



RESEARCH  
PROGRAM ON  
Livestock

*More meat, milk and eggs by and for the poor*

# Site-specific plans for the More Milk in Tanzania project, Tanga region

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We also extend our appreciation to all Maziwa Zaidi implementing partners and collaborators including local government authorities, and value chain actors, especially dairy producers, input and service providers, and milk traders, for their cooperation.

# Foreword

Smallholder dairy production in Tanzania is concentrated in the highland areas of Kilimanjaro, Arusha, Tanga, and Mbeya. The increased demand for fresh milk in urban centres in recent years has resulted in an expansion of smallholder dairy production around these centres. Until recently, government policy on dairy development focused mainly on large-scale State-owned farms. The new Tanzania livestock policy gives due emphasis to the development of the smallholder sector through increased supply of upgraded cattle, and animal feeds and other production inputs, including extension services (Ministry of Livestock Development, 2006).

The emphasis on smallholder dairy production in Tanzania calls for increased efforts towards the development of locally tested innovations that will increase productivity given farmers' present resources. It is in this light that the International Livestock Research Institute (ILRI) has been implementing a four-year research for development (R4D), More Milk in Tanzania (MoreMilkiT) project, to promote pro-poor rural livelihoods through milk production. The MoreMilkiT project aims to ensure more income security through enhanced access to demand-led dairy market business services and viable organizational options.

The project's strategy to achieving its goal is to promote and facilitate the formation of functional but flexible dairy market hubs (DMHs) in both the extensive and intensive milk producing project areas of Tanga and Morogoro. DMHs are collective arrangements aiming to stimulate grouping of a large number of producers or cattle or demand for inputs. These offer opportunities to produce and bulk more milk, facilitating both entry to milk markets, and group access to inputs and services. To operationalize the concept of DMHs, the project facilitated the formation of 27 new milk producer groups, and worked with three existing groups. Because of the heterogeneous nature of the producer groups in terms of their needs, challenges, resource endowments and organizational capacity, the project found it imperative to facilitate them to develop site-specific development plans (group).

This booklet outlines the site-specific plans for each group. These plans were developed in a participatory manner to capture challenges and activities that the groups can address through their own initiatives or in collaboration with the local government in their respective districts. The plans reflect the long-term development strategies and sustainability, and form the basis for future engagement with other dairy development initiatives.



15 May 2017

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Sokoine University of Agriculture, Morogoro, Tanzania

# Glossary of terms

AI	Artificial Insemination
BDS	Business Development Services
DADPs	District Agriculture Development Programs
Faida MaLI	Faida Market Link, a local non-governmental organization
HI	Heifer International
HIT	Heifer International in Tanzania
IP	Innovation Platform
iWASH	Integrated Water and Sanitation Hygiene
LGAs	Local Government Authorities
MAPALIO	Swahili terminology for livestock routes
Maziwa Zaidi	This is a Swahili word for the Tanzania dairy value chain program being led by International Livestock Research Institute (ILRI)
MFIs	Microfinance Institutes
MilkiT	The short term for Milk in India and Tanzania, a project funded by International Fund for Agriculture Development (IFAD)
MoreMilkiT	More Milk in Tanzania, a four-year project funded by Irish Aid and implemented by ILRI
MoU	Memorandum of Understanding
Olelili	A Maasai word for grazing land protected in wet season and being used during the dry season by lactating cows, young and sick ones while others are moved away to look for pastures and water.
POSA	Producer Organization Sustainability Assessment
SACCOS	Savings and Credit Cooperative Societies
TDB	Tanzania Dairy Board
TZS	Tanzania Shillings

# Introduction

The International Livestock Research Institute in collaboration with Heifer International Tanzania, Faida Market Link, Sokoine University of Agriculture, and Tanzania Dairy Board has implemented the Irish Aid-funded More Milk in Tanzania project in Lushoto, Bumbuli, and Handeni districts in the Tanga region, and Mvomero and Kilosa districts in the Morogoro region. The project set out to pilot dairy market hubs, an approach to dairy value chain development that strengthens linkages between milk producers and other value chain actors. The project has facilitated the formation and registration of 27 milk producer groups, and worked with three existing groups to operationalize the concept of dairy market hubs. Efforts to grow dairy market hubs have included, among other things, the participatory formulation of site-specific plans for the 30 producer groups.

