

Agricultural Challenges in Sub Saharan Africa

By

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General view

- Population in Sub Saharan Africa was last measured at 874,841,049 in 2011, according to the World Bank.
- The UN Food and Agriculture Organization estimates that 239 million people in sub-Saharan Africa were hungry/undernourished in 2010 (its most recent estimate)

Sub Saharan Africa map



- There are 42 countries located on the sub-Saharan African mainland, in addition to six island nations (Madagascar, Seychelles, Comoros, Cape Verde and São Tomé and Príncipe and Mauritius). According to this classification scheme, the countries of sub-Saharan Africa are:

Central Africa

- Democratic Republic of Congo
- Republic of Congo
- Central African Republic
- Rwanda
- Burundi

East Africa

- Sudan
- Kenya
- Tanzania
- Uganda
- Djibouti
- Eritrea
- Ethiopia
- Somalia

Southern Africa

- Angola
- Botswana
- Lesotho
- Malawi
- Mozambique
- Namibia
- South Africa
- Swaziland
- Zambia
- Zimbabwe

West Africa

- Benin
- Burkina Faso
- Cameroon
- Chad
- Côte d'Ivoire
- Equatorial Guinea
- Gabon
- The Gambia
- Ghana
- Guinea

West Africa


- Guinea-Bissau
- Liberia
- Mali
- Mauritania
- Niger
- Nigeria
- Senegal
- Sierra Leone
- Togo

Island nations

- Cape Verde (West Africa)
- Comoros (Southern Africa)
- Madagascar (Southern Africa)
- Mauritius (Southern Africa)
- São Tomé and Príncipe (West Africa)
- Seychelles (East Africa)
- **Territories, possessions, départements**
- Mayotte (France)
- Réunion (France)

Agriculture in African

- African agriculture has enormous potential for growth due to its abundant natural resources namely land and water.
- The strong potential of agriculture in sub Saharan Africa is welcome news.
- Agriculture is the backbone of overall growth for the majority of countries in the region.
- Essential for poverty reduction and food security.

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- Smallholder agriculture is the predominant form of farm organization in Africa.
 - Agriculture in SSA (excluding South Africa) employed 62% of the population and generated 27% of the GDP of these countries in 2005.
 - In the short and medium term, agricultural growth (especially that of staples) and poverty reduction is closely associated with growth in smallholder agriculture.

