FOOD SECURITY AND MARKET INTEGRATION

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ALBERT EINSTEIN (1879-1955)

- We cannot solve our problems with the same thinking we used when we created them.
- Insanity: doing the same thing over and over again and expecting different results
- Anyone who has never made a mistake has never tried anything new.
THE CHALLENGE?

- Implementation of costly but ineffective programs
  - Disregarding evidence in decision making
  - Limited commitment to try out alternative policies

- Conventional wisdom usually rules the day
ROAD MAP

Introduction
• Food security?
• Market integration?
• Mega trends

Challenges and opportunities
• Agricultural productivity
• Price Volatility
• Ag. Policies
• Ag diversification and commercialization
• Food Security Portal
• Etc.

Strategies to achieving sustainable food and nutrition security

Conclusion and recommendations
Agriculture is critical for:

- Employment
- Economic development
- Food & nutrition Security

It needs to be inclusive.

MEGA TRENDS:

- Rapid population growth
- Rising land scarcity
- Labor force exit from farming
- Large-scale capital intensive investments
- Rapid urbanization and rising incomes
- Rise of 'investor farmers' / changing farm sizes
- Agrifood system transformation (supermarkets, e.g., processing etc.)
- Rapid growth in food demand and change in diet and diversification (protein diet)

Creates opportunities as well as challenges for smallholder farmers.
CLIMATE CHANGE
SUB-SAHARAN AFRICA: ONLY REGION OF WORLD WHERE RURAL POPULATION CONTINUES TO RISE PAST 2050

Source: UN 2013
NET CEREAL EXPORTS, SUB-SAHARAN AFRICA

Source: FAOSTAT, 2016
“Currently, sub-Saharan Africa (SSA) is amongst the (sub)continents with the largest gap between cereal consumption and production, whereas its projected tripling demand between 2010 and 2050 is much greater than in other continents. We show that nearly complete closure of the gap between current farm yields and yield potential is needed to maintain the current level of cereal self-sufficiency (approximately 80%) by 2050. For all countries, such yield gap closure requires a large, abrupt acceleration in rate of yield increase. If this acceleration is not achieved, massive cropland expansion with attendant biodiversity loss and greenhouse gas emissions or vast import dependency are to be expected.”

CHANGES IN THE SHARE OF TOTAL JOBS IN FARMING, NON-FARM AND OFF-FARM AGRI-FOOD SYSTEMS, AMONG THE WORKING AGE POPULATION (15–64 YEARS)

**Farming**

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**Non-farm outside Agrifood system**

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**Off-farm within Agrifood System**

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United Nations World Food Summit in Rome 1996:

“Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO 2006).
FOOD SECURITY & MARKET INTEGRATION

Price Volatility
- More frequent food crises
- Price instability
- ...Food markets not catalyzing rural growth

Agricultural commercialisation

Agricultural Diversification

Agricultural policies and political economy

Food security and trade

Market expansion (eg. public nutrition programmes)

Private Sector led Agricultural Investments (Value Chains)

Processing and value addition

Linkages to targeted formal market segments e.g. modern retail outlets, restaurants and hotels

Post Harvest Losses

Food/Nutrition security and Market information

Indaba Agricultural Policy Research Institute
Millions of small family farms in Africa are the continent’s main source of food, employment, and income.

The majority of Africa’s smallholders remain poor
Eg. 70%+ in Zambia

- Land constrained
- Low productivity
- High post harvest losses
- Limited input and output markets
- Unpredictable weather
- Liquidity constraints and limited access to credit
- High transport costs
- Bad agricultural policies
- Rampant land degradation
- Unpredictable agricultural policies
- etc.
AGRICULTURAL GROWTH AND POVERTY REDUCTION IN CHINA

Agricultural production

Rural poverty

Agricultural production index

Percent in poverty
GETTING MORE FOR FARMERS

Improved farm productivity – closing the yield gap high across all commodities and across African countries

Increasing marketable share, especially for food crops – including through reducing harvest and postharvest losses.