A site-specific plan documents the activities needed to establish a dairy market hub in a given project site. The plan highlights the fundamental challenges facing milk producers in a particular project site, the potential solutions, and the resources needed to execute the solutions. Project activities for each site were drawn from these plans. The plans also include some challenges and activities that are not directly within the scope of the 'Maziwa Zaidi' projects, but which the groups can address using either their own initiatives or perhaps in cooperation with local governments. The plans are therefore blueprints for the groups' future engagements with other projects outside Maziwa Zaidi. The inclusion of the roles of local governments also points to the possibility of achieving continued support from the local governments. As such, the plans provide a basis for the groups' long-term organizational development strategies and sustainability. In cases where initial target dates for addressing certain constraints have expired but remain unaddressed, development facilitators might begin by finding out the reasons behind the failure to address them.

Attached to each group's site-specific plan is the group profile. The profile provides detailed information about the group including membership segregated by gender, registration status, achievements, and areas requiring immediate support. The plans and profiles have been handed over to local government authorities (LGAs) in the five districts to enable the LGAs continue strengthening and monitoring the growth of the groups. Livestock officers from LGAs at the village and district levels have been at the forefront in implementing activities stipulated in the site-specific plans. The LGAs highly appreciate the efforts made by MoreMilkiT project in facilitating the development of these groups and have pledged to continue supporting the development of the groups. This will include working with the groups in the future to implement dairy and other livestock-related development projects.

## Site-specific plans - Tanga region

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## Site 1: Kibaya plan, Handeni district

Village: Kibaya

Group Name: UMOJA WA WAFUGAJI MAZIWA ZAIDI KIBAYA No.: HW/HD/UV/0517

Date: 10 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1	Land disputes between livestock keepers and farmers.	<p><b>Potential solution:</b> Develop village land use plan and utilize it.</p>	<p>Prepare land use plan for Kibaya village. Initiate village and ward land conflict resolution committee.</p> <p>Process land use ownership certificate for earmarked grazing area as per developed land use plan.</p>	<p>Facilitators</p> <p>Funds</p>	<p>Group</p> <p>LGA</p>	<p>Group</p> <p>LGA</p> <p>HIT</p>	<p>Ongoing</p> <p>Land use plan</p> <p>Land use certificates</p>
2	Lack of verified Livestock routes to and from grazing land.	<p><b>Potential solution:</b> Utilize livestock routes as per village land use plan.</p> <p><b>Opportunity:</b> Livestock routes recognized.</p>	<p>Revive livestock all old livestock routes.</p> <p>Evacuate invaders of livestock routes</p> <p>To ensure existence of stock routes by choosing stock routes committee that is linked to LGA</p>	<p>Facilitators</p> <p>Funds</p>	<p>Group</p> <p>LGA</p>	<p>Group</p> <p>LGA</p> <p>HIT</p>	<p>Ongoing</p> <p>Livestock routes used</p> <p>Presence of livestock routes committee in place</p>