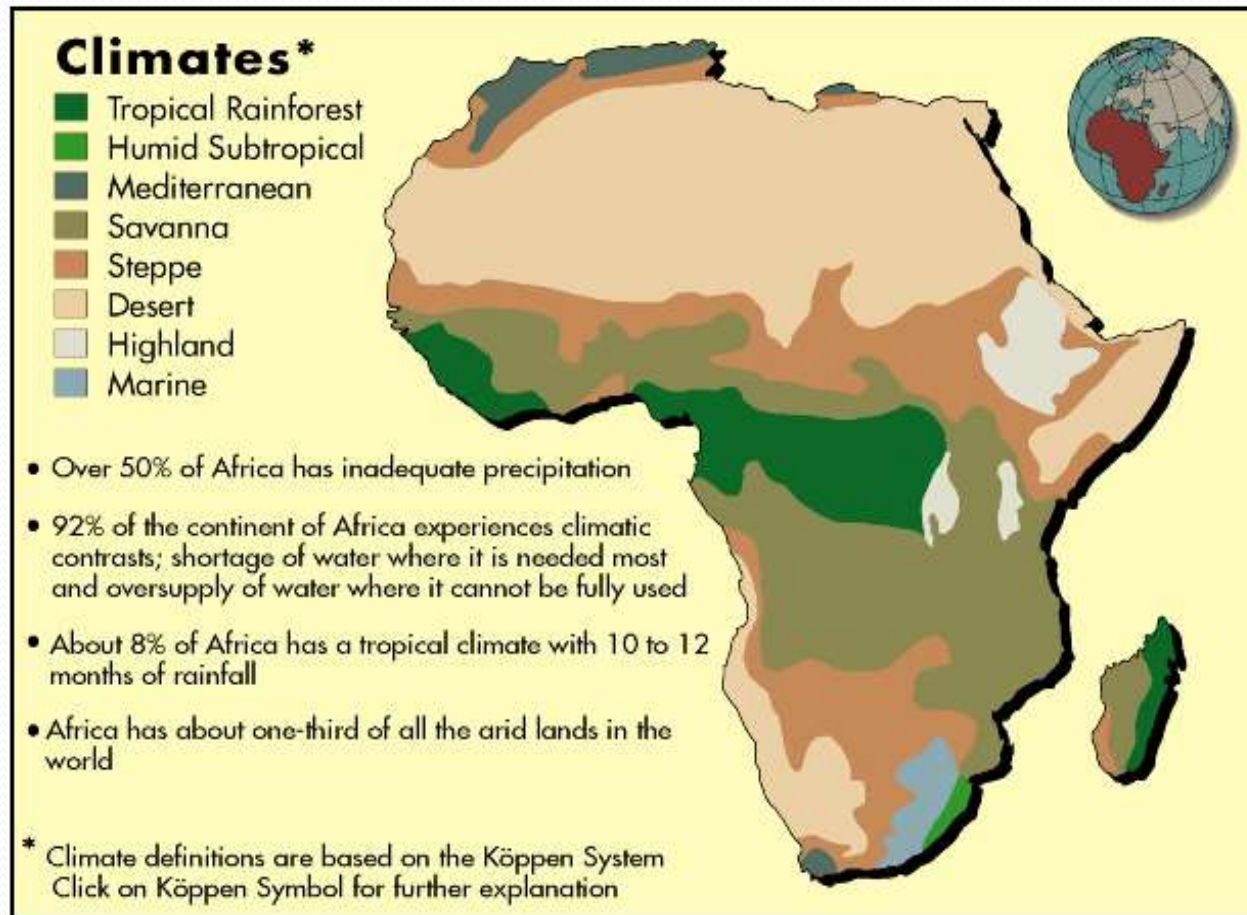
Challenges

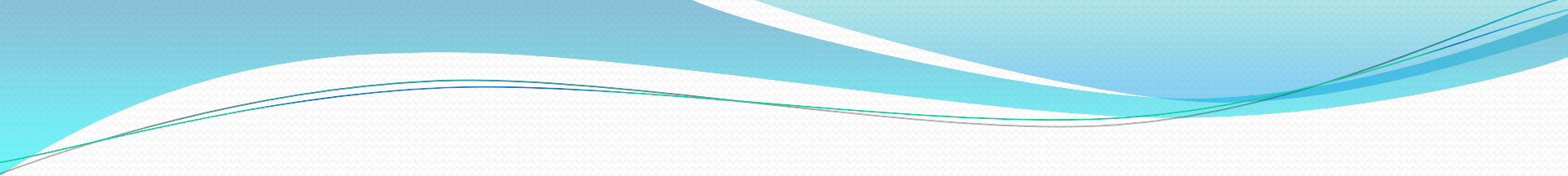
- Natural resources
- Technology
- Investment climate
- Nutrition security(Hunger, Poverty)
- Disease
- Institutional reforms
- Natural disaster
- Conflict

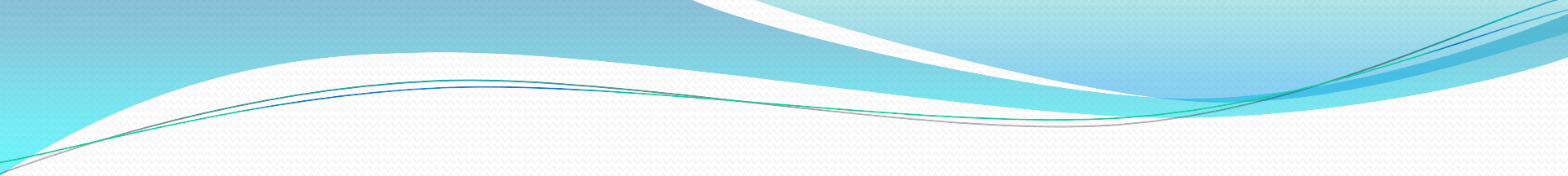
Natural resources

- Farming is largely done under rain fed conditions.
- Natural water supplies is not evenly distributed.
- Very low levels of irrigation and improved water management (water harvesting and storage).

