



## 6<sup>th</sup> DAIRY DEVELOPMENT FORUM

(DDF)



Report of the 6<sup>th</sup> DDF meeting held on MAY 29<sup>TH</sup> 2016 at the Njombe district council hall

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## Acronyms

|                 |   |
|-----------------|---|
| <b>AI</b>       | Artificial Insemination   |
| <b>CoP</b>      | Cost of Production  |
| <b>DALDO</b>    | District Agricultural and Livestock Development Officer                 |
| <b>DDF</b>      | Dairy Development Forum   |
| <b>EADD II</b>  | East Africa Dairy Development Project-phase ii                          |
| <b>HPI</b>      | Hiever Project International  |
| <b>ICRAF</b>    | World Agro-forestry Centre  |
| <b>ILRI</b>     | International Livestock Research Institute                              |
| <b>LGA</b>      | Local Government Authority  |
| <b>LITA</b>     | Livestock Training Agency   |
| <b>MALF</b>     | Ministry of Agriculture, Livestock and Fisheries                        |
| <b>MCC</b>      | Milk Collection Centre  |
| <b>MITI</b>     | Ministry of Industry, Trade and Investments                             |
| <b>NAIC</b>     | National Artificial Insemination Centre                                 |
| <b>PAID</b>     | Public Private Partnership for Artificial insemination Tanzania Program |
| <b>RIU</b>      | Research into Use   |
| <b>RLA</b>      | Regional Livestock Advisor  |
| <b>SIDO</b>     | Small Industries Development Organisation                               |
| <b>SNV</b>      | Netherlands Development Organisation                                    |
| <b>TADB</b>     | Tanzania Agricultural Development Bank                                  |
| <b>TALIRI</b>   | Tanzania Livestock Research Institute                                   |
| <b>TAMPRODA</b> | Tanzania Milk Producers Association                                     |
| <b>TANESCO</b>  | Tanzania Electricity Company  |
| <b>TDCU</b>     | Tanga Dairy Development Cooperative Union                               |
| <b>TOSCI</b>    | Tanzania Official Seed Certification Institute                          |
| <b>TRA</b>      | Tanzania Revenue Authority  |
| <b>TZS</b>      | Tanzania Shillings  |

## 1. Background

### 1.1 About DDF

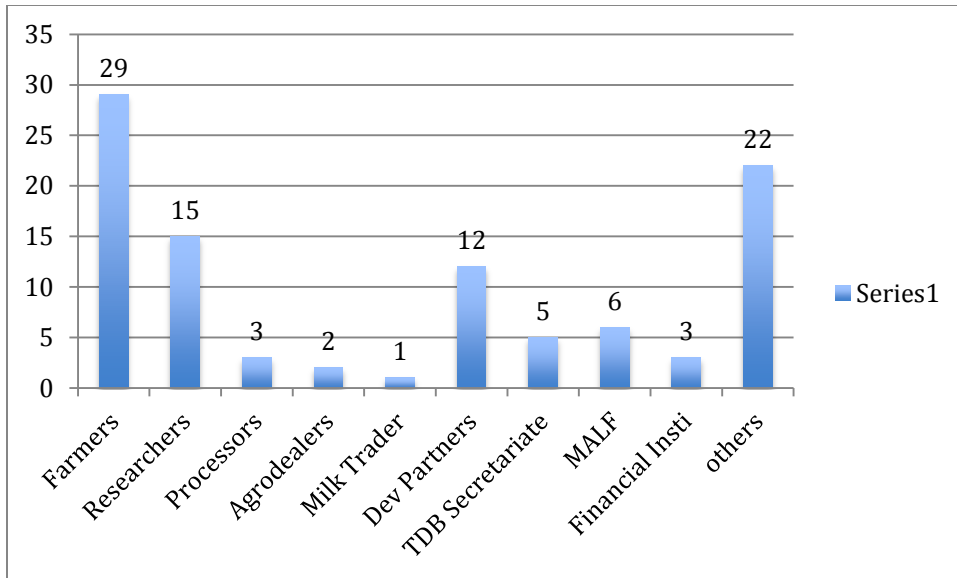
The Tanzania Dairy Development Forum (DDF) was launched on 22 February 2013 to bring together national dairy actors in a bid to explore a coordinated and collaborative approach to the development of Tanzanian dairy industry. Nested under the authority of the Tanzania Dairy Board, whose role is to strategically plan and coordinate sector development “in an orderly manner”, the DDF acts as a platform where initiatives can be conceived and acted on, where evidence of what works and what does not can be shared and discussed, and where action-based alliances between like-minded actors can be formed. It aims to fill gaps in (1) dairy technology and agribusiness skills, craft strategies for (2) expanding the national dairy herd and (3) seek business solutions for year-round availability of quality feeds. The Secretariat role of the DDF is performed by the Tanzania Dairy Board.

### 1.2 INTRODUCTION

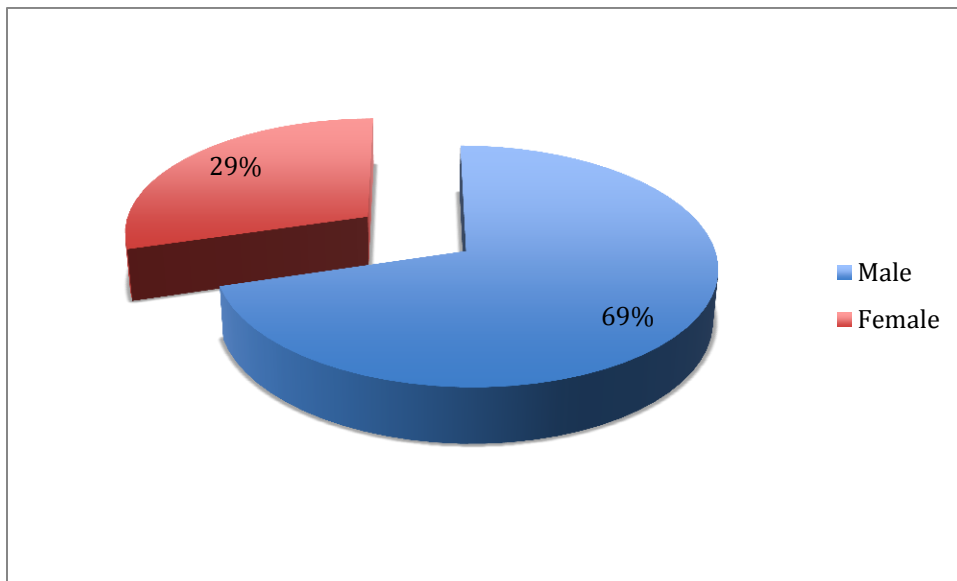
The sixth DDF was held on May 29<sup>th</sup> in Njombe region at the Njombe district council Hall. It was held concurrent to the annual national milk promotional week (venue for the milk week was at Mpechi Secondary School), where the theme for the milk week was “Jenga tabia ya kunywa maziwa salama kwa afya na uchumi’ meaning ‘building a culture for consuming processed milk for health and economic growth’.

