Regional Markets Outlook and Lessons for the Dairy Sector in Tanzania

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International Livestock Research Institute (ILRI),
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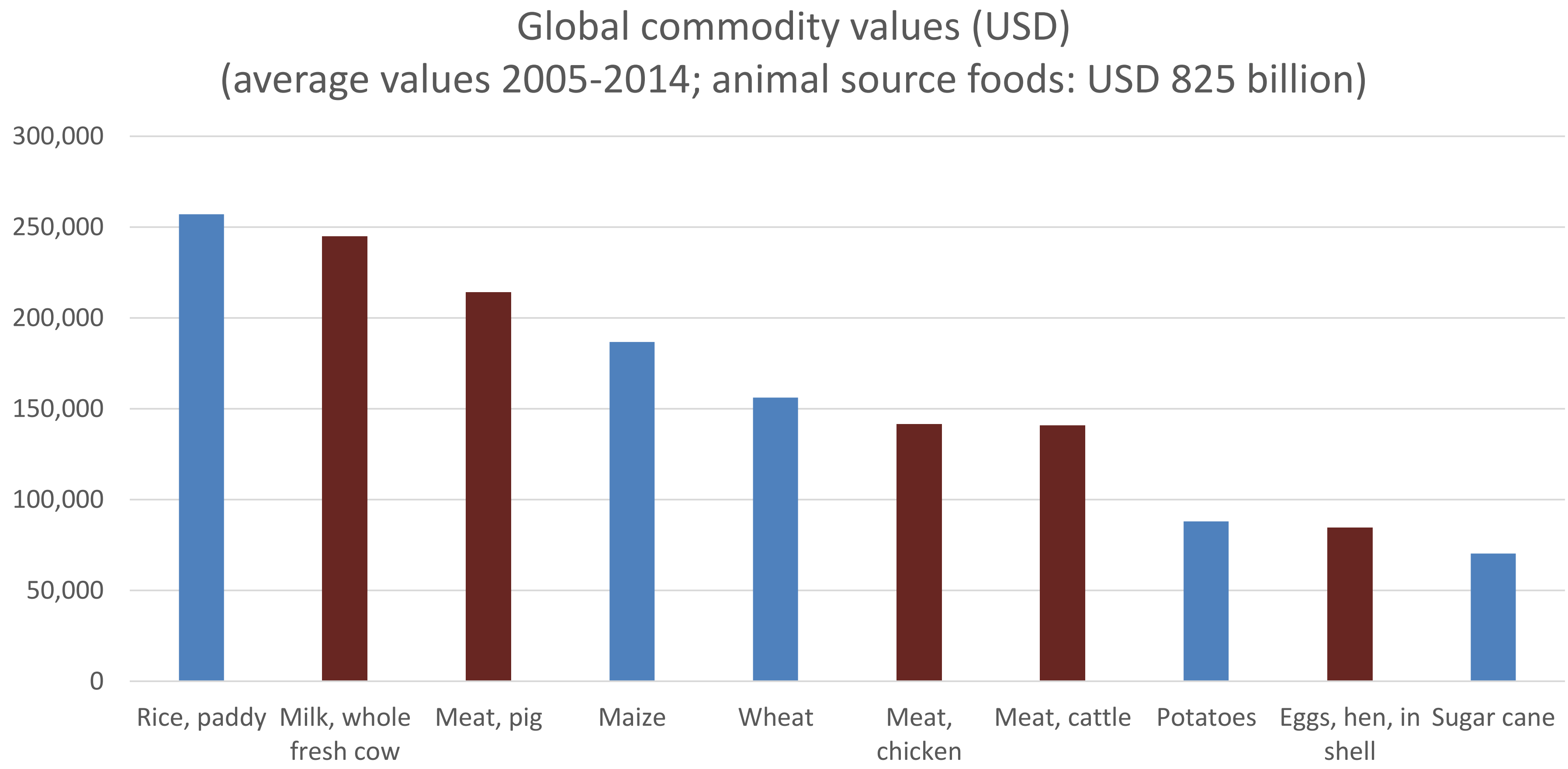
Overview