Climatic map of Africa

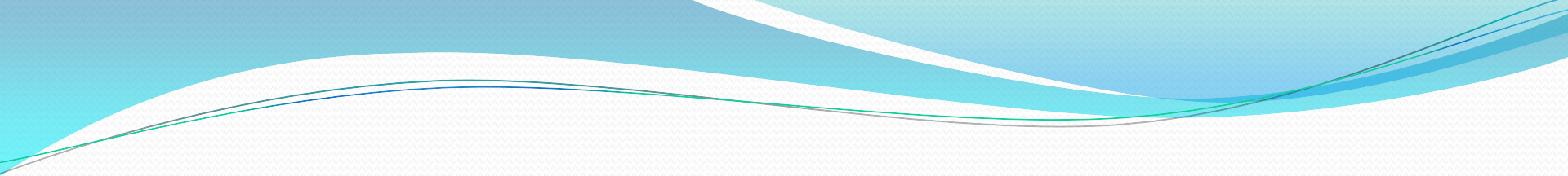


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- The yield gap, the difference between average grain yields in SSA and in the world, is still wide.
 - The region's average grain yields were roughly one-third of the world average (1.1 tons per hectare versus 3.2 tons per hectare) in 2008-10.

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- Indiscriminate removal of vegetation (Lumbering and Bushfire).
 - Soil erosion (top soil removal)
 - Soil nutrient loss

Technology

- A fundamental challenge in achieving productivity growth in Africa is the variety of agro-ecological environments and farming systems.
- Yield gains associated with high-yielding varieties have been much lower in sub-Saharan Africa.
- Input and output markets and

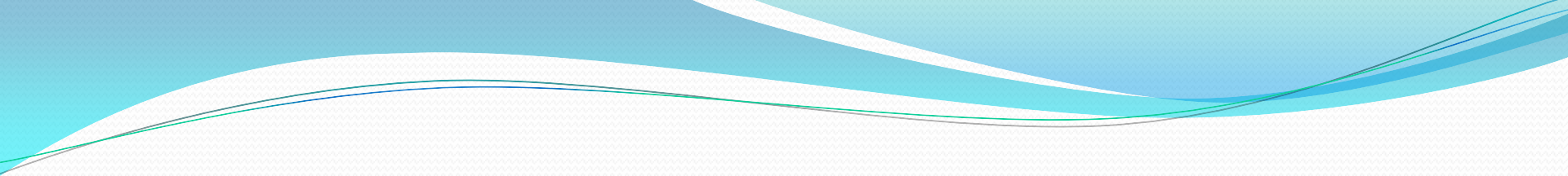
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- Poor infrastructure (institutions)
 - Extension services delivery
 - Pesticides use
 - Use of cutlasses and hoes
 - Undeveloped farm tracks

A farmer using traditional hoe in her farm.



Investment climate

- The food crisis trap that threatens the African continent is primarily the result of lack of requisite investment in the agricultural sector.
Insufficient investment in:
- Agricultural production (high risk)
- Value chain development (Input – Consumer)
- support services (transport, Fin. Inst. Research and Extension etc)

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- Insufficient investment in the above to match rapid growth in the region's rural population can have a severely detrimental impact on the food security of the majority of the poor and hungry, who live in rural areas and depend directly or indirectly on agriculture for their livelihoods.

Nutrition (Hunger, Poverty)

- The Africa Human Development report 2012: notes that with more than one in four of its over 8 m. people undernourished, sub-Saharan Africa remains the world's most food insecure region
- More than 15 million people are at risk in the Sahel – the semi-arid belt from Senegal to Chad – and an equal number in the Horn of Africa remain vulnerable after last year's food crisis in Djibouti, Ethiopia, Kenya and Somalia.