3	Inadequate supply of livestock drinking water during dry season	<p><b>Potential solutions:</b> Group work with LGAs on Construction of dams and boreholes</p> <p>Feed some livestock (lactating cows and calves) on fodder melons during dry season</p> <p><b>Opportunity:</b> Availability of land for construction of dams, boreholes and cultivation of fodder melons.</p>	<p>Follow up of planed dams excavation from LGAs</p> <p>Participatory site selection for dam and boreholes</p> <p>Construction of dams and boreholes.</p> <p>Link group to water service providers.</p> <p>Cultivation of special water melons for livestock feeding.</p>	<p>Facilitator</p> <p>Funds</p>	<p>Project</p> <p>Group</p> <p>LGA</p>	<p>LGA</p> <p>Group</p> <p>HIT</p>	<p>Ongoing</p>	<p>Boreholes/ dams in place.</p> <p>Plot of fodder melon</p>
4	Inadequate grazing land and fodder	<p><b>Potential solutions:</b> Follow up on village land use plan and livestock routes</p> <p>Reduce number of livestock per unit area</p> <p>Growing of improved fodder</p> <p>Training on appropriate grazing land management and fodder conservations</p>	<p>Group to make follow up on allocated grazing land and develop it.</p> <p>Training of animal husbandry focusing on management.</p> <p>To reduce number of livestock per unit area</p> <p>Conduct learning exchange visits.</p> <p>Establish improved pasture/ fodder</p>	<p>Transport</p> <p>Funds</p> <p>Facilitators</p> <p>Seeds</p>	<p>LGA</p> <p>Group</p> <p>Project</p>	<p>Group</p> <p>LGA</p> <p>HIT</p>	<p>Ongoing</p>	<p>Village land use plan implemented</p> <p>Handouts of grazing land management</p> <p>List of participants</p> <p>Farmer field school</p>



		<p><b>Potential solutions:</b> Market analysis</p> <p>Collective bulking and selling of milk</p> <p><b>Opportunities:</b> Availability of milk from group members and other farmers in the village</p> <p>Willingness of group to collectively sell their milk</p>	<p>Conduct training on dairy farming as businesses – cash flow/cost-benefit analysis, record keeping, contract negotiation</p> <p>Identify dairy inputs, outputs and prices and develop a template for cost-benefit analysis</p> <p>Identify reliable milk buyers and their needs</p> <p>Sensitize group members and other villagers on the advantages of collective milk selling</p> <p>Conduct business meeting between group and buyers to discuss possibility of contractual agreements</p>								
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Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 2: Konje site plan, Handeni district

**Village:** Konje

**Name of Group:** MAZIWA KWANZA

**No.:** HW/HD/UV/0223

**Date:** 12 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1	<p>Insufficient livestock drinking water during dry season</p> <p><b>Potential solutions:</b>                      Rehabilitation of the existing dams                       Construction of dams and boreholes</p> <p><b>Opportunity:</b>                      Availability of land for construction of dams and boreholes.</p>	<p>To rehabilitate existing dams.</p> <p>Follow up water diversion from existing HTM water project to the livestock drinking troughs.</p> <p>Follow up on planned excavation of dams from LGA.</p> <p>Participatory site selection for dam and boreholes excavation.</p> <p>Excavation of dams and boreholes.</p> <p>Link group to water service providers (e.g. borehole drilling companies) through LGA.</p>	<p>Experts</p> <p>Transport</p> <p>Time</p> <p>Funds</p>	<p>Project</p> <p>Group</p> <p>LGA</p>	<p>LGA</p> <p>Group</p>	<p>Since July 2014</p>	<p>Official reply from LGA on its planned activities towards these constraints</p> <p>MoU between the group/farmers and LGA</p>

