Emerging Issues in the Agricultural Sector

Implications to Successful Implementation of Feed the Future

Feed the Future Partner's Meeting

Dar es Salaam

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Presentation Outline

- **Introduction**
- **Rising food imports**
- **Demographic transition**
- **Rising incomes and emerging middle class**
- **Rapid urbanization**
- **Technology and innovations**
- **Opportunities for intra-regional trade**
- **Emerging oil and gas sector**
- **Asking critical questions**
  - **Is Tanzania/Africa ready for FDI in agriculture?**
  - **Is governance/accountability getting better for PPP?**

Emerging Socioeconomic Issues

and implications to Competitiveness of Tanzania's agriculture

Increasing population

- Africa = 1 billion people in 2012 and projected to double in 40 years
- Tanzania = 42 million in 2012 and projected to reach 70 mil by 2025
- Population growth versus agricultural sector growth. E.g. Tanzania: Overall GDP growth = 2.9 versus ag GDP growth of 4.2% (net=1.3%)
- Increased food demand
- Land fragmentation
- Agriculture intensification in land scarce areas
- Rising land price and conflict – e.g. high growth sectors are land intensive – ag, tourism, mining, etc

Emerging Socioeconomic Issues

and implications to Competitiveness of Tanzania's agriculture

Changing Demographics

- Falling Median age :Africa = 20, Asia=30, Europe=40 and Tanzania =18
- Falling fertility rate – in medium term the median age will rise and hence improve the dependency ratio leading to "demographic dividend"
- However, currently countries are facing youth unemployment and unfavorable ag labor force
- Increasing female headed households- In Tanzania fhhh was 18% in 1991 and increased to 25% in 2007– land rights, crop and technology choice

Emerging Socioeconomic Issues

and implications to Competitiveness of Tanzania's agriculture

Rapid urbanization

- 50% of Africa's population will be living in urban areas by 2025 (Tanzania's projections vary – 2025/30)
- Urbanization means the majority of population will be getting their food from the market (as opposed to their farms)
- Urbanization calls for leap forward in agricultural productivity e.g. one third of population to feed two-thirds of population
- Need to ensure markets and food systems work efficiently – better market based policies
- Need for economies of scale in production and value chain – implications for land tenure and greater engagement of private sector in production, storage, processing, distribution and retailing
- Private sector is gradually articulating
- Urbanization combined with the youth factor will have implications in the governance strategy

Emerging Socioeconomic Issues

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Increasing Incomes and Emerging middle class

- 12 African countries had annual GDP growth rates of 6% and above for at least 6 years
- 60 mil households (300 mil people) in Africa have annual incomes greater than $3,000 (projected to increase to 100 mil households by 2015)
- Increased demand as reflected in rising food prices and food import bill
  - In 2010 Africa spent $52 bil in food imports
  - Major imports: wheat, rice, sugar, edible oil, dairy, meat (beef & poultry), fruits and vegetables
- Urbanization and increasing incomes are contributing to changing eating habits
- Private sector is gradually articulating the changing demand e.g. emerging supermarkets

Emerging Socioeconomic Issues

and implications to Competitiveness of Tanzania's agriculture

- Technology
  - ❑ Reducing communication and transaction costs
  - ❑ Market information and mobile money transfer

- Emerging Oil and Gas sectors (Ghana, Mozambique, Uganda, Tanzania etc)
  - ❑ Implications to agriculture competitiveness

- Regional integration – EAC, COMESA, SADC etc
  - Share of intra-regional trade: Africa = 10%, EAC=12%, Europe=40% and Asia=60%

Rising Global Food Prices

Recent Trends in Price of Staples

Tanzania: Average Wholesale Price of Staples Tsh/100kg

Staple	Oct 2010	Oct 2011	% Change
Maize	30,108	42,453	41
Rice	88,269	143,233	62
Beans	104,508	124,831	19

Capitalizing on High Food Prices:

Wholesale Price of Staples – First week of March 2012 (US $/Ton)

Market	Rice	Maize
Bujumbura	1456	348
Dar es salaam	1272	311
Kampala	1316	265
Kigali	1173	390
Nairobi		356

Tanzania: Agricultural Trade Balance

	2006	2007	2008	2009	2010
Ag Export	267.1	319.7	507.3	479.6	559.0
Food Import	273.9	346.6	333.5	377.3	507.3
Fertilizer Import	59.2	65.0	188.5	104.6	126.4