A total of 98 value chain actors and supporters -attended the 6<sup>th</sup> DDF meeting from different regions and institutions (**see Annex 1 for list of attendees**). Out of the attendees, 28 were female while the remaining 70 were men. The regions represented were: Tanga, Pwani, Dar es Salaam, Morogoro, Manyara, Songwe, Kigoma, Mbeya, Arusha, Kilimanjaro, Tabora, Rukwa, Iringa, Ruvuma and Njombe. Milk producers topped the list followed by researchers and trainers as can be seen on the below graph.

*Participants disaggregated by function/role*



*Segregation of attendees by Percentile*



### 1.3 Rational of the 6<sup>TH</sup> DDF Forum

The workshop was intended to bring together various stakeholders including but not limited to livestock farmers, development partners like ILRI, Heifer, SNV, Land O' Lakes; Ministry of Agriculture, Livestock and Fisheries, and other players in dairy value chain.

The objective of this workshop was to share progress and feedback from the task forces formed during the last (5<sup>th</sup>) DDF meetings addressing specific issues around dairy genetics and availability of feed resources to create solutions for these systemic bottlenecks towards a more inclusive dairy development in Tanzania. As a result of the above, the workshop focus was on:

- Synthesis output of the 1<sup>st</sup> to 5<sup>th</sup> DDF meetings
- Value chain actors access to finance
- Public Private Partnership for Artificial Insemination Tanzania Program (PAID)
- East Africa Dairy Development (EADD II) – Tanzania by understanding:
  - Dairy consumers’ study
  - Cost of Milk Production (CoP) in the southern highlands of Tanzania
  - EADD Approaches: Hub model and social capital development feedback from various groups on thematic issues
- Inspiration stories from dairy platforms,

#### **1.4 Methodology**

A participatory methodology was used during the 6<sup>th</sup> DDF held in Njombe. Presentations by stakeholders were made either by Power Point or verbal explanations. Both the participants and presentators asked questions for clarifications and to get the participants views. Questions and answers were recorded. Where applicable, participants worked in small groups to brainstorm and come up with appropriate ideas geared towards dairy development- finding local and national solutions.

#### **2.0. Opening of the meeting**

The 6<sup>th</sup> DDF meeting was officially opened by the chairperson for DDF Prof. Ruth Ryoba. In her opening speech she explained and reminded the participants the purpose of the Forum and its objectives. She took the opportunity and informed the participants that during the 5<sup>th</sup> forum -held in Babati last year, key challenges facing the sub sector in the country were highlighted and a common agreement reached which then led to the formation of task forces to address those key and systemic challenges.



She highlighted that, even though some efforts has been put in place to address the challenges, more efforts from the stakeholders are still needed to completely eliminate them. In order to make meaningful progress, it is important that all stakeholders work together for the development of dairy industry in the country.

The chairperson reminded the participants that it had been resolved in previous meetings that DDF should be held at least twice a year-therefore the stakeholders need to continue to make commitments and attend the meetings as soon as they are scheduled-the forums enable the sector to grow and actors to benefit as a team rather than individually.

### **3. Report from the task forces and development partners/programmes**

#### **3.1 Synthesis output of the 1<sup>st</sup> to 5<sup>th</sup> DDF meetings**

A [synthesis evaluation of the past five DDF workshops](#) was presented by the Tanzania Dairy Board Chairperson - Dr. Aichi Kitalyi. Before she presented the analysis, she asked participants to indicate their personal opinions on whether and why they think DDF is important. The following points summarizes views of the participants:

1. Provides a forum for stakeholders to identify challenges
2. A platform to transfer knowledge, experience and share opportunities
3. Brings stakeholders together to speak with one voice
4. Stakeholders jointly address common issues regarding the dairy sub sector
5. Opportunity to get feedback from actors regarding the sectors development
6. To jointly analysis the challenges facing dairy sub sector
7. Stakeholders have the opportunity to build the capacity of other actors on how to manage and address challenges in the sub sector.
8. Opportunity to jointly discuss and come up with appropriate sensitization and advocacy that benefits all actors.
9. Platform to develop strategic actions for combating the challenges

10. DDF is an appropriate platform that enables actors along the value chain to meet, express concerns and appreciations; i.e amongst farmers, traders, processors, policy makers, development partners etc

### **3.1.1 The synthesis (Evaluation of the 1<sup>st</sup> to 5<sup>th</sup> DDFs)**

The workshop was informed that the evaluation of the past five Dairy Development Forums has shown a lot of broad changes and success to dairy development in the country since its formation in 2013. Examples of such broad changes include the stakeholders formation of regional forums in Mara, Manyara and Morogoro where challenges have been brought up and regional/local solutions has been found using local resources.

At the same time, participants were informed that some other challenges such as slow pace in the establishment of new law and regulations regarding dairy genetics and review of the 2007 regulations on levy for milk products.

The power of market information through the DDF has helped many actors. It was cited that due to such information Tanga Fresh Ltd has been able to secure milk market in Dodoma while ASAS has also secured market in Lindi and Mtwara.

Despite the success achieved over the past years, there is still the need for all actors to work together to get joint solutions for the many challenges that are facing dairy industry in the country.

The TDB Board chairperson urged all the task forces formed during the previous DDF to undertake in-depth understanding focusing on the root causes of the problems and challenges so that sustainable solutions can be found.

The chairperson reminded the participants that the real solutions facing the dairy industry does and should not depend on Government or any other individual institution, but on individuals who are ready and willing to work together to bring lasting development to the dairy industry.