2	<p>Inadequate Knowledge in animal husbandry and business skills</p> <p>Animal health</p> <p>Cost of milk production</p> <p>Business awareness</p> <p>Gross margin analysis</p>	<p><b>Potential solution:</b> Training on identified needs such as: *Animal health *Milk production *Business awareness *Gross margin analysis</p> <p><b>Opportunity:</b> Cattle keepers are eager and willing to learn</p>	<p>Conduct training on animal health</p> <p>Conduct training on animal husbandry</p> <p>Conduct training on agri-business management</p> <p>Conduct participatory training on gross margin analysis on production of one litre of milk and cost of raising one cow</p> <p>Conduct training on negotiation skills</p> <p>Conduct learning exchange visits</p>	<p>Facilitators</p> <p>Transport</p> <p>Stationery</p> <p>Venue</p> <p>Funds</p>	<p>Project</p> <p>Group</p>	<p>Faida MaLi</p> <p>HPI</p>	<p>Since mid June 2014</p>	<p>Attendance list</p> <p>Training notes from cattle keepers</p> <p>Training handouts</p> <p>Action plan in place</p>
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3	<p>Inadequate pasture and livestock routes</p> <p>A. Inadequate pasture</p> <p>B. Livestock routes to and from grazing land.</p>	<p><b>Potential solutions:</b> Growing of improved fodder</p> <p>Training on pasture management</p> <p><b>Opportunity:</b> Availability of grazing land and willingness of group to grow fodder</p> <p><b>Potential solution:</b> Earmark and reclaim livestock routes</p> <p><b>Opportunity:</b> Presence of previous livestock route which has illegally blocked</p>	<p>Training on pasture management</p> <p>Conduct learning exchange visits</p> <p>Establishment of improved pasture Farm Field Schools and distribution of improved pasture seeds</p> <p>Conduct identification of old livestock routes</p> <p>Evict encroachers of livestock routes</p>	<p>Transport</p> <p>Funds</p> <p>Facilitators</p> <p>Time</p> <p>Seeds</p> <p>Venue</p>	<p>LGA</p> <p>Group</p> <p>Project</p>	<p>Group</p> <p>LGA</p> <p>Project</p>	<p>Since August 2014</p>	<p>Handouts</p> <p>List of participants</p> <p>Farmer Field School in place</p> <p>Old livestock routes used</p>
4	<p>Lack of improved dairy cattle breeds</p>	<p><b>Potential solution:</b> To improve the existing cattle herd through AI and/or improved bulls.</p> <p>Use of improved bull service</p> <p>To acquire improved in-calf heifers</p>	<p>To link the group with AI service provider from the district (LGA).</p> <p>To link the group with the identified source/dealer of improved bulls and/or in-calf heifers such as the government farms (LMUs and NARCO)</p>	<p>Experts</p> <p>Funds</p>	<p>Project</p> <p>Group</p> <p>LGA</p>	<p>Faida Mali</p>	<p>June-July 2014</p>	<p>Action plan</p> <p>List of various service providers</p> <p>MoU between service providers and producers</p>

		<p><b>Opportunities:</b> Presence of indigenous cattle, which can be crossed with dairy breeds</p> <p>Cattle keepers are willing to adopt dairy cattle</p>	To arrange the acquisition of improved breeding services by cash for some producers and by check-off system for some others					
5	Low producer milk price	<p><b>Potential solutions:</b> To invite more milk traders for exploring advantage of price competition</p> <p>Collective selling of milk by the group to weakens the influence of traders/middlemen</p> <p><b>Opportunities:</b> Availability of milk from group members and other farmers in the village</p> <p>Willingness of group to sell their milk</p>	<p>Participatory identification reliable milk buyers</p> <p>Sensitize group members and other villagers on the advantages of collective action</p> <p>Conduct business meeting between group and buyers to discuss sales contract</p> <p>Signing of business contract between group and buyers</p>	<p>Transport</p> <p>Funds</p> <p>Experts</p> <p>Facilitate</p> <p>Time</p> <p>Stationery</p> <p>Venue</p>	Project Group	Project Group LGA	Sept. 2014	<p>Training reports and attendance list</p> <p>Application of trainings</p> <p>Milk sales contract</p>

Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												



### Site 3: Kwabaya site plan, Handeni district

**Village:** Kwabaya

**Name of Group:** MAZIWA ZAIDI KWABAYA

**No.:** HW/HD/UV/0179

**Date:** 14 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1	Inadequate water during dry season	<p><b>Potential solution:</b> Group work with LGAs on Construction of dams and boreholes</p> <p><b>Opportunity:</b> Availability of land for construction of dams and ponds</p>	<p>Participatory site selection for dam and bore hole excavation.</p> <p>Link group to water service providers (borehole drilling companies)</p> <p>Construction of dams and boreholes.</p>	<p>Facilitator</p> <p>Funds</p>	<p>Group</p> <p>LGA</p>	<p>LGA</p> <p>Group</p> <p>HIT</p>	<p>May - July 2014</p> <p>Boreholes/dam</p>
2	Inadequate grazing land and livestock routes	<p><b>Potential solution:</b> Earmark and reclaim invaded livestock routes and grazing land.</p>	<p>Identification of old livestock routes and grazing land.</p>	<p>Funds</p>	<p>LGA</p> <p>Group</p> <p>Project</p>	<p>LGA</p> <p>Project</p>	<p>Since August 2014</p> <p>Old livestock routes and grazing land been verified</p>
3	Low cow productivity with respect to milk production	<p><b>Potential solutions:</b> Use of improved dairy bulls and AI services</p> <p>Acquire dairy cattle breeds</p> <p>Improve husbandry</p>	<p>Identify services providers who can supply improved cow breeds and AI services.</p> <p>Examine with farmers the husbandry practices that need improvement and provide training accordingly</p>	<p>Facilitator</p> <p>Funds</p>	<p>Project</p> <p>Group</p> <p>LGA</p>	<p>HIT</p> <p>Group</p>	<p>Sept. 2014</p> <p>List of various service providers</p>

4	High incidence of tick-borne diseases	<p><b>Potential solution:</b> Construction of a dip in the village</p> <p><b>Opportunity:</b> Availability of many cows, which justifies construction of dip in the village</p>	<p>Conduct site selection for dip construction</p> <p>Conduct feasibility study and develop bill of quantity on dam construction at Kwabaya village</p> <p>Group members work with LGAs to construct dam for water use in dip tank filling</p> <p>To select dipping committee to work with dipping work</p>	<p>Funds</p> <p>Facilitator</p>	<p>LGA</p> <p>Group</p> <p>Project</p>	<p>LGA</p> <p>Group</p> <p>HIT</p>		Dip in place
5	Inadequate veterinary services for livestock	<p><b>Potential solution:</b> Raise the issue with LGA</p>	<p>Meeting between Group and LGA</p>	<p>Transport</p> <p>Funds</p>	<p>Group</p> <p>LGA</p>	<p>Group</p> <p>LGA</p>	<p>Sept. 2014</p>	<p>Minutes of meeting</p>
6	Low producer milk price	<p><b>Potential solutions:</b> Provision of market/price information</p> <p>Collective selling of milk</p>	<p>Identify reliable and affordable source of market information</p> <p>Sensitize farmers on the advantages of collectively selling their milk.</p>	<p>Funds</p>	<p>Project</p> <p>Group</p>	<p>Faida MaLi</p> <p>Group</p> <p>LGA</p>	<p>Since January 2015</p>	<p>Rules for collective selling of milk</p> <p>Strategy for collecting and disseminating price information among group members</p>

Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 4: Kweditilibe site plan, Handeni district