Disease

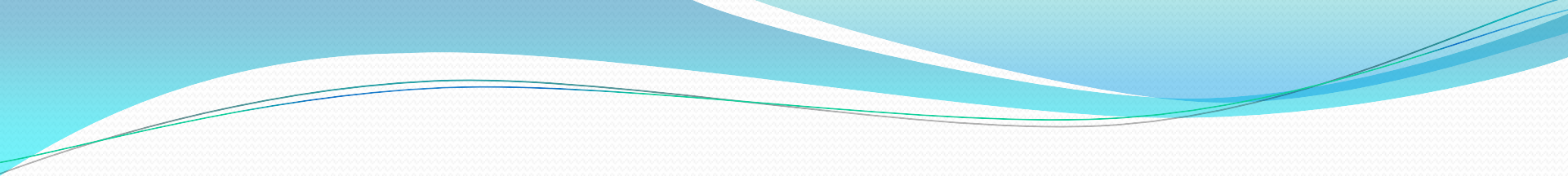
- Malaria transmission is very high in many parts of sub-Saharan Africa and sufficient preventative measures are still lacking in some places.
- Ebola Caused panic, loss of lives etc.
- HIV-AIDS (Sub-Saharan Africa has the most serious HIV and AIDS epidemic in the world. In 2012, roughly 25 million people were living with HIV).
- Cholera – loss of lives.
- Buruli ulcer (a cutaneous neglected tropical disease caused by *Mycobacterium ulcerans*)

Cholera patients.



Institutional reforms

- State institutions for agriculture in Africa are particularly weak in the poorest countries.
- Lack of decentralized and bottom-up processes are often in contrast with the heterogeneity of agro-climatic conditions and technology needs that need specific solutions derived through a participatory process.

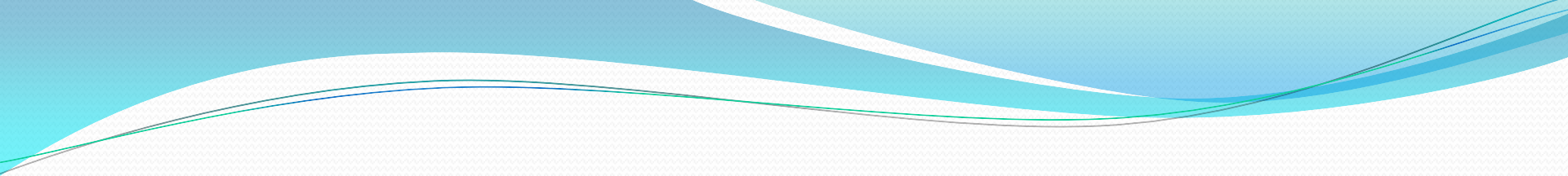
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- Institutions are needed that strengthen the functioning of national and regional markets (regulatory, risk management, information, a framework for organizations and cooperatives) and
 - Those for the management of climatic and other risks.

Natural disaster

- Climate change is expected to hit developing countries the hardest because of its vulnerability.
- Its effects—higher temperatures, changes in precipitation patterns, rising sea levels, and more frequent weather-related disasters (Drought, Floods, Wind)—pose risks for agriculture, food, and water supplies.

Smallholder farmers
are struggling with
the effects of climate change.
Source: Africa Human
Poverty Facts.



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- The Intergovernmental Panel on Climate Change (IPCC) has estimated that adaptation to climate change could cost Africa some 5 to 10 percent of its gross domestic product.
 - The Panel report also predicted that climate change could cause potential crop yields from rain-fed agriculture to decline by 50 percent in some African countries

Conflict

- Political stability and peace are still issues that require attention.
- Religious intolerance and sectarianism are issues that create panic among rural folk.
- Ethnic disagreement – boundaries and landmarks.
- Chieftaincy problems.

Boko Haram attacks on a christian village in norther Nigeria.

Source: Africa Hunger and Poverty Facts.