- Regional dairy markets outlook
- Lessons from successful programs in the region
- Upgrading the value chain in Tanzania: key problems to address
- The How question: Key lessons to enhance competitiveness from recent / ongoing collaborative research & development initiatives

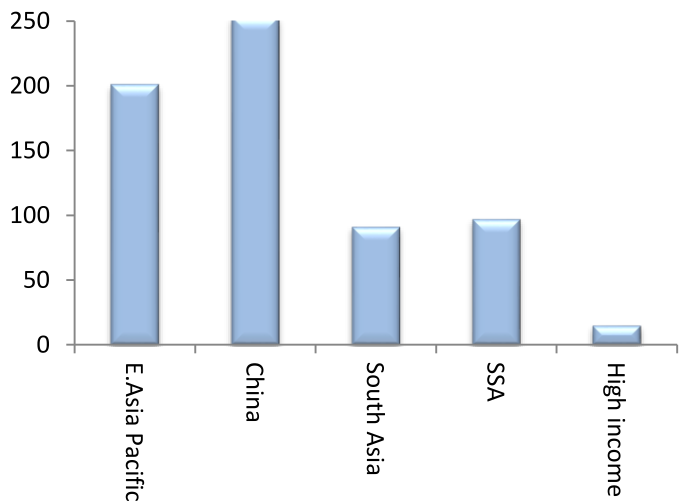
Five of the top ten global agricultural commodities by value are animal source foods



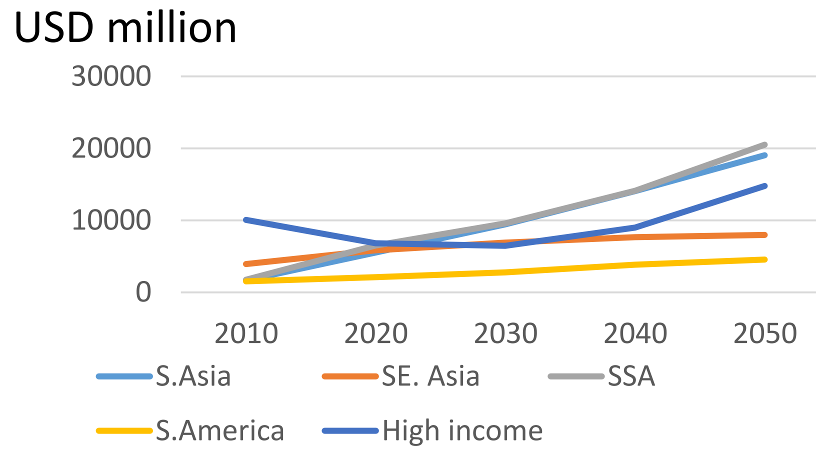
Demand driven by increasing population, urbanisation and incomes

High growth in demand for milk in developing countries – projections and implications

Milk demand projection to 2030



Demand for milk imports to 2050 – growing fastest in SSA



Implications ….