Optimising income generation through better access to remunerative markets

- Promoting sustainable uptake of available technology
- Expansion/improvement in extension service delivery
- Manage inputs price shocks
- Foster access by means of innovative financing systems
- Improving producer incentives by addressing challenges and risks in output markets - **Not through Government marketing boards** (WRS, Value addition, collective marketing, Insurance, market-friendly quality and quantity assurance systems)
MINIMIZING LOSSES & CREATING VALUE

Value Addition

Agro processing
Imagine an island with only two trees but lots of boats. The islanders produce two goods, coconuts and fish.

A nearby island has many trees, but it has very few boats.

Initially, there is no contact between the islands. However, a new navigational device will soon allow shipments between the islands.

What do you think would happen?
REGIONAL TRADE

- Untapped opportunities for farmers (10-12% Between African countries)
- Ad hoc import and export bans
  - raises smuggling costs, which depress prices for farmers and raise costs for consumers
- Price Instability
- Creates disincentives for private sector to invest in markets

Openness to regional trade
- Access to expanded market for products
- Consumers access to a wide range of products and services
Diversification into higher-value production
Reduced price volatility
CHALLENGES OF MARKET INTEGRATION AND REGIONAL TRADE

- Inadequate production capacity to generate exportable surpluses of commodities
- Low agricultural productivity

Poor Infrastructure
- Limited soft and hard infrastructure
- Limited irrigation systems (dependence almost exclusively on rain fed farming systems)
- Total investment in irrigation is 4% of crop area in SSA

Funding to research and development limited

Ad hoc agricultural policies
- Non-tariff barriers and export/import bans

Institutional deficiencies, insecurity, and conflicts
WHAT SHOULD THE POLICY CHOICE LOOK LIKE GOING FORWARD?

- Policies that promote modernization of the agricultural sector (e.g. mechanization, irrigation, increased use of ICT)
- Recognize that consumption patterns are changing in ways that are creating opportunities for smallholder farmers
- Openness to trade in food and investments led by the private sector (especially food staples)
- Policy stability – to attract private sector investment. Government funds alone are not enough to meet the rising demand
WHAT SHOULD THE POLICY CHOICE LOOK LIKE GOING FORWARD?

Embrace the new marketing innovations
• Crowd in private sector; both local and international
• Governments should put in place regulations that promote competition and more innovation

Investment incentives (e.g. Tax breaks) should be given to both local and international investors

Governments should focus public investment into areas that stimulate growth instead of private goods
• Subsidies should not crowd out private sector participation (e.g. input subsidies) e-vouchers and cash transfers to create effective demand
Should we be expecting that there is a staple food marketing/trade strategy that can catalyze growth, food and nutrition security ….. …..without also making progress on:

- Agricultural diversification and commercialisation
- Public investment in physical infrastructure?
- Technology – crop, fisheries and livestock science?
- Soil fertility?
- Improved farmer management practices?
- Extension?
- HIV/AIDS?
Policy network
Policy research networks associated with AGRODEP in Africa south of Sahara

Media analysis tools
Covering regional major crops including maize

Soil profiles
Soil grid map application collaborated with SoilGrids.org

Agricultural R & D indicators
on institutional, investment, and capacity trends in agricultural R&D.

Volatility & Early warning systems
volatility of local prices and of relevant commodities

Themes and discussion
Thematic topics (food access, food availability, input markets, risk and resilience, food consumption and nutrition)

Crop and Yield mapping
Crop calendar application collaborated with GeoGlam initiatives and yield mapping.

Indaba Agricultural Policy Research Institute
“Evidence-based policy helps people make well-informed decisions about policies, programmes and projects by putting the best available evidence from research at the heart of policy development and implementation. (Davies, P.T., 1999)
FARMERS’ ACCESS TO MARKETS AND SERVICES

Thank you