

Dairy development in Tanzania with local innovation platforms: When and how can they be useful?

Birthe K. Paul, Brigitte L. Maass, Fred Wassena, Amos O. Omoro and Godfrey Bwana

Farmers and livestock keepers in Tanzania face a range of problems, including feed shortages, land tenure issues, animal health and milk and meat marketing. Seventy percent of the milk produced in Tanzania comes from indigenous East African Zebu cattle, which produce an average of 0.5-2 litres of milk per day, while improved commercial breeds contribute 30% (4–10 litres/day). Smallholder farmers have few animals of improved breeds, and most cannot afford artificial insemination.

Livestock productivity in many areas of Tanzania is severely limited by tsetse infestation, and farmers complain that preventing or treating other diseases such as East Coast fever, foot-and-mouth disease and worms is either too hard to get or too expensive. Most find it hard to obtain feed in sufficient quantity and quality to improve their milk production. The main feed constituents in all production systems (mixed crop-livestock, agro-pastoralist and pastoralist) are natural grasses and herbs, either grazed or collected. But these plants are low in productivity, digestibility and protein content. Especially in the dry season, producers have to cover long distances in search for forage, and milk production levels drop steeply. Producers also lack markets to sell milk and meat, especially in rural areas where direct sales to neighbours is the most common marketing channel.

Box 1. Innovation platforms

An innovation platform is a space for learning and change. It is a group of individuals (who often represent organizations) with different backgrounds and interests: farmers, traders, food processors, researchers, government officials etc. The members come together to diagnose problems, identify opportunities and find ways to achieve their goals. They may design and implement activities as a platform or coordinate activities by individual members.

What role can local innovation platforms play in helping them solve these problems? Under what conditions are they useful, and what are the factors for success? Do we need innovation platforms at the village level, or can we work with producer groups?

This brief suggests some answers based on experiences from MilkIT, a project that aimed to improve the feeding of dairy cattle in Tanzania (Box 2).

Box 2. The MilkIT project

MilkIT was a three-year research-for-development project led by the International Livestock Research Institute (ILRI) and the International Center for Tropical Agriculture (CIAT) and supported by the International Fund for Agricultural Development. It aimed to improve productivity of dairy cattle using improved feeding practices and better arrangements for milk marketing. The project worked in India (Uttarakhand) and Tanzania (Morogoro and Tanga) from 2010 to 2014. The three main objectives were:

- Institutional strengthening: To strengthen use of value chain and innovation approaches among dairy stakeholders to improve feeding strategies for dairy cows.
- Productivity enhancement: To develop options for improved feeding strategies leading to yield enhancement with potential income benefits.
- Knowledge sharing: To strengthen knowledge sharing mechanisms on feed development strategies at local, regional and international levels.

Innovation platforms in Tanzania: Maziwa Zaidi and the MilkIT projects

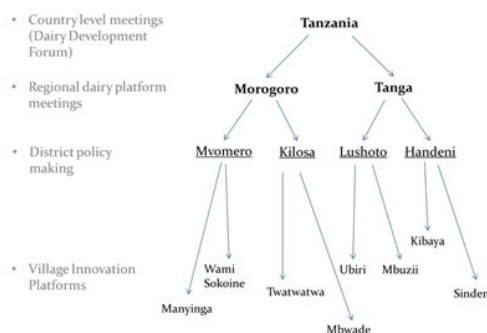
Innovation platforms are a way for various stakeholders to collaborate to achieve a common objective and draw on new knowledge and linkages. They have been established at different scales, from national to regional to village levels.

Numerous research and development organizations (including Sokoine University of Agriculture, SNV Netherlands, Heifer International and Land O'Lakes) work with the innovation platform approach at different levels in Tanzania, united under the umbrella of Maziwa Zaidi ('more milk' in Swahili).

The Dairy Development Forum is an innovation platform operating at the national level. It is an informal yet structured mechanism that is increasingly valued as a neutral space where public and private sector actors in the dairy sector can meet to coordinate development activities, address systemic bottlenecks and co-create solutions. It is part of a network of regional and district-level platforms, including the regional Morogoro and Tanga platforms, that are strengthening relationships among value chain actors and stakeholders to transform the dairy value chain.