Transform smallholder dairy value chain

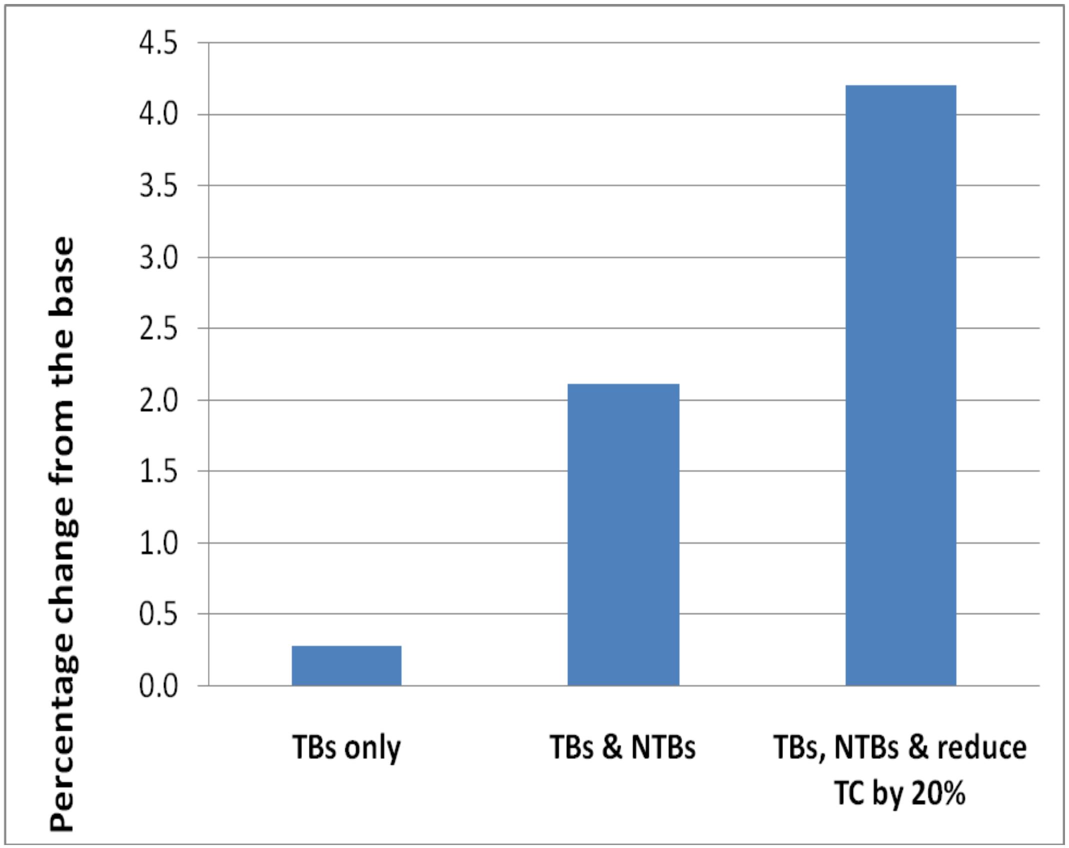
OR…

Import products or
Rely on industrial production know-how

Estimates of the % growth in demand for animal source foods in different World regions, comparing 2005 and 2030. Estimates were developed using the IMPACT model, courtesy Dolapo Enahoro, ILRI.

Regional trade is a win-win for producers and/or consumers in EAC countries

Aggregate welfare effects of removing trade barriers across EAC countries




Development Policy Review

Original Articles

Beyond Tariffs: The Role of Non-Tariff Barriers in Dairy Trade in the East African Community Free Trade Area

Correction(s) for this article

Ayele Gelan, Amos Omore

First published: 11 August 2014 | https://doi.org/10.1111/dpr.12071

Read the full text

- Traded volumes are still very small compared to domestic markets across East Africa
- Tanzania has relatively low milk supply and the highest milk prices in the region

Regional examples of dairy sector evolution

Kenya:

- Livestock is **42%** of ag GDP (**12%** to total GDP)
- **18m** cattle (**4m** mostly smallholder dairy); **significant formal sector**
- Dairy contributes **8%** to total GDP
- Long history of public investments in **push** (e.g., AI subsidy for 10 years in the 70's - 80's) and **pull** (e.g., school milk program). Private sector has leveraged these public investments.

Rwanda:

- Girinka program has resulted in **>10-fold** increase in production in 15 yrs;
- The smallholder dairy sector now contributes to **6%** to GDP

South Africa:

- Production base is mostly large-scale with higher productivity

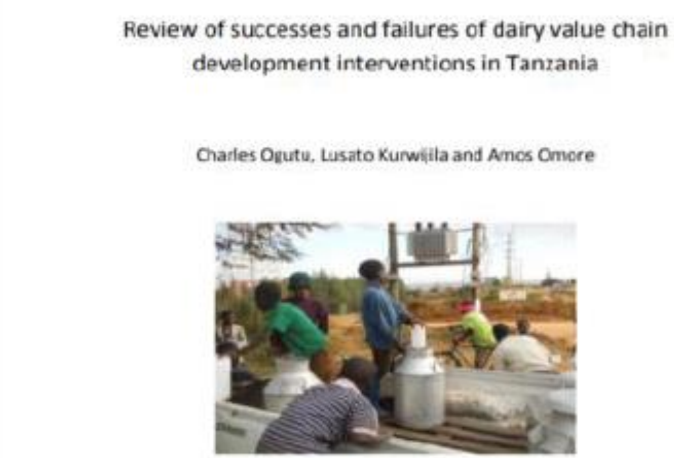
Githunguri Dairy Farmers Cooperative Society, Kenya

- Another successful inclusive push-pull example
- Dramatic growth since starting milk processing in 2004; now Kenya's 3rd biggest dairy operation with approx. 20,000 members
- High concentration:
  - 76 collection centres spread across the division - a catchment area of only 170 km^2 (<20km diameter)
  - Over 200,000 kgs of milk per day;
- Competitiveness factors: leadership, good management, quality standards, good market pull given proximity to Nairobi, farmers and value chain actors can profitable invest in inputs and services

Investments: Tanzania vs regional peers

Tanzania dairy

- Huge potential but livestock is only **13%** to ag GDP (**7**% of total GDP)
  - **28m** cattle (**0.8m** dairy); small formal sector
  - Dairy contributes **1.5%** of total GDP
  - Similar conditions but history of low public & private investments (hence the Livestock Master Plan)
  - Current investments need to be sustained and increased!



Review of successes and failures of dairy value chain development interventions in Tanzania

Charles Ogutu, Lusato Kurwijila and Amos Omore

Source: https://hdl.handle.net/10568/65154

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Key inter-related problems to address

1. Dominant direct sales of small volumes of raw milk preclude economies of scale

2. Low access to basic inputs and services, credit and working capital. This discourages investment to improve productivity

3. Lack of appropriate organizational or business models for upgrading pre-commercial & small-scale production

4. Seasonality of rainfall and related effects are strong

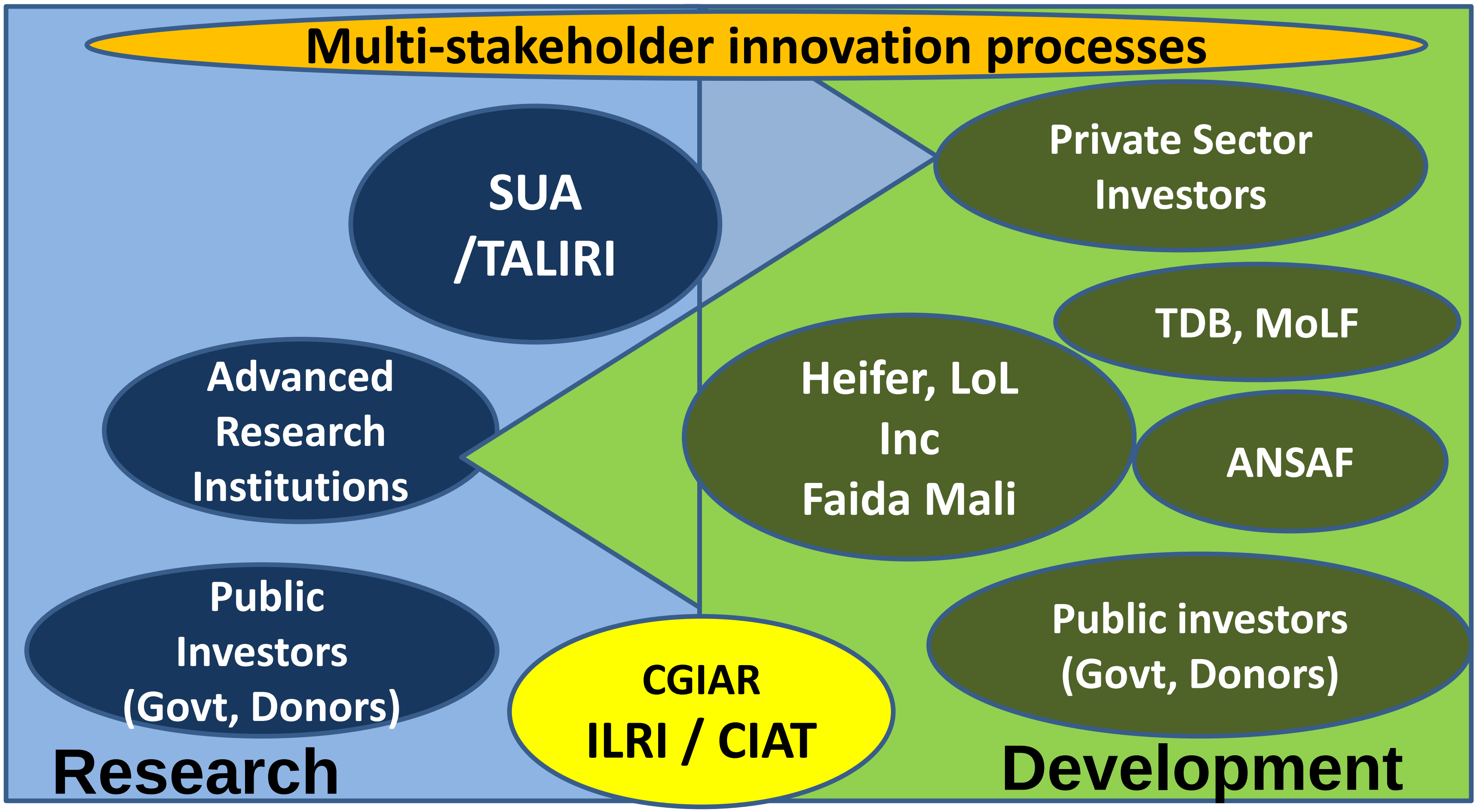
Tanzania NBS and FAO data reveals:

- The 20% of households that use extension services earn thrice than those who don't!

Research focused on proving the concept that marginalized pre-commercial producers can be targeted successfully

The How - Key lessons from recent / ongoing initiatives: Maziwa Zaidi, EADD, ADGG/PAID etc

R&D actors involved in the initiatives



Examples of activities: Value chain assessments, testing of solutions, targeted studies; gender analysis, capacity building, MLE, advocacy

The How - Key lessons from recent / ongoing initiatives: Maziwa Zaidi, EADD, ADGG/PAID

Dairy Production: feeds and forages technologies

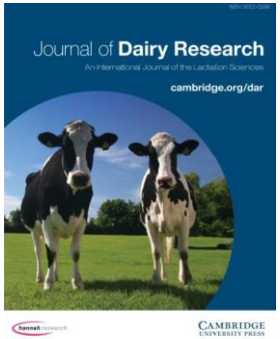
- Feed (quantity and quality) is the most important constraint for value chain upgrading. Cross bred do not produce to their full potential due to under-feeding
- Encourage adoption of improved forage species and good agronomic practices through raising awareness, feed conservation, fodder markets, participation in innovation platforms and business hubs
- Improve feed quality testing and certification
- Promote inclusive agribusinesses

Source: https://livestock.cgiar.org/2017/06/14/tanzania-investment-opportunities/

The How - Key lessons from recent / ongoing initiatives: Maziwa Zaidi, EADD, ADGG/PAID

Dairy Production: genetics, farm efficiency & sustainability

- Expand dairy herd (now only 3% of 28m cattle). AI used by only 20% of dairy households currently.
- Herd recording for smallholders now piloted and should be scaled (thanks to ICT!). High grade local bulls better suited to local systems are continually being identified
- Public investments are required for at least 5 years in places like Kilosa for AI agribusinesses to become viable



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Dairy markets and linkages

- Existing processing facilities are under supplied; imports are filling the gap!
- Participation in pre-commercial /informal dairy hubs improves revenue by 20% and nutrition (odds = 3.5).
- Informal hubs can act as ladder towards more capitalized / formal business hubs, but they need support for organizational development and agribusiness orientation
- Individual enterprises should be incentivized to become inclusive business hubs linked to smallholders for inputs and services