**Village:** Kweditilibe

**Name of Group:** MAZIWA ZAIDI KWEDITILIBE

**No.:** HW/HD/UV/0179

**Date:** 13 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1	Inadequate Knowledge of animal husbandry particularly in: *Fodder/pasture conservation *Animal health *Milk production *Dairy cows feeds and feeding	<b>Potential solutions:</b> Improving dairy cattle husbandry (Breed and breeding, feeding, disease control, calf rearing and proper milking technique  Presence of local and some mixed breed cattle  Willingness of farmers to sell some of local cattle and buy dairy cattle	Training on dairy cattle husbandry (breed and breeding, feed and feeding, calf rearing, disease control and proper milking technique  Training on fodder/pasture production  Exchange visits	Facilitators  Funds	Project  Group	HIT	Since mid June 2014  Plots with pasture/feed  Conserved feeds  Attendance list  Training handouts on the
2	High incidence of livestock diseases in the village (East Coast fever, <i>Anaplasmosis</i> , <i>cowdriosis</i> , <i>babesiosis</i> and BQ)	<b>Potential solutions:</b> Disease prevention and cure  Initiation of group input shop for input supplies <ul style="list-style-type: none"> <li>The use of dip for dipping to control Tick bone diseases</li> </ul>	Mobilize group members to initiate group input shop  To start group input shop  Link group to reliable input service providers	Facilitators  Funds	Project  Group  LGA	HIT	Since Sept. 2014  Attendance list  Group shop  Contract/MoU with service provider  Dip in place

		<p><b>Opportunities:</b> Group members are ready to buy inputs on collective basis.</p> <p>The need of dipping of their livestock</p>	Organize business meeting between group and service provider					
3	<p>Inadequate grazing land and livestock routes</p> <p>a) Inadequate grazing land</p> <p>b) Lack of verified Livestock routes to and from grazing land.</p>	<p><b>Potential solutions:</b> Growing of improved fodder</p> <p>Training on pasture management</p> <p><b>Opportunity:</b> Availability of grazing land and willingness of group to grow improved fodder</p> <p><b>Potential solution:</b> Earmark and reclaim invaded livestock routes</p> <p><b>Opportunity:</b> Old livestock routes are recognized by the group and village at large</p>	<p>Training on pasture management</p> <p>Conduct learning exchange visits</p> <p>Establishment of improved pasture</p> <p>Farm Field Schools</p> <p>Distribution of improved pasture seeds</p> <p>Conduct identification of old livestock routes.</p> <p>Evict invaders of livestock routes</p>	<p>Funds</p> <p>Facilitators</p>	<p>LGA</p> <p>Group</p> <p>Project</p>	<p>HIT</p>	<p>Since August 2014</p>	<p>Handouts</p> <p>List of participants</p> <p>Farmer Field School in place</p> <p>Old livestock routes reinstated</p>

4	Low production due to low genetic potential	<p><b>Potential solutions:</b> Improve productivity by acquiring new breeds</p> <p>Use of improved breeds</p> <p><b>Opportunity:</b> Producers willingness to buy improved cattle for crossing</p>	<p>Linkage with AI service provider.</p> <p>Identify services providers who can supply improved cow breeds</p> <p>Link farmers with Service providers on check off basis so that they can access improved bulls and AI services</p> <p>Select some group members who will get training on AI services so that they can bring the services near the group members</p>	<p>Experts</p> <p>Funds</p>	<p>Project</p> <p>Group</p>	<p>HIT</p>	<p>Sept. 2014</p>	<p>Accessibility of AI services</p> <p>List of various service providers</p> <p>Contract/MoU between service providers and producers</p>
5	Scarcity of water during dry season	<p><b>Potential solution:</b> Group members to work with LGA in the construction of dams and boreholes</p> <p><b>Opportunity:</b> Availability of land to construct dams/ boreholes</p>	<p>Follow up on planned construction of dams by LGA.</p> <p>Participatory site selection for dam</p> <p>Group member to work with LGAs to construct a dam and boreholes.</p>	<p>Facilitator</p> <p>Funds</p>	<p>Project</p> <p>Group</p> <p>LGA</p>	<p>LGA</p> <p>Group</p>	<p>Since July 2014</p>	<p>Boreholes/ dams in place</p> <p>Water user certificate</p>