Factors Contributing to the Surge in Food Price

- **Demand Factors**
  - **Population increase including rapid urbanization (42 mil and projected to reach 70 mil by 2025)**
  - **Increase in per capita income**
  - **Increased demand for biofuel**
  - **Dollar devaluation and Tsh exchange rate fluctuation**
  - **Speculation in future markets**
- **Supply Factors**
  - **Escalating crude oil prices**
  - **Rising production cost – fertilizer price**
  - **Adverse weather condition – climate change**
  - **Slow growth in agricultural production**

Profiles of Youth Farmers in Tanzania (under 40yrs)

Under 40 years farmers are more likely than older farmers to:

- **Grow staples and annual crops (rice, maize, horticulture, etc than traditional permanent and export crops (coffee, cashew, tea, etc)**
- **Engage in irrigated agriculture**
- **Rent land (or being immigrant farmer)**
- **Produce for the market**
- **Engage in post harvest activities**

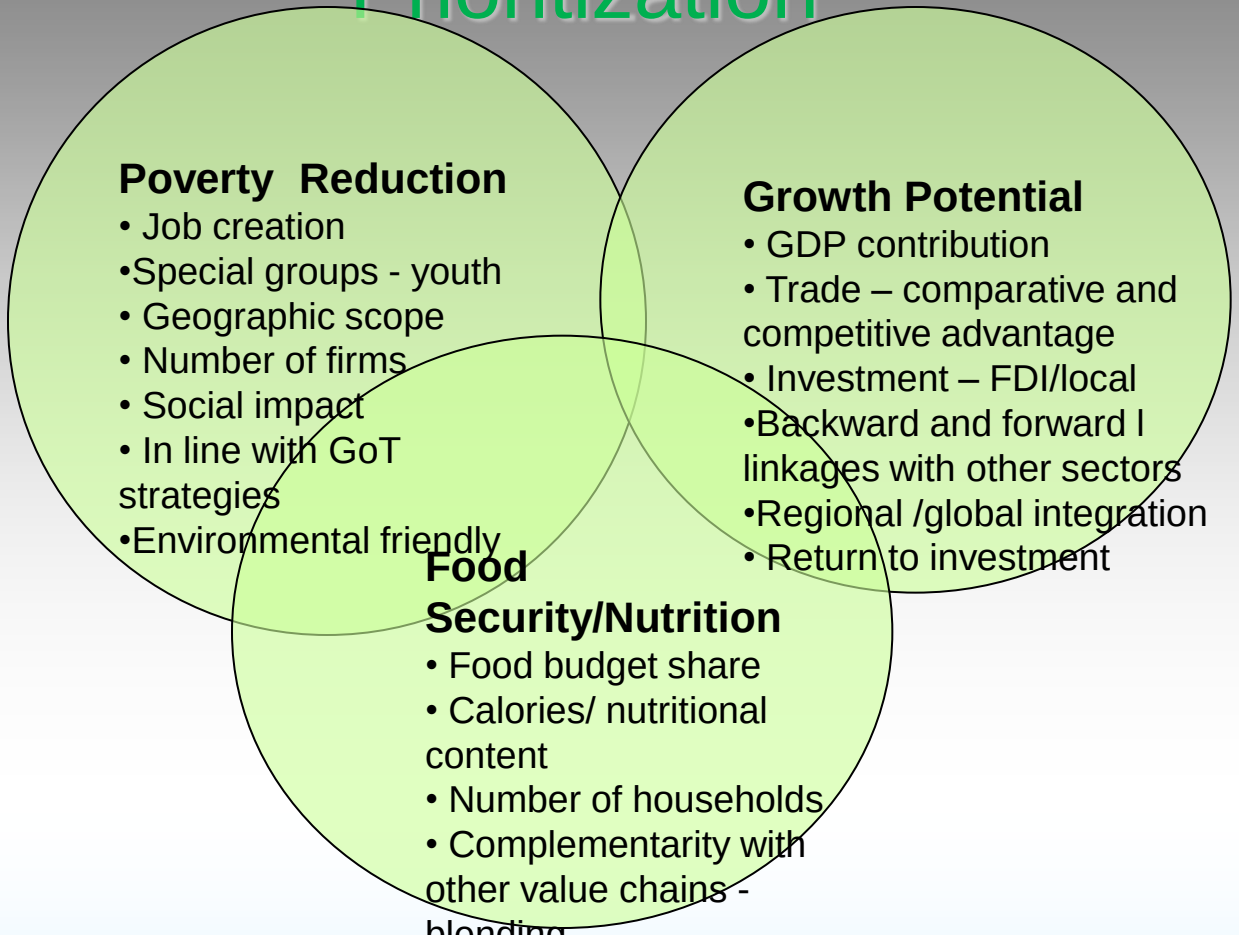
Feed the Future Considerations in Youth Engagement

