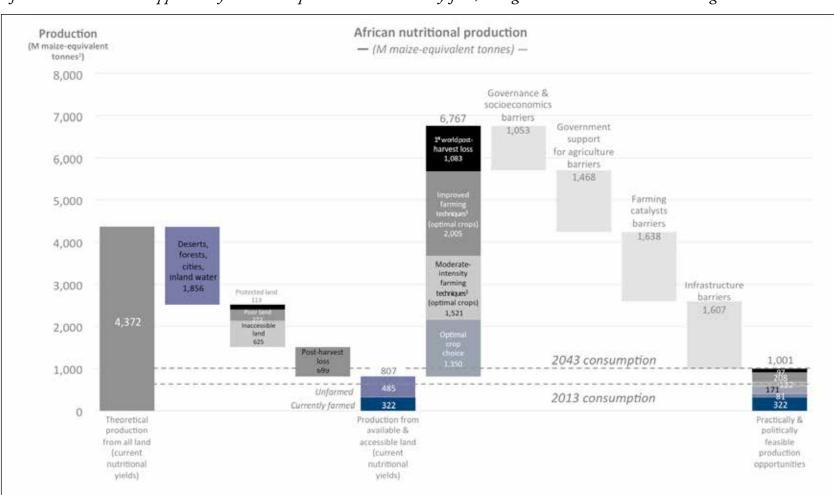
To view the complete *Africa's Potential for Agriculture* study, visit http://brownrevolution.org/.

ABOUT THE AUTHOR

Howard G. Buffett is a farmer and Chairman and CEO of the Howard G. Buffett Foundation. He has farmed for over thirty-five years, and the Foundation has invested over \$150 million in research to improve agriculture and an additional \$350 million in agriculture-related programs globally.

OVERVIEW: THEORETICAL OPPORTUNITY & HEADWINDS

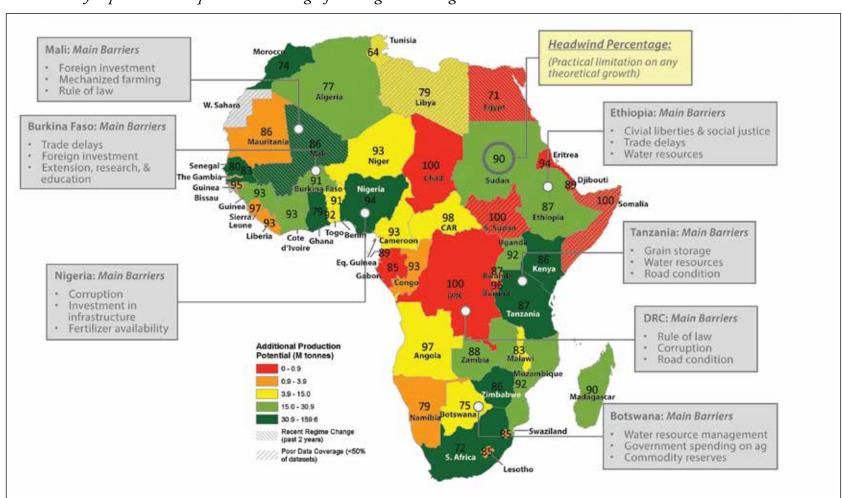
Africa has a theoretical opportunity to increase production over twenty-fold, though real-world headwinds limit growth.



¹ Defined as moderate and high use of fertilizer, improved varieties of crops, mechanized tools, use of pesticides and herbicides, soil erosion mitigation, nutrient maintenance and fallow year requirements

POTENTIAL PRODUCTION AND CURRENT BARRIERS TO GROWTH

Each country experiences unique barriers to significant agricultural growth.



Source: Lake Partners analysis

² Maize-equivalent tonnes describe tonnes of all major crops that we weighted by calorie and protein content relative to maize Source: FAOSTAT, GAEZ, Lake Partners analysis