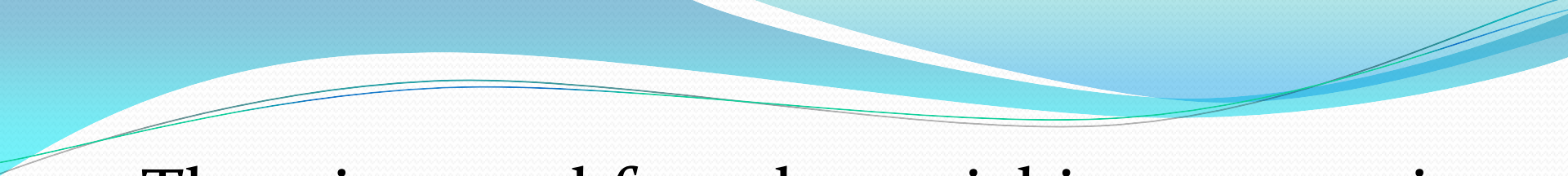
Women in Mayo- Sava part of Cameroun say they are too frightened of Boko Haram attacks.

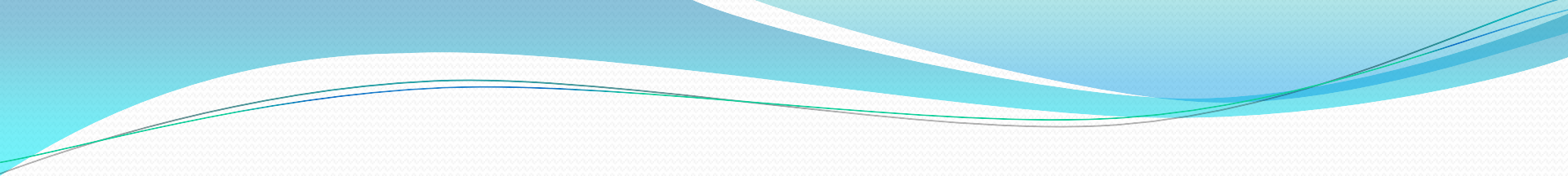
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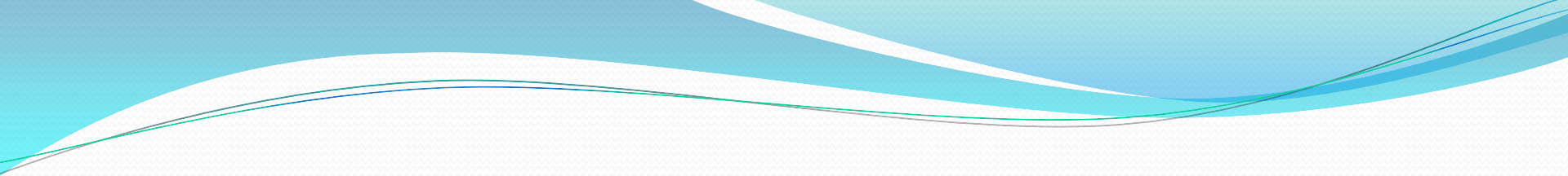
The way forward

- Connecting smallholders to markets and helping them to adapt to new conditions and become more productive.
- Reducing risk and vulnerability, especially to extreme weather events and price swings, and increasing access to assets and skills.
- Conservation Agriculture should be encouraged to help check problems associated with soil erosion.

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- There is a need for substantial investment in support for agriculture, notably research and extension.
 - Addressing climate change requires unprecedented global cooperation across borders.
 - Regardless, climate change should be mainstreamed into general agricultural and risk mitigation agenda.

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- Improving health is central to the Millennium Development Goals,
 - Emphasis should be on primary health care, including immunization, sanitation, access to safe drinking water, and safe motherhood initiatives.

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- There is the need for programmes and policies to increase the capacity of small holder farmers to boost their productivity and enter dynamic sectors for national, regional and international markets.
 - Such programmes should include awareness, reductions in transaction costs due to small volumes and perishability.
 - Facilitating the creation of FBOs and other forms of institutions to ensure control of quality and safety of food.

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- Narrowing the nutrition gap in sub-Saharan Africa, where the difference between actual and optimal intake is greatest, and the incidence of undernourishment is highest, is imperative.
 - Improved food security must occur in conjunction with improved nutrition security which refers to the “quality” component of food production, consumption and physiological need.



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1. New World Encyclopedia
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5. The Joint United Nations Programme on HIV/AIDS,



Thank You