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Source: https://livestock.cgiar.org/2017/06/14/tanzania-investment-opportunities/

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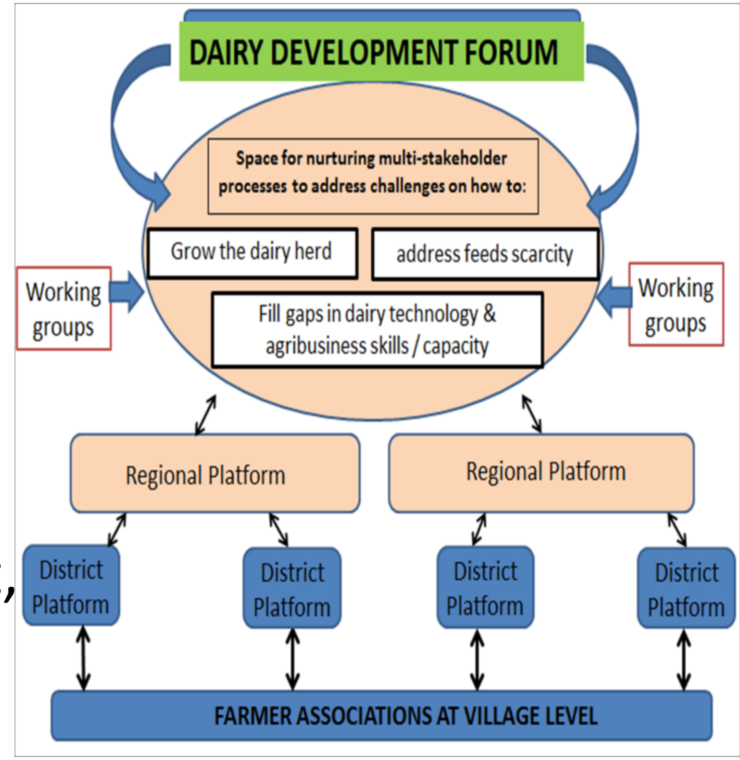
Multi-stakeholder processes (MSPs)

- Innovation platforms and hubs facilitate information sharing, collaboration among value chain actors and technology transfer (e.g., improved forage species)
- A hierarchy of MSPs at village, district, regional and national levels can improve policy making and catalyze widespread innovation