The MilkIT project used the innovation systems approach to enhance innovation capacity and address constraints in dairying, especially regarding feeds and feeding. It established eight innovation platforms in eight villages in the regions of Morogoro and Tanga. Sixty percent of the members of each platform were producers, with other stakeholders making up the remaining 40%. The village platforms were tied into the network of platforms at the district, regional and national levels (Figure 1).

Figure 1: Linkages between different levels of dairy innovation platforms in Tanzania



Lessons from village innovation platforms

The level of innovation platforms have implications on their objective. Higher-level platforms with their national and regional actors can tackle upstream issues related to market linkages or policymaking. Local-level platforms are uniquely placed to generate and promote innovations suited to producers in a specific location. The MilkIT project answered some questions about local platforms. Do we need them – and if yes, under which conditions? What factors contribute to their success?

Location, location, location! Local platforms can be useful, but are not always necessary. Village innovation platforms can be useful if the challenges identified are local but complex, if the solutions rely on collective action from a range of stakeholders, and if those stakeholders all have an interest in the solutions (Boxes 3, 4 and 5).

Box 3. A land registry and a new extension officer in Twatwatwa

The village platform in Twatwatwa gave local residents a voice and empowered them. That led to actions to meet local needs. Here are two examples.

A shortage of land was a major challenge for livestock grazing in the village. To help solve this problem, the innovation platform agreed to set up a registry office to keep records of land demarcations and ownership. The village authority was given responsibility to consult with the district office, while a platform committee was formed to seek funds. A new office is being built to house the registry as well as the village office.

The village platform also requested the Kilosa District office to provide extension services. As a result, a new extension officer was assigned to the village. The actors concerned included farmers, the village authority and the department of land in the district council.

But if the issues are rather individual and production-focused, a producer group, or a group consisting only of farmers, might be more appropriate. In Mbuguzi village, farmers did not feel they had problems in selling their milk so the platform mainly comprised pre-commercial producers selling directly to traders as needed. Other actors in the dairy value chain saw little point in joining the platform.

If the issues to be addressed require higher-level involvement, then a village platform needs strong links to actors at the higher level, perhaps via the network of district, regional and national platforms.



Box 4. Cleaning and protecting a water source in Kibaya

The water source in Kibaya, a natural spring, was controlled by a few wealthy livestock keepers, leading to conflicts with most villagers. The village platform decided to clean and protect the spring and make it available to everybody. It fenced off the area around the spring to protect the vegetation from grazing. It demarcated areas where people and animals were permitted, posted guards and passed by-laws imposing fines for infringements.

A cleaned and protected spring.



Box 5. Livestock registry in Manyinga

The Manyinga innovation platform is an example where meetings were well-documented. The platform has a database for livestock keepers and cattle statistics, such as records of births, deaths and sales at household level. The platform members decided it was necessary to keep such records in order to improve their livestock productivity.

Manyinga innovation platform meeting.

Multi-actor engagement. A range of internal stakeholders is vital, but the membership of an innovation platform can be flexible. Local platforms will have difficulty in attracting stakeholders from outside the immediate area. Such stakeholders may find it too costly or time-consuming to become involved and the pay-offs too low. That may lead to the platform becoming dominated by producers, further reducing the incentive for other stakeholders taking part.

However, stakeholders from the immediate area can be engaged on a more regular basis: they include traders, village leaders and extension staff. Membership of the platform can be flexible, and members can pull in and out, depending on the issue at stake. If the market is the main priority, actors from along the value chain should be encouraged to attend. If the focus is on organizational issues, policymakers would be more needed. The platform can contact higher-level stakeholders with concrete questions, offers and requests; these do not have to become platform members (Box 6). Mapping stakeholders when planning a platform can identify stakeholders to contact on various issues as the need arises.