### **3.2 Task force presentation on Manyara 2015 resolutions**

During the 5<sup>th</sup> DDF, meeting held in Manyara, the stakeholders identified challenges that are hindering the development of the country's dairy industry. As a result of this identification, task forces were formed to find possible solutions to the challenges. During the 6<sup>th</sup> DDF, two of these task forces gave presentations on a) Availability of animal feeds throughout the year, b) Availability of dairy cows.

#### **3.2.1 Availability of animal feeds throughout the year**

This presentation was made by Angelo Mwilawa of Tanzania Livestock Research Institute (TALIRI) on behalf of the team that were tasked to find solution for all year round feed.

He explained that the task force found that the availability of all year round feed is affected by the unavailability of good seeds for pasture mainly due to structural issues embedded in coordination and certification of pasture seeds.

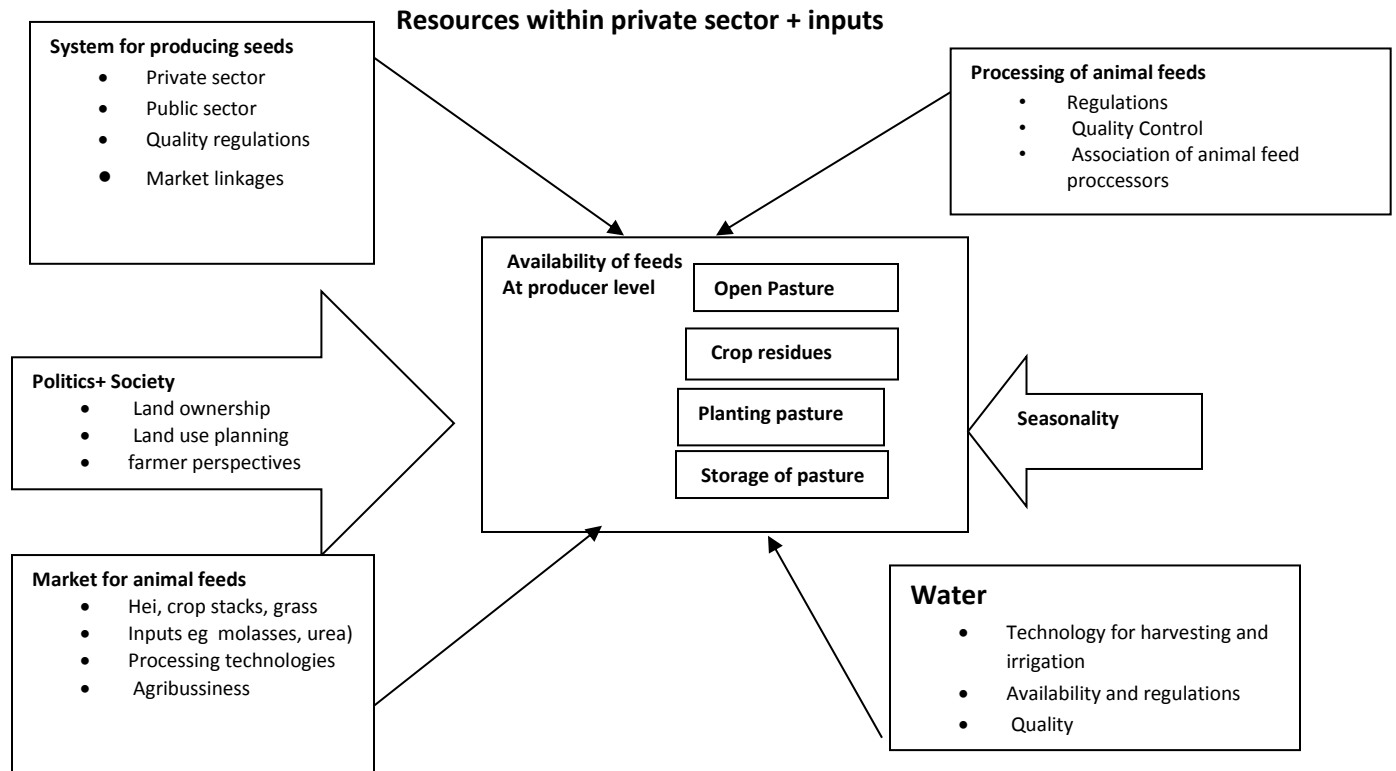
According to the task force, the unavailability of pasture and feeds is due to four main reasons:

- ✓ Absence of pasture species which are agro ecologically known.
- ✓ Production of pasture seeds is done to a large extent by government agencies only
- ✓ Genetic integrity and quality standards and
- ✓ No coordination and control on the production of seeds for pasture, i.e TOSCI does not have standards for seeds for pasture and consequently do not coordinate or certify the produced seeds.
- ✓ Limited financial resources

The task force report also indicated both challenges and opportunities in availing all year round pasture/animal feeds and the provided possible strategies for ensuring year round feeds based on each agro ecological zone, a list of approved organisations and institutions who can readily supply the feeds and seeds.

### 3.2.2 Current structural expression of the challenges and resources on animal feeds (Availability, Challenges na opportunities)

The presentation depicted the challenges in the structures and systems as can be seen from the below drawing.



### 3.2.3 Strategies to ensure availability of animal feeds-pasture all year round

In order to ensure steady and continuous availability of seeds, the task force recommended that the government establish sustainable forage seed production, supply and marketing program. In order to ensure sustainability, the following aspects and activities should be done:

- Cultivar development
- Evaluation, release and varietal maintenance
- Seed production technology

- Availability of equipments for processing, storage and packing materials for pasture seeds.
- Sensitizing and promoting seeds for pasture that aim at meeting the demands of dairy farmers as well as a system for monitoring.
- To continuously build infrastructure and human resource capacity.

### **3.2.4 Recommendations for pasture based on agro-ecological zones**

Information regarding the appropriate pasture was provided (*see Annex 4*). The task force reiterated that this information is helpful to farmers and traders who would like to engage in selling pasture.