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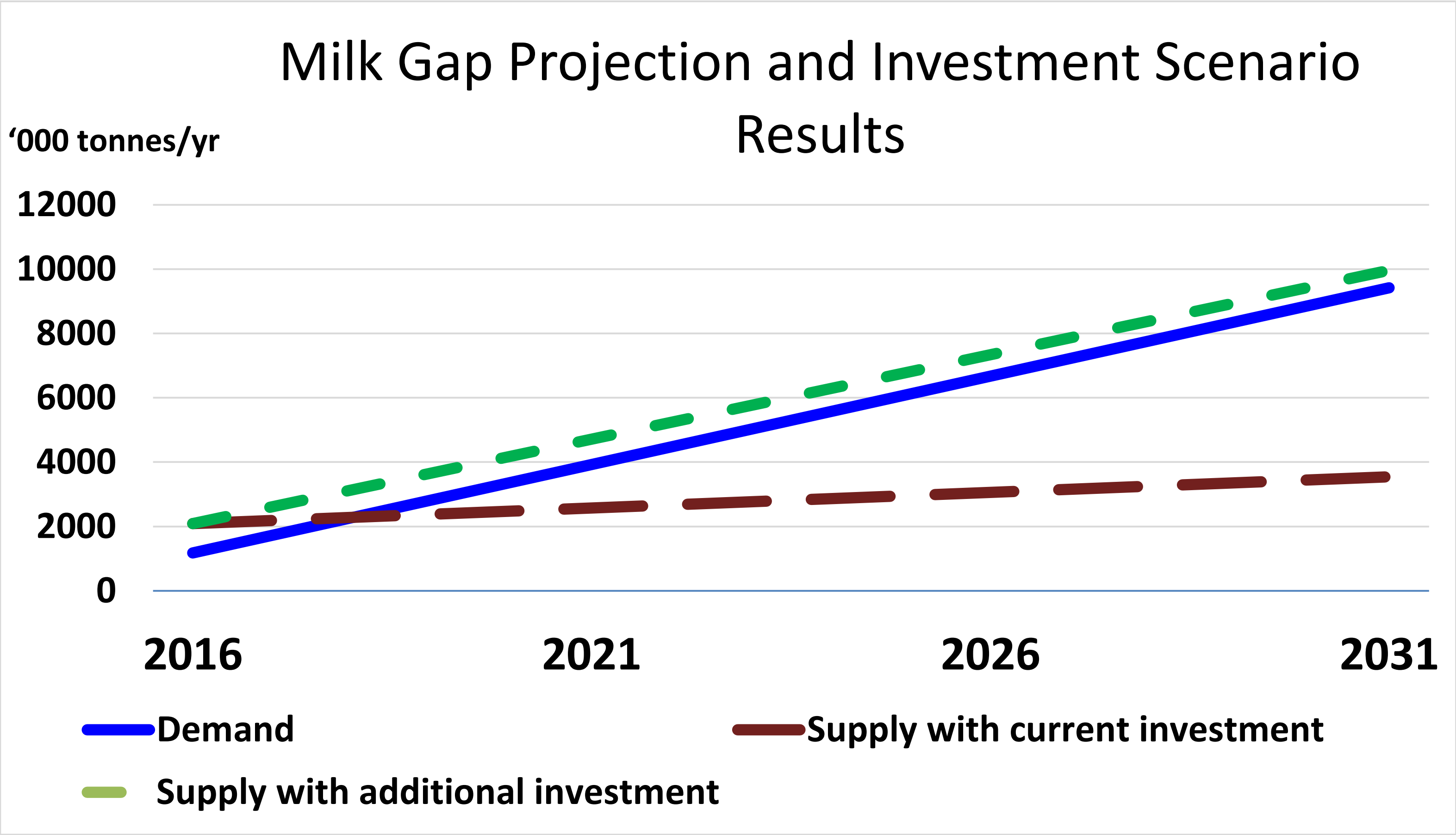
Dairy policy & inclusivity

- A supportive policy is needed to improve nutrition outcomes in low income households
- Policy proposals in the TLMI / LMP would increase milk producer and consumer welfare by about USD 3m annually
- Engagement in the informal sector is riskier, especially for the youth, but it must be the basis for inclusive upgrading
- Ownership at farm level is defined according to gender norms

Source: https://livestock.cgiar.org/2017/06/14/tanzania-investment-opportunities/

Dairy projections in Livestock Master Plan



Every 100 liters of marketed milk creates 4 jobs on- and off-farm, so bridging this gap will generate many jobs!

Source:: https://livestock.cgiar.org/2018/01/30/tanzania-lmp/

The How – Dairy proposals in the Livestock Master Plan

- Investments in feed, breeding, animal health, marketing and policy (as above)
- Investment in long shelf-life (LSL) **milk** processing by the private sector is crucial for overcoming the huge projected milk deficits and manage seasonal flush periods
- Now there are 74 dairy plants operating at 30% capacity which produce mainly short shelf life products like pasteurized and fermented milk, yoghurt, etc.
- Need 3 UHT and 2 powder milk processing plants
- The key policy changes needed are incentives to increase investment LSL **milk** processing and **milk** quality standards enforcement

Source:: https://livestock.cgiar.org/2018/01/30/tanzania-lmp/

Key messages

- Trends show the region’s dairy industry is growing rapidly driven by growing demand
- Significant opportunities exist for Tanzania’s dairy sector
- More private and public investments are required to address the challenges and take successes to scale
- Support growth of inclusive agribusinesses along the value chain
- Tanzania is now primed to unleash its huge potential to become a leader in dairy production in the region

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