Integrating Food and Nutrition Security into Economic Transformation and Industrialization Agenda:
How can agriculture be the driver rather than follower of economic transformation in Tanzania?

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Challenges and Prospects of Smallholder Dairy Farming in Tanzania

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OUTLINE

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  - Challenges to Dairy Farming
  - Opportunities to Dairy Farming
- Insights on the Prospects of the Tanzanian Smallholder Farming
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Despite challenges, dairy sub-sector has a great potential for enhancing the livelihoods of smallholder farmers to have more productive enterprises that will help feed future generations and contribute towards industrialization and reduction of poverty.

- Source of animal protein,
- Income; and
- Employment

Africa Dairy genetic Gains (ADGG) program seeks to provide better dairy cattle to smallholder farmers by:

- Establishing performance recording and selecting crossbred bulls and cows of superior genetic merit for artificial insemination (AI) and natural mating.
This Paper Aimed at:

- Analyzing Key Challenges Facing Smallholder Dairy Farmers
- Identifying Opportunities for Smallholder Dairy Farmers
- Highlighting Insights on the Prospects of the Tanzanian Smallholder Dairy Farming
METHODOLOGY and DATA ANALYSIS

- Baseline survey collected using paperless questionnaire coded using Open Data Kit [https://opendatakit.org/](https://opendatakit.org/) (ODK)

- Survey was carried out in Tanga, Kilimanjaro, Arusha, Iringa, Njombe and Mbeya sites

- Total of 16,809 dairy farmers were interviewed

- Information regarding general husbandry practices and potential challenges and opportunities were analyzed using SAS software
RESULTS
Challenges to Dairy Farming

- Arusha
- Iringa
- Kilimanjaro
- Mbeya
- Njombe
- Tanga

- Feed unavailability
- Lack of proper breeds
- Prevalent Diseases
- Low milk prices
- Lack of information
RESULTS - OPPORTUNITIES

BREEDS

- Ayrshire
- Boran
- Brown Swiss
- Holstein crosses
- Jersey
RESULTS - OPPORTUNITIES

LAND

LAND SIZE OWNERSHIP

<table>
<thead>
<tr>
<th>Size Range</th>
<th>Ownership</th>
</tr>
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<tbody>
<tr>
<td>&gt;10</td>
<td>1%</td>
</tr>
<tr>
<td>6.01-10.0</td>
<td>2%</td>
</tr>
<tr>
<td>1.01-5.00</td>
<td>33%</td>
</tr>
<tr>
<td>0.51-1.00</td>
<td>29%</td>
</tr>
<tr>
<td>0.26-0.50</td>
<td>19%</td>
</tr>
<tr>
<td>0.0-0.25</td>
<td>16%</td>
</tr>
</tbody>
</table>

LAND USE

- Livestock: 38%
- Pastures: 4%
- Staple crops: 4%
- Trees: 2%
- Vegetables: 52%
RESULTS - OPPORTUNITIES

FARMER GROUPS

- Social Welfare/Community Dev
- SACCO
- Livestock producer group
- Livestock marketing groups
- Agricultural producer group
- Agricultural marketing group
INSIGHTS ON PROSPECTS

- Look at the dairy value chain as a whole
- Promote increased productivity per animal THROUGH:
  - Strategic cross breeding
    - Establish performance recording, select crossbred bulls and cows of superior genetic merit, mating through artificial insemination (AI) or natural method
  - Conservation and use of improved pastures
  - Animal health management routine
  - Proper calf management - *Today’s calf is tomorrow’s cow*
Promote value addition of dairy farm products:
- Milk products (Ghee, Yogurt, Cheese etc.)
- Bio gas (Manure)
- Other products e.g. Hides, Hoofs, Horns

Promote stakeholder engagement
- Farmer to farmer visits
- Research-Extension-Farmer linkage
- Stakeholders forums (TDB)- Farmers, Researchers, Policy makers, Processors etc.
INSIGHTS ON PROSPECTS Cont’d

- Enabling environment:
  - Policies
    - Fasten the Breeding act
  - Financial services
    - Empower Farmers to access livestock financial services
  - Access to inputs
    - Empower Farmers to access livestock inputs
      - Quality Feeds
      - Quality Drugs
      - Standard Milk Containers
CONCLUSION

- Smallholder dairy farming has the potential for growth to improve nutrition, support industrialization and reduce poverty.

- The challenges provide the opportunities needed to take the sector to the next level.

- Research - Extension - Farmer linkages should be enhanced.

- Government should create an enabling environment for smallholder dairy farmers.
THANK YOU