#### **Institutions recognised for production and distribution of pasture seeds**

Participants were informed that the government has continued to enhance collaboration between farmers and public institutions in an effort to ensure availability of improved seeds and pasture. The current institutions recognised for such production are:

- TALIRI Mpwapwa
- Vikuge farm
- TALIRI Tanga
- TALIRI Uyole
- TOSCI

### **3.2.5 Current challenges on recognition and distribution of pasture seeds**

Despite the government's efforts to ensure availability of good/improved pasture seeds, there are still challenges especially on areas around determination, recognition, certification and distribution of the seeds. To a large extent this is due to limited financial resources which could be used to undertake:

- Payments for imported seeds (some seeds have been obtained from Ethiopia)
- To bring together actors for a joint planning meeting on certification and distribution of seeds.
- Inability of TOSCI to visit and monitor private farmers who have been recognised and selected to produce pasture seeds.

### **3.3 Availability of dairy cows**

The report of this task force was presented by Dr. Mrutu.

In his feedback to the participants he indicated that Tanzania has a good policy on improvement of the dairy genetics, however importation of dairy herds (breeds) has not followed the recommended guidelines which has consequently led to limited positive effect.

As a result of the foregoing, he said that the government has recognised the shortfall and currently is in the process of introducing a new law- *Animal Breeding Act*. But even this process has encountered two main challenges: a) lack of financial resources to complete the process and, b) limited common understanding on what it takes to have good dairy cows.

He informed the participants that the task force realised that good milk production does not depend solely on the dairy cow (breed) but rather there is a higher need for care and general environment which encompass; Feeds and feeding, shelter and disease control). For this reason, it was recommended that the extension officers should undertake the task to educate farmers on four issues:

- ✓ Dairy cow –breed- tolerant /adaptable to their locality
- ✓ Feeds and feeding –appropriate and nutritious all year round
- ✓ Shelter
- ✓ Disease control including vaccination.

## **4. Reports from Development partners/programs**

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Presentations from Land 'O'Lakes (Public Private Partnership for Artificial Insemination) and Hiefer through the East Africa Dairy Development (EADD II) project focused on current plans and intermediary results within the dairy industry.

### **4.1 Public private partnership program for artificial insemination (PAID) program**

The presentation was made by Mr. Joachim Balakana.

Participants were informed that this is a five year program which started in November 2015 and will come to a close in 2020. The program funding is from Land O'lakes.

#### **4.1.1 Program implementation strategy**

- The program has been designed to empower smallholder dairy farmers to produce improved breeds, increase efficiency and to reduce poverty.
- The general implementation is done and achieved through public private partnership by involving the Government of Tanzania, large specialized institutions on AI, small/individual community based inseminators, milk processors and farmers.

Specific objectives

- Renovate and improve the National Artificial Insemination Centre (NAIC).
- Provide capacity building for the staff at NAIC
- Empower NAIC to implement the strategy for national breeding and control.
- To set up a national system for distribution of LN2 using a collaboration approach between public and private sectors.

#### **4.1.2 Expected Program Outcome**

- Reach out to 84,500 households consisting of smallholder dairy farmers as beneficiaries;
- Inseminate 871,200 cows by using 300 inseminators over a 5 year period.
- Achieve 296,208 improved cattle out of which 148,104 will be cows.
- Sensitize and advocate both international large insemination institutions and local companies to work through and in partnership with:
  - a. At least four milk processors
  - b. At least 10 farmer associations who are being served by 300 inseminators
  - c. Government

### **4.1.3 Intrinsic elements for the program**

- To improve the training curriculum for inseminators through partnership between NAIC and international companies;
- To train all targeted community based inseminators so that they can provide good services to farmers which includes monitoring and education on dairy cattle's reproductive health to the smallholder farmers; and
- Dairy cows achieve 85% reproduction during the program period

### **Program Activities**

- Provision of training to 300 inseminators out of which 90 will be females;
- Develop a monitoring system which will enable evaluation of the inseminators through collaboration between NAIC and ADGG (a private company for the provision of AI).
- Training of the community based inseminators so as to provide good services including animal reproductive health to smallholder farmers; and
- Achieve a 40% pregnancy amongst dairy cows and a reproduction of 85%
- Provide training to 84,500 out of which 59,200 will be female smallholder farmers
- Develop a campaign for the sensitization using flyers, electronic and print media on AI services targeting smallholder farmers.

## **4.2 Presentation on the African Dairy Genetic Gain (ADGG)**

Participants were informed that this is a three year project, and led by ILRI at the regional level. In Tanzania, TALIRI is the lead implementer working with other partners. The regions of focus are: Tanga, Kilimanjaro, Arusha, Iringa and Mbeya.

### **4.2.1 Rationale for the project**

While many producers keep dairy cattle with low milk productivity, the few we keep improved breeds are faced with challenges relating to; feeds and feeding, high costs of medicines and disease control as well as higher deaths of calves.

Therefore the project aims at establishing a strategy that will ensure increased productivity per cow based on agro-ecological zones.

The project will support the initiatives of the PAID programme.



#### **4.2.2 Specific objectives of the project**

1. To establish and manage a database for all dairy cows
2. To identify and register improved bulls who have higher genetic potential
3. To introduce a computer based ICT system that will receive and provide feedback directly to producers.

#### **4.2.3 Planned project activities**

- Establish and manage the database for all dairy cows- this will be done by purchasing the equipment
- Hold meetings to introduce the project nationally and in the regions
- Provide relevant feedback on other studies which have been conducted in project areas
- Provide employment and train youth who will be collecting dairy cow information's and transmitting to the system.
- Collect production information from 200 farmers during phase I and 10,000 during phase II
- Provide feedback to producers through telephone
- Train producers how and what type of information or questions to send database using their mobile phones.
- Identify best performing bulls so that they can be used to produce semen for AI
- Sensitize and mobilize farmers to form farmer producer groups.

#### **4.2.4 Expected Project Outcomes**

Promoting the public private partnership so as to establish a good number of good dairy bulls which will increase productivity

Have a robust database that manages the information regarding production and productivity and provides rapid information and feedback.

To increase the production of trained farmers.

#### **Project partners**

ILRI- Nairobi, TALIRI- Mpwapwa, Land O'Lakes-PAID-Arusha, NAIC-Arusha, Scotland University-SRUC, University of New England-UNE-Australia, Nelson Mandela Institute of Technology-ArushaMALF, Green Dream Tech-Ltd-Nairobi, RLA, TDB, District Extension Officers, large and small scale farmers.

#### **4.3 Presentation of the [East Africa Dairy Development \(EADD II\) project](#)**

The presentation about the EADD was made by Mark Tsoxo.

### **4.3.1 Introduction**

Participants were informed that EADD II is a five year program with the object to empower smallholder dairy farmers in Tanzania, Uganda and Kenya (and currently in its second phase).

### **4.3.2 Expected Outcome**

To transform the lives of smallholder dairy farmers, through increased income.

The program aims to reach out to 136,000 smallholder dairy farmers in East Africa, and specifically 35,000 in Tanzania by the year 2018. The program is implemented in partnership- where Heifer International is the lead firm. Below are the project partners and their roles in the program:

- Heifer: - Milk production
- Technoserve: - Business development.
- ILRI: Research
- ICRAF: Pasture (feeds)
- ABS:- Dairy breeds (genetics)

### **4.3.3 Specific Interventions**

**Empowering smallholder farmers is done through:**

- Increasing average milk production from the current 4.2 to 8.4 liters/cow/day.
- Improving extension services.
- Improving AI services
- Improving availability of feeds during the dry season

#### **Dairy/Milk Hubs.**

- Developing and setting up 9 dairy milk hubs. The hubs will be important/used for:
  - Milk collection/bulking and provision of other services to farmers.
  - Milk quality improvement and reducing spoilage to less than 2% annually.

#### **Gender equity (women and youth)**

- Increase the participation of women and youth in decision making in all production channels.

#### 4.3.4 EADD II view on DDF and the Hub Model

In there presentation the presenter informed participants that among other roles, EADD II, has the mandate to facilitate formation of DDFs (district, regional to zonal levels) and that these forums are a basis for informed decision making process for the actors in the dairy industry.

In order to achieve this, the project finds that the general concept and operationalization of the dairy hubs aligns fairly well with the overall goal of DDF.

That the best entry point for the district or regional forums are the dairy hubs. Furthermore, EADD II project has learnt that the hubs whether within the dairy sector or when covering other sub sectors do:

- Facilitate dialogues and responds to stakeholder needs
- Influence policies by informing decision makers and policy implementers
- Promote the formation of stakeholder apex organizations

Therefore EADD has planned to achieve the following in this context

- ✓ 12 DDFs to hold at least 2 meetings between June 2016 and May 2017
- ✓ 3 regional DDFs to be established by Dec 2016
- ✓ Zonal DDF to be established by May 2017 (if need be)
- ✓ Cascade DDF down to group level (PMC through SCD structure) structure)

#### 4.4 Presentation on [milk production and marketing: The EADD perspective](#)

The findings from this study were presented by Catherine

##### 4.4.1 Introduction

The study found that the entire dairy industry value chain has several challenges affecting availability and consumption of milk in the country. The actors and respective challenges are summarized in the *table 2* below.

| sn. | Actor         | Challenge   |
|-----|---------------|---|
| 1.  | Dairy farmers | <ul style="list-style-type: none"><li>• Inadequate extension services and improper payment system.</li><li>• High cost of production</li><li>• Long distance between dairy farmers and milk collection centres</li><li>• Seasonality in milk production</li></ul> |

|   |                 |  |
|---|-----------------|--|
|   |                 |  |
| 2 | Milk processors | <ul style="list-style-type: none"> <li>• Availability of quality milk</li> <li>• Low production due to less milk</li> <li>• Conflicting government policies</li> <li>• Lack of quality packaging and other allied equipments</li> <li>• Limited knowledge of new technologies</li> </ul> |
| 3 | Consumers       | <ul style="list-style-type: none"> <li>• Limited knowledge on health benefits and nutritional matters of milk.</li> <li>• Low availability of locally processed milk</li> <li>• Tastes/preferences of consumers between raw milk and processed milk</li> </ul>                           |
| 4 | Government      | <ul style="list-style-type: none"> <li>• Overregulation and misalignment of policies</li> <li>• Duplication of roles and responsibilities</li> <li>• Inadequate infrastructure</li> <li>• Lack of Public/Private collaboration</li> </ul>  |

#### 4.4.2 Research Findings and Recommendations

| Sn | Finding                     | Recommendation  |
|----|-----------------------------|---|
| 1  | Increase consumer awareness | <ul style="list-style-type: none"> <li>• Roll out a national dairy industry campaign</li> <li>• Continue efforts around school milk feeding programs</li> <li>• Continue aggregation efforts around dairy marketing events and forums</li> <li>• Dairy product diversification</li> </ul> |

|   |  |   |
|---|--|---|
| 2 | Improve quantity and quality                   | <ul style="list-style-type: none"> <li>• Formalize the informal market</li> <li>• Capacity building and quality training</li> <li>• Messaging and education of quality of milk</li> </ul>   |
| 3 | Address overregulation and government policies | <ul style="list-style-type: none"> <li>• Calculate the demand for locally produced milk (raw &amp; processed)</li> <li>• Address multiplicity of regulations and re-align policies and</li> <li>• Address the issue of imports for milk and dairy products</li> </ul>     |
| 4 | Improve supply chain                           | <ul style="list-style-type: none"> <li>• Increase uptake of breeding services, vet services, vet drugs and AI services</li> <li>• Investment into milk packaging solutions</li> <li>• Organize farmer groups and run MCCs with provision of extension services</li> </ul> |

#### **4.5 Presentation on cost of milk production in Iringa, Njombe and Mbeya regions**

Presenter: Consolata Balterzary, EADD II/ILRI

##### **4.5.1 Background to the study**

Participants were informed that since its inception, EADD II has never had accurate information on the cost of milk production in the three regions and profit realized from such a production in Iringa, Njombe and Mbeya regions.

The three regions have an estimated 1.35 million cattle out of 86,982 are dairy cattle. Annual Milk production is 538 million liters from 295,547 households engaged in livestock rearing/keeping.

#### **4.5.2 Research findings**

It was realized that;

- Farmers engaged in intensive system have a much higher profit than those practicing extensive system-(open grazing) ( $P>0.1$ )
- Farmers engaged in extensive production system have a higher cost of production per liter sold or consumed at home in addition to other operational costs. (variable cost, total cost and fixed cost) ( $P>0.01$ )
- Contrary to expectations, labour, extension services and disease control including treatment costs were higher in extensive system compared to intensive system.
- The average milk price to farmers per liter in the southern highlands was TZS: 320 for every liter produced.
- In both systems, the highest costs for milk production are; labour, feeds and feeding and disease control.
- Milk spoilage lowers farmers' income in all study areas.
- Farmers engaged in intensive system have to produce more milk (compared to those in extensive system) in order to cover other production costs.

#### **4.5.2 Recommendations from the study**

- EADD II will continue to provide capacity building to smallholder farmers on the use of cost saving technologies so as to increase production efficiency.
- In order to achieve sustainable dairy development all stakeholders should invest on market information, increasing dairy herd/ breeds and linkage of smallholder farmers to financial institutions.

#### **4.6 Presentation from Tanzania Agricultural Development Bank**

The presentation was made by the Chief Executive Officer of the bank.

In his presentation, he informed the participants that the bank was set up with the following objectives:

- Ensure food security
- Contribute to agricultural revolution (crops, livestock, fisheries, forestry and beekeeping) in the country.

Within the above sub sectors, the priorities are given to the following commodities:

- Cereals (maize and rice),
- Agro processing (sugar and cashew),
- Livestock (dairy and beef),
- Horticulture
- Oil seeds (sunflower and sesame)
- Forestry and bee products,
- Poultry
- Aquaculture.

#### 4.6.1 Bank credit schemes

The Banks main product is credits to actors who are involved in the said commodities. The presentation highlighted three types of credits that the Bank offers. The difference between the credit schemes is the repayment period as can be seen below.

- Short term credits**- the credit period ranges between one month and up to two years.
- Medium term credits** – credit period ranges from two years to five years.

For purposes of the dairy sub sector, participants were informed that credit can be extended to cover the following items/activities:

- Construction of better shelter for dairy cows,
- Procurement of better milking cans and machinery,
- Procurement of milk processing machineries,
- Purchase of commercial dairy cows that promote commercial dairy farming,
- Investments in dairy animal feeds plus
- Any other costs that may be required and can be repaid within five years.

- Long terms credits**- credit period ranges from five to fifteen years.

In order to benefit from the long term credit, a project must meet at least one of the following criteria:

- Be a large agricultural, livestock, fisheries, forestry or beekeeping

- Construction of infrastructure for crop or livestock production such as milk processing plant or equipments for dairy industry.
- Procurement of large processing equipments required for value addition in the Dairy industry
- All the long term loan must be geared towards enhancing the Dairy industry

**Interest for all the credits are below 12% p.a.**

#### **4.6.2 Who is eligible for TADB Credit?**

Participants were informed that a range of actors are eligible to get credit from the bank as can be seen below:

- Dairy breeders, traders as well as farmers. The later must be in an association
- Animal/dairy cattle feed processors,
- Agro dealers and agrovets,
- Buyers of milk products such as milk processors
- Livestock research institutes,
- Business service providers who target the livestock sector,

For practical reasons and in order to minimize risks Dairy farmer groups may acquire loan guarantee from the local government offices (DALDO, cooperative officers) or any other recognised institutions.

## **5. Presentations from regional dairy platforms**

### **5.1 Tanga dairy platform**

#### **History**

Participants were informed that Tanga Dairy Forum was formed in 2008 with funding from Research Into Use (RIU). After one year, the funding was withdrawn however the forum has continued to function.



## **Membership**

The forum membership consists of all the dairy industry stakeholders in the region. The regional administrative officer is the designated/default patron of the forum and works with the secretariat to organize various meetings. There are efforts to establish district based dairy forums in the entire region.

### **The current institutions that form part of the membership are:**

#### ***Ministries:***

- Ministry of Agriculture, Livestock and Fisheries, Ministry of Industry, Trade and Investments, Ministry of Lands, Housing, Regional Secretariate,

#### ***Research institutions and technical staff.***

- TALIRI, LITA-Buhuri, district livestock officers, extension officers.

#### ***Agencies and authorities***

- TRA, SIDO, UWASA, LGAs, and TANESCO

#### ***Support organisations***

- Financial institutions-banks and, credit associations, PASS, rex solar

#### ***Producers and associations***

- Individual farmers, farmers associations and groups, farmer networks, TAMPRODA and TDCU,

#### ***Processors***

- Tanga Fresh Ltd, Ammy Brothers,

#### ***Development organisations***

- SNV, Land o Lakes, MILKIT, MoreMilkiT, HPI, Farm Friends Tanzania, Agri Pro Focus, Josera (Germany)

#### ***Others***

Agro dealers and agro vets, consumer representatives, private transporters and advertising companies

## **Success from Tanga Dairy Forum**

Participants were informed that Tanga Dairy platform has achieved the following success since its inception.

- Involvement of the regional secretariate
- Open discussions regarding Tax, fees and cess charged on milk and milk products
- Baseline study for dairy in Tanga region
- Capacity building for 15 MCC on leadership and management of the MCCs

- Establishment of Dairy hubs within 5 MCC's
- Development of the forums strategic plan covering the period 2016-2021
- Development and operationalization of the action plan for implementation of the strategic plan -2016-2021
- Implementation of short and long term development plans of the forum.

## **6.2 Morogoro dairy forum**

### **History**

The Morogoro Dairy Forum was established in the year 2014 and has membership that covers the districts of Morogoro (municipal and rural), Mvomero and Kilosa.

### **Activities**

Being a new forum, the following were shared as part of the activities which has been undertaken todate.

- Organisation of farmer associations/groups
- To take stock of the challenges facing the sub sector in morogoro region
- Establishment of task forces to address:
  - Inadequate dairy cows/herd
  - Low price of milk at farmgate or MCC, and
  - Inadequate dairy farming knowledge amongst the producers.

### **Success from Morogoro dairy forum**

- The forum secretariat has been able to organise Mvomero dairy forum and will soon roll out to other districts.

### **Challenge facing the forum.**

- Financial resources to enable it undertake the intended activities including organising routine forums.

## **7. Conclusion**

Following the days presentations, questions and clarifications, the participants summarized the key challenges that need to be addressed soonest as:

- Availability of pasture and feeds all year round
- Dairy genetics
- Production enhancing technologies
- Strengthening producer groups and
- Sustainable and rewarding market for milk

After the above summary, participants worked in groups based on the challenge and interest and developed agreed way forward-.

Given the persistence of the challenges and the need to make quick but sustainable positive development changes, the participants agreed that all activities should be those that can be achieved within the next two years, and commitments can be realised from relevant actors and stakeholders to work together in achieving them.

It was therefore agreed as away forward that the below commitments if properly executed will enable the Tanzania dairy industry to be competitive.

## 8. Way forward: actions against each challenge

| Activity  | Actions  | Lead organization/person  |
|---|--|---|
| <b>8.1 Availability of pasture and feeds all year round</b> | <b>What</b><br>Establish a mobile market information system for pasture seeds<br><br><ul style="list-style-type: none"> <li>• In all agro-ecological zones avail list of approved species of seeds and pasture</li> <li>• Training of farmers on how to produce and store pasture</li> </ul> | TALIRI<br><br>mobile phone companies<br>EADDII-Mark<br>ADGG, PAID |

|                                  |   |                                 |
|----------------------------------|---|---------------------------------|
|                                  | <p>and crop residues</p> <ul style="list-style-type: none"> <li>• Development of practical working relations between MALF and MITI on the establishment of commercial pasture farms through investment.</li> </ul> <p><b>What</b></p> <p>Develop a database of pasture seed producers and disseminate this in all regions and districts.</p> <p><b>How</b></p> <ul style="list-style-type: none"> <li>• TDB to promote trade on pasture and pasture seeds</li> <li>• Government to make deliberate efforts to ensure that pasture seeds are recognised and certified by TOSCI</li> <li>• Distiquish demand gap for pasture seeds by zone</li> <li>• Government to forge a production relationship for seed production and distribution</li> </ul> | <p>TDB (Justa &amp; Mamuya)</p> |
| <p><b>8.2 Dairy genetics</b></p> | <p><b>What</b></p> <p>To increase the number of Dairy cows through importation and breeding</p> <p><b>How</b></p> <ul style="list-style-type: none"> <li>• Take stock of the total and current breeds based on the locality</li> <li>• Increase the number of Heifers in livestock multiplication units and the private firms</li> <li>• Engage private sector to produce more heifers through contracts</li> <li>• Improve NAIC to ensure sexed sperms are used for inseminations.</li> <li>• To sensitize private sector to undertake Artifical insemination as a business service.</li> <li>• Awareness and capacity building for producers on dairy husbandry.</li> </ul>   | <p>NAIC<br/>PAID<br/>MALF</p>   |

|  |   |   |
|--|---|---|
|  | <ul style="list-style-type: none"> <li>Lobby for the finalisation of a responsive policy</li> </ul>   |   |
| <b>8.3 Production enhancing technologies</b> | <p><b>What:</b></p> <ol style="list-style-type: none"> <li>Capacity building and training regarding good dairy animal husbandry: a)-feeding and pasture storage b) Guidelines for quality milk production</li> <li>Improve on the system for accessing equipments and inputs for production and milk processing: a) milk cans b) cooling tanks c) grass choppers</li> <li>Access to affordable and appropriate milk packaging materials</li> <li>Access to small, medium and large milk processing equipments</li> <li>Increase number of milk processing technicians</li> </ol> <p><b>How</b></p> <ul style="list-style-type: none"> <li>✓ Farmers to be taught the side effects of using plastic containers</li> </ul> <p>Ensure easy availability and access to equipments</p> <p>Enforce the regulation to punish non adherence</p> <p>Provision on milk preservation techniques</p> <ul style="list-style-type: none"> <li>✓ TDB to provide list of all input suppliers</li> <li>✓ TAMPA to work with other stakeholders to ensure availability of milk packaging equipments.</li> <li>✓ Revise course on Dairy technology to meet the current needs of processors</li> <li>✓ TAMPA and TDB to liaise with financial institutions so as to provide financial access for milk processing equipments.</li> </ul> | <p>TDB,<br/>TAMPA<br/>SUA<br/>TADB<br/>TALIRI</p>   |
| <b>8.4 Strengthening of producer groups</b>  | <p><b>What:</b></p> <p>To organize producer groups so that they can form cooperatives through their LGA and where possible zonal cooperatives.</p> <p><b>How:</b></p> <p>To take stock of existing producer (dairy) groups</p> <p>Hold sensitization meetings so as to bring together all dairy industry actors in the regions and Local Government Authorities</p> <p><b>Target</b></p> <ul style="list-style-type: none"> <li>✓ Eastern zone will start with one cooperative within 2</li> </ul>  | <ul style="list-style-type: none"> <li>EADD,</li> <li>LGA's</li> <li>Regional secretariates</li> <li>TAMPA</li> </ul> |

|   |   |   |
|---|---|---|
|   | <p>Years</p> <ul style="list-style-type: none"> <li>✓ Northern zone will have one producer group cooperative by 2018</li> <li>✓ Lake zone to have one producer cooperative group by 2018</li> <li>✓ Southern highland zone will also have active farmer cooperative within two years.</li> </ul> <p>Overall the development organisations and local government authorities will</p> <ul style="list-style-type: none"> <li>• Sensitize and encourage dairy farmers to form and register groups/cooperatives.</li> <li>• Provide cooperative leadership and management training to any established dairy farmer groups and cooperatives.</li> </ul>  |   |
| <p><b>8.5 Sustainable and rewarding market for milk</b></p> | <p><b>What</b><br/>Sensitization and promotion of milk as an important healthy food product :</p> <p><b>How</b></p> <ul style="list-style-type: none"> <li>✓ Conduct sensitization and educational campaigns. The focus should be through different cadres and three different places especially where there are large groups of people.</li> <li>✓ Promote milk consumption in events such as weddings.</li> </ul> <p><b>What</b></p> <ul style="list-style-type: none"> <li>✓ Availability of adequate and quality milk</li> </ul> <p><b>How</b></p> <ul style="list-style-type: none"> <li>✓ Provision of extension services focusing on production and quality control of milk</li> </ul> | <p>TDB<br/>MALF<br/>EADD<br/>(Lydia)<br/>TAMPA-(Mariki)</p> |

|  |   |   |
|--|---|---|
|  | <p>✓ Improve supervision and inspection as per the regulation requirements</p> <p><b>What</b><br/>Availability of policies that promote local production and consumption</p> <p><b>How</b></p> <ul style="list-style-type: none"> <li>✓ Harmonization of the various cess, tariffs and other fees</li> <li>✓ Promote consumption of locally produced products – provide protection of local products</li> <li>✓ Work with financial institutions to provide affordable long term loans/credits.</li> </ul> <p><b>What</b><br/>Improve distribution system</p> <p><b>How</b></p> <ul style="list-style-type: none"> <li>✓ Increase access to milk carrying equipments such as milk cans and packaging materials.</li> <li>✓ Promote the establishment of small and medium industries that will produce equipments needed for marketing of milk.</li> </ul> | <p>EADD</p> <p>TDB</p> <p>MALF</p> <p>TDB</p> <p>TAMPA-(Mariki)</p> |
|  |   |   |

## 9. Closing remarks

The closing remarks were given by the chairman of the Dairy Council. In his closing, he reiterated the importance of the forum to all the stakeholders. The need to implement the agreed actions with urgency can not be over emphasized. He thanked all the organisations who supported the 6<sup>th</sup> DDF meeting as well as the participants who have continued to volunteer their time and resources.

## 10. Annexes

### Annex 1

List of participants at the 6<sup>th</sup> DDF meeting holding on 29<sup>th</sup> May 2016 at Njombe Town Council Hall

| SN | NAMES              | ORGANISATION        | TELEPHONE      | E-MAIL                     |
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## Annex 2

### Program agenda for the 6<sup>th</sup> DDF

1. Introduction and Opening remarks
2. Synthesis output of the 1<sup>st</sup> to-5<sup>th</sup> DDF meetings
3. Paper presentation by Task force – *Manyara 2015 Resolutions* )
4. Public Private Partnership for Artificial insemination Tanzania Program (*PAID*)
5. Milk production and marketing : *The EADD perspective*
6. Value chain actors access to finance in relation to dairy development  
Inspiration stories from dairy platforms- *Tanga, Morogoro, Manyara, Mara*
7. Way forward
8. Closing



### Annex 3

#### Appropriate pasture by zones

| Agro-Ecological Zone |                   | Grasses                               | Herbaceous Legumes                | Browse                        |
|----------------------|-------------------|---------------------------------------|-----------------------------------|-------------------------------|
| I                    | Highlands         | <i>Lolium perenne</i>                 | <i>Trifolium</i> spp.             | <i>Calliandra calothyrsus</i> |
|                      | LGP* = 240 days   | <i>Chloris gayana</i>                 | - perennials                      | <i>Leucaena diversifolia</i>  |
|                      |                   | <i>Pennisetum purpureum</i> - annuals |                                   | <i>Acacia angustissima</i>    |
|                      |                   | <i>Setaria splendida</i>              | <i>Desmodium intortum</i>         |                               |
|                      |                   | <i>Tripsacum andersonii</i>           | <i>Neonotonia wightii</i>         |                               |
|                      |                   |                                       | <i>Lablab purpureum</i>           |                               |
|                      |                   |                                       | <i>Medicago sativa</i>            |                               |
| II                   | Humid to Subhumid | <i>Setaria splendida</i>              | <i>Neonotonia wightii</i>         | <i>Leucaena leucocephala</i>  |
|                      | LGP* = 240 days   | <i>Setaria anceps</i>                 | <i>Desmodium uncinatum</i>        | <i>Calliandra calothyrsus</i> |
|                      |                   | <i>Panicum maximum</i>                | <i>Desmodium intortum</i>         | <i>Gliricidia sepium</i>      |
|                      |                   | <i>Chloris gayana</i>                 | <i>Centrosema pubescens</i>       | <i>Acacia angustissima</i>    |
|                      |                   | <i>Pennisetum purpureum</i>           | <i>Pueraria phaseoloides</i>      |                               |
|                      |                   | <i>Brachiaria</i> spp.                | <i>Colopogonium mucunoides</i>    |                               |
|                      |                   | <i>Tripsacum andersonii</i>           | <i>Macroptilium atropurpureum</i> |                               |
|                      |                   | <i>Cenchrus ciliaris</i>              | <i>Medicago sativa</i>            |                               |

| Agro-Ecological Zone |                       | Grasses                  | Herbaceous Legumes        | Browse                       |
|----------------------|-----------------------|--------------------------|---------------------------|------------------------------|
| III                  | Subhumid to semi-arid | <i>Chloris gayana</i> ,  | <i>Medicago sativa</i>    | <i>Leucaena leucocephala</i> |
|                      | LGP = 180 days        | <i>Setaria anceps</i> ,  | <i>Neonotonia wightii</i> | <i>Gliricidia sepium</i>     |
|                      |                       | <i>Panicum maximum</i> , | <i>Clitoria ternatea</i>  | <i>Cajanus cajan</i>         |

|    |                |  |                                   |                              |
|----|----------------|--|-----------------------------------|------------------------------|
|    |                | <i>Panicum coloratum</i>                               | <i>Stylosanthes</i> spp.          | <i>Morus alba</i>            |
|    |                | <i>Panicum antidotale</i>                              | <i>Macroptilium atropurpureum</i> | <i>Leucaena pallida</i> ,    |
|    |                | <i>Cenchrus ciliaris</i><br><i>P. Purpureum (irrg)</i> | <i>Centrosema pubescens</i>       | <i>Leucaena diversifolia</i> |
|    |                |  |                                   |                              |
| IV | Semi-arid      | <i>Cenchrus ciliaris</i>                               | <i>Stylosanthes</i> spp.          | <i>Leucaena leucocephala</i> |
|    | LGP = 150 days | <i>Cynodon</i> spp.                                    | <i>Centrosema pubescens</i>       | <i>Sesbania sesban</i>       |
|    |                | <i>Chloris gayana</i>                                  | <i>Clitoria ternatea</i>          | <i>Gliricidia sepium</i>     |
|    |                | <i>Bothriochloa</i> spp.                               | <i>Macroptilium atropurpureum</i> | <i>Cajanus cajan</i>         |
|    |                | <i>Panicum coloratum</i>                               | <i>Lablab purpureus</i>           | <i>Leucaena pallida</i>      |
|    |                | <i>P. Purpureum (irrg)</i>                             |                                   | <i>Leucaena diversifolia</i> |