			Link group to water service providers								
6	Low producer milk price	<p><b>Potential solutions:</b> Identify other potential milk buyers</p> <p>Collective bulking selling of milk</p> <p><b>Opportunity:</b> Willingness of group to make collective sales</p>	<p>Conduct training on understanding the cost of production</p> <p>Group members to participate in identification of reliable milk buyers</p> <p>Sensitizing collective milk selling</p> <p>Conduct business meeting between group and buyers to discuss sales contract</p> <p>Signing of business contract between group and buyers</p>	<p>Facilitator</p> <p>Funds</p>	Project Group	Project Group LGA	Since Sept. 2014	<p>Training reports and attendance list</p> <p>Milk sales contract/MoU</p>			

Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 5: Kwediyamba site plan, Handeni district

**Village:** Kwediyamba

**Name of Group:** MAZIWA ZAIDI KWEDIYAMBA **No.:** HW/HD/UV/0298

**Date:** 15 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resource	Who does the task	When	Evidence items
1	A: Inadequate Knowledge of animal husbandry particularly in: breeds and breeding, feeds and feeding, calf rearing, disease control, housing, milk techniques	<p><b>Potential solution:</b> Improve the knowledge base of producers on dairy cattle husbandry and entrepreneurship</p> <p><b>Opportunity:</b> Farmers willingness to learn animal health, AI and to serve other group members</p>	<p>Conduct training on animal health.</p> <p>Conduct training on fodder conservation</p> <p>Conduct training on milk production, value addition</p> <p>Conduct training on animal breeding and breeds</p> <p>Conduct training on dairy cows, feeds and feeding</p> <p>Conduct field visits. Conduct training on business awareness.</p> <p>Conduct training</p>	<p>Facilitators</p> <p>Funds</p>	<p>Project</p> <p>Group</p>	<p>HIT</p> <p>Since Mid June 2014</p>	<p>Attendance list</p> <p>Training notes</p> <p>Training handouts</p>

			on record keeping, negotiation skills and gross margin analysis on production of one litre of milk and cost of raising one cow.					
2	Low productivity due to low genetic potential of the existing cows	<p><b>Potential solutions:</b> Improve productivity by crossing the existing cows with improved breeds</p> <p>Use of improved breed</p> <p><b>Opportunity:</b> Producer willingness to sell some of their local breed and to buy improved breed and/ or the use of AI</p>	<p>Identify and linking service providers who can supply improved breeds and AI services.</p> <p>Link farmers to input supplier who are willing to provide the service</p> <p>Select some group members to be trained on AI services so that they can bring the services near the group members</p>	<p>Facilitators</p> <p>Funds</p>	Project	HIT	Sept. 2014	<p>Contract /MoU between service providers and producers</p> <p>Trained group members on AI service provision</p>
3	Insufficient grazing land and inaccessibility of grazing lands due to lack of livestock routes	<p><b>Potential solutions:</b> Growing improved fodder</p> <p>Training on appropriate grazing land management and fodder/pasture management</p>	<p>Training on pasture management</p> <p>Conduct learning exchange visits</p> <p>Establishing demonstration plot</p>	<p>Funds</p> <p>Facilitators</p>	LGA Group Project	HIT	Since August 2014	<p>Handouts</p> <p>List of participants</p>



		<p>Earmark and reclaim invaded livestock routes</p> <p>Reduce number of livestock per unit area</p> <p><b>Opportunities:</b> Availability of grazing land and willingness of group to grow improved fodder.</p> <p>Old livestock routes are recognized by the group and village at large</p>	<p>Establishing improved pasture</p> <p>Conduct identification of old livestock routes.</p> <p>Working with LGA create a village livestock committee to protect existing grazing lands against encroachment</p>					
4	Inadequate supply of drinking water for livestock during dry season	<p><b>Potential solution:</b> Harvest ground and rain water</p> <p><b>Opportunity:</b> Readiness of government to construct new dam in the village</p>	<p>Follow up of planned dam construction by LGA</p> <p>Farmers to Participate in site selection for dam and bore holes construction</p> <p>Group members to work with LGA for construction of dams and bore holes</p>	<p>Facilitators</p> <p>Funds</p>	<p>Project</p> <p>Group</p> <p>LGA</p>	<p>LGA</p> <p>Group</p>	<p>Since October 2014</p>	<p>Boreholes/ dams in place</p>

5	Low producer milk price	<p><b>Potential solutions:</b> Explore additional/potential milk buyers</p> <p>Collective bulking of milk sales</p>	<p>Group member to participate in identifying reliable milk buyers</p> <p>Sensitizing collective milk selling</p> <p>Conduct business meeting between group and buyers to discuss sells contract</p> <p>Signing of business contract between group and buyers</p>	<p>Funds</p> <p>Expert</p> <p>Facilitator</p>	<p>Project Group</p>	<p>FAIDA MALI Group</p>	<p>Since Feb. 2015</p>	<p>Training reports and attendance list</p> <p>Milk sales contract/MoU</p>
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Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 6: Kwemashai site plan, Lushoto district

**Village:** Kwemashai

**Name of Group:** UWAKWE

**No.:** HW/LT/UV/50

**Date:** 21 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1. Low cow productivity regarding milk production due to the genetic composition of the herd	<b>Potential solution:</b> Improve the genetic composition of the herd through use of dairy bulls and heifers	Identify and link group members to services providers who can supply improved cow breeds and AI services  Conduct training on breeding and recognizing heat period of improved dairy breeds  Identify and visit model farmers  Select some group members who can get training on AI services so that they can bring the services nearer the cooperative society members	Experts  Funds	Project  Group  LGA	HIT  Group	July 2014	List of various service providers  MoU between service providers and producers
2. Inadequate Knowledge in animal husbandry and business skills particularly in:  A: Animal production	<b>Potential solution:</b> Training on identified needs such as animal health	Conduct training on animal health, milking and milk quality, pasture production and conservation	Facilitators  Transport, for: *participants to and from village to training destination	Project Group  LGA	HIT  Group  LGA	Since June 2014	Attendance list  Training notes  Training handouts on the subject matter

	<p>Animal health</p> <p>Milking and milk qualities</p> <p>Pasture production and conservation</p> <p>B. Lack of business skills: Record keeping, forecasting demand and prices</p> <p>Profitability analysis</p>	<p><b>Potential solutions:</b> Record keeping</p> <p>Gross margin analysis</p> <p>Providing market information</p>	<p>Conduct training on record keeping, gross margin analysis</p>	<p>*facilitators to and from training destination</p> <p>Stationery</p> <p>Venue</p> <p>Time</p> <p>Funds</p>				<p>Application of the knowledge</p> <p>Action plan in place</p>
3	<p>Seasonality of feeds</p>	<p><b>Potential solution:</b> Improved pasture management</p> <p><b>Opportunity:</b> Availability of land for growing improved fodder.</p>	<p>Workshop and field demonstrations on pasture management and conservation</p> <p>Supply of pasture seeds to group members on check off basis</p> <p>Establishment of farm field school on improved pastures</p>	<p>Transport</p> <p>Funds</p> <p>Facilitators</p> <p>Time</p> <p>Seeds</p> <p>Venue</p>	<p>LGA</p> <p>Coop</p> <p>Project</p>	<p>Group</p> <p>LGA</p> <p>Project</p>	<p>Sept. 2014</p>	<p>Handouts</p> <p>List of participants</p> <p>Application of knowledge</p> <p>Farmer Field School in place</p>

4	Limited availability and accessibility to livestock inputs (concentrates, minerals, bran)	<p><b>Potential solutions:</b> Formation of consumer coop or group to collectively procure inputs</p> <p>Check-off system</p> <p><b>Opportunity:</b> Some of the group members are members of a local producer (marketing) cooperative, UWALU. They could use their knowledge of cooperatives to form a consumer (supply) cooperative</p>	<p>Link group to potential input suppliers and service providers willing to work with milk traders to supply