Box 6. Water troughs and wells for Mbwade and Twatwatwa

Early on, village platforms in Mbwade and Twatwatwa highlighted the problem of water shortages. The platforms addressed this issue by linking with an NGO implementing iWASH, a project dealing with water, sanitation and hygiene. This project set up a number of wells and water troughs to relieve the shortage. Farmers, other people in the village and livestock now have more access to water. However, farmers tend to have a lot of animals, and there is still too little drinking water for people.

Action focus. The purpose of a platform is not just to meet, but to discuss concrete actions. At first many producers struggled to see the benefit of platform meetings. Their motivation rose only when they saw concrete results. It is crucial to get things right at the beginning: innovation approaches can be complex, so comprehensive training on the proposed platform's rationale, functions and potential benefits is crucial.

It is easy to compile lists of constraints; it is more important to transform them into concrete issues that can be delegated to representatives or committees to work on. An action plan can foster commitment and following through, it is crucial for trust, learning and progress (Box 7).

Box 7. A lack of concrete action in Mbuzii and Ubiri

The platforms in Mbuzii and Ubiri followed the proposed procedures: they developed a list of challenges for 2013, formed committees, identified stakeholders, and members attended various trainings and meetings. But the members failed to translate the challenges into concrete actions, or to report their achievements back to the platform.

It was only after leadership training in 2014 that things changed. The achievements became more visible to the platform members and actions could be more closely linked to the challenges that had been identified. The members' motivations rose accordingly. Even where people can be expected to know each other (like in a village platform), good communication and feedback are essential.

Keeping members engaged in action is vital. This is better than having a formal list of members, who merely represent their organizations rather than actually doing anything. Meetings that result in tangible action and outcomes can have a big impact on marginalized platform members. Women in particular have begun to raise their concerns (Box 8).

Box 8. Empowering women in Twatwatwa

The local platform meetings often had strong participation by women, who were encouraged to become platform leaders. Overall, women accounted for only 37% of meeting participants in agro-pastoralist villages, compared to 45% in villages with mixed crop and livestock farming. This reflects the traditionally weak role of women in pastoralist society. For training events, however, slightly more women from agro-pastoralist villages (43%) attended, compared to 40% in the crop/livestock sites.

Nevertheless, women in Twatwatwa, a pastoralist area, have begun to take a more active role. The platform in this village was the only one to identify gender as a challenge. Now women can be heard and listened to, girls are given chance to go to school, and women are given leadership positions in the society. Women producers who represent their villages on higher-level platforms such as the regional Morogoro platform have gained status. The fact that they get a voice and sit at the same table as the other actors empowers them back home in their village. They can voice their concerns and have them dealt with by government officials, development agents, the private sector and researchers.

Key insights

Insights from the village platforms include the following.

- Local platforms are well-suited to working with local issues and challenges. They can be very empowering and lead to useful local actions.
- Local platforms can set the scene and facilitate engagement with external actors when these come in.
- Platforms should avoid having only one type of member (usually, producers only). They should strive to have a diverse range of actors and participants.
- Unless they are explicitly connected to higher levels, local platforms have a limited ability to influence district, regional or national efforts.
- Do not expect results to scale easily from local platforms without specific efforts to make this happen. Examples include connecting with outside actors, organizing village-to-village exchanges, etc.
- It is difficult to attract significant external investment in local efforts unless the products can easily be bulked or provide economies of scale.
- Local actions may end up tackling other issues and challenges than what was initially expected.

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Birthe Paul, Brigitte Maass and Fred Wassena work for the International Center for Tropical Agriculture (CIAT). Amos Omore works for the International Livestock Research Institute (ILRI). Godfrey Bwana is a consultant.

Contact

Amos Omore
ILRI, Tanzania
a.omore@cgiar.org



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ILRI is a member of the CGIAR Consortium

Box 30709, Nairobi 00100, Kenya
Phone: +254 20 422 3000
Fax: +254 20 422 3001
Email: ILRI-Kenya@cgiar.org

Box 5689, Addis Ababa, Ethiopia
Phone: +251 11 617 2000
Fax: +251 11 617 2001
Email: ILRI-Ethiopia@cgiar.org



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