- **Value chains with greater youth participation – rice and horticulture**
- **Value chain activities**
- **Internship program**
- **Leadership capacity building**
- **Graduate training – targeting under 40 years**
- **Nutrition – targeting early childhood nutrition for a healthy population**
- **Enabling environment for private sector – create employment opportunities**

Lessons From Early Successes in the Rice Value Chain

- Rice is one of the popular value chain by youth in Tanzania
- Rice production increased by 80% from 530,000 to 910,000 tons (milled) from 1998-2011 with a concurrent decrease in imports
- Yield are 1 ton/ha (milled rice equivalent). The potential is 3tons/ha
- Household budget survey increase in the budget share of rice and a concurrent decrease in the share of maize
- Tanzania mainland annual imports average 8% of its needs (80,000 tons), whereas Zanzibar imports an annual average 85% of its needs (60,000 tons).
- Rice is imported from Vietnam, Thailand, India, Pakistan, China and Japan.
- Tanzania is the largest rice producer in the East Africa region
- Export of 100,000 tons of rice could generate the same level of foreign exchange as coffee export today
- Consistent public investment in new and maintenance of irrigation infrastructure is necessary

Strategic Value Chain Investment Prioritization



Prioritizing Regional Investment

- **Invest in strategic trade/transport corridors and consumer markets**
- **Need to align agricultural investment with existing infrastructure – e.g. SAGCOT aligned with roads, railway, power line, telecommunication, ICT, etc**
- **Consider geographic comparative advantage based on:**
  - **Agro-ecological conditions – climate, soils**
  - **Opportunity cost for land and labor**
  - **Resources – land, water**
- **Ensure agricultural investments are in harmony with other sectors for sustainability e.g. upstream vs downstream river basin**

Transformative Approaches

To unleash sector growth and transformation

- **Promote approaches that are catalytic, sustainable, with deeper impact, innovative, and with potential to leverage the greatest change, etc.**
- **Example:**
  - **Enhance agricultural sector competitiveness – reducing cost of doing business (for input, credit and product markets)**
  - **Unleash private sector investment – promote enabling environment, PPP such as SAGCOT**
  - **Advocate interventions that would leap forward productivity – irrigation, research**
  - **Promote efficiency in value chains – contract farming, mobile technology, GPS in land titling, targeted mechanization, etc**

Diversifying Agricultural Exports Through Promotion of Staples

- **Tanzania has relied on traditional exports such as coffee, tea, etc that are vulnerable to changes in global demand and supply**
- **Staples offer opportunity to diversify products and markets concurrently – 50,000 ha with yields of 3-4tons/ha= $100 -150 mil exp**
- **There is potential for intra-regional trade for staples as Africa has become a major food importer $14 billion in 2007 (Rice=$3 billion)**
- **Price of some staples such as rice is within a price range of some traditional exports e.g sisal ($1,300/ton) and cashew ($900-1,100/ton)**
- **Staples have a shorter incubation period (3 months) compared with traditional exports such as coffee**
- **More households participate in staples value chains than traditional exports**
- **Irrigated agriculture such as paddy/rice is attractive to youth**
- **However, lack of processing and postharvest operations are binding constraints**

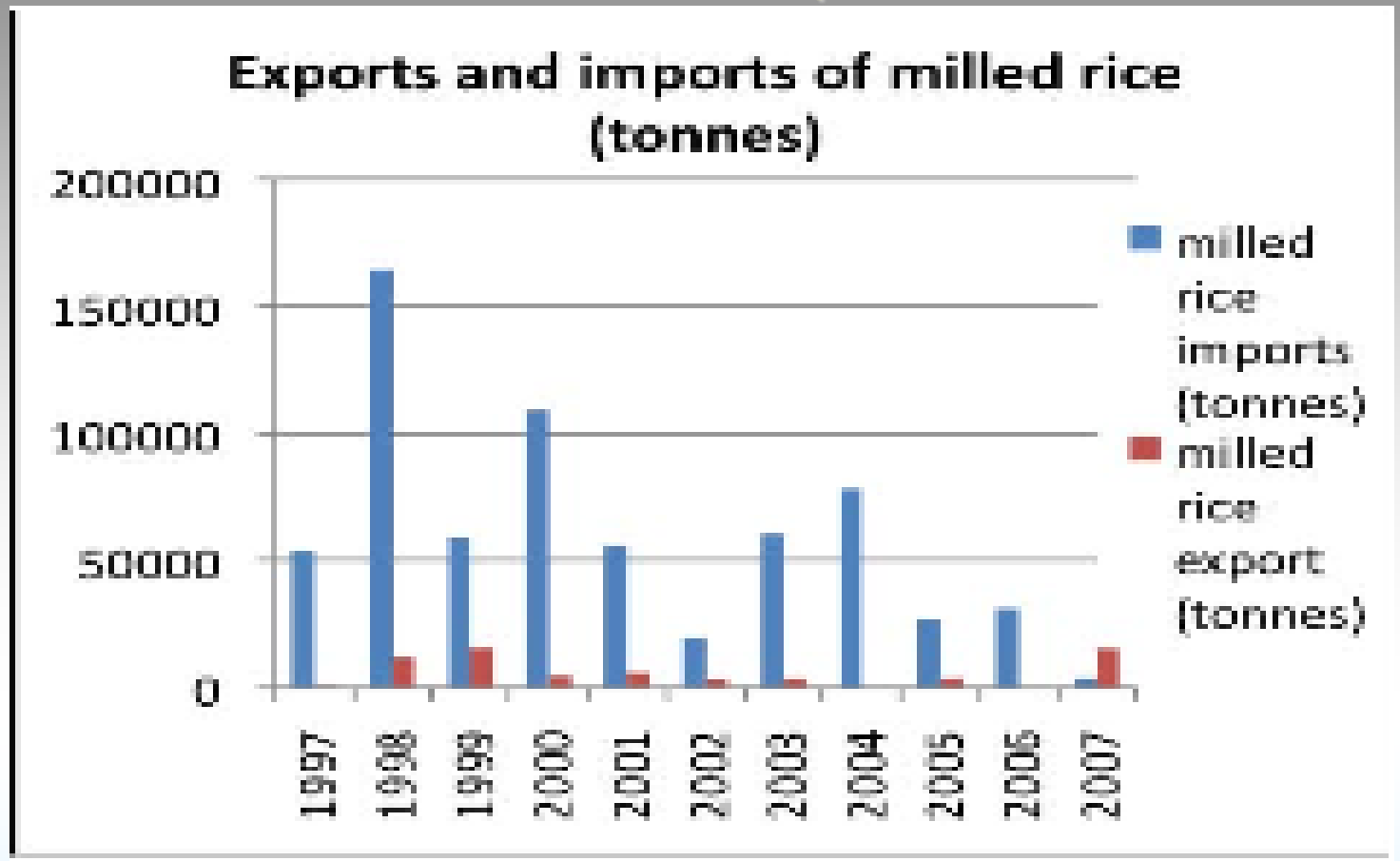
Key Issues to a Successful Rice Value Chain

- **Public investment in irrigation infrastructure under NIDF and DIDF with a complementary investment in rural roads**
- **Improved productivity from 1 to 3 tons/ha (milled rice equivalent)**
- **Land fragmentation addressed through land leasing and hence plot consolidation to achieve economies of scale (30-40% of farmers in irrigation scheme lease land to others)**
- **Strategic mechanization is necessary**
- **Large concentration of farmers in schemes attractive to private sector investment in milling and warehousing agro-input and tractor dealership**
- **Irrigation schemes are attractive to youth – average age of farmers is lower than the mainstream population**
- **Sustainability – 5% of harvest contributed to maintain the infrastructure, agency dedicated to irrigation, watershed management**

Returns to Investment in Irrigated Rice

- **The cost of developing irrigation infrastructure for rice is about $3,500 - $4,000 per ha**
- **Under average crop husbandry yield of 3-4 tons/ha of milled rice equivalent could be achieved**
- **With the prevailing wholesale price of over $1,000/ton (even as low as $500/ton) returns to investment would be very high**
- **A recent cost benefit analysis done in Tanzania show IRR ranging from 14-44%**
- **A recent study by USAID shows that Tanzania informally export slightly over 100,000 tons**

Tanzania Has Made Great Strides in Increasing Domestic Rice Production Resulting in a Concurrent Decline in Imports



Source: FAO

Conclusion

- **Youth engagement is critical to the success of agricultural and poverty reduction strategies**
- **Countries could capitalize on the demographic dividend by engaging youth**
- **Strategic choice of value chains and interventions is important to enhance youth engagement**
- **Post harvest operations in agriculture value chains offer opportunities for youth employment**
- **Youth force could be an opportunity and threat to country economies depending on how countries would manage this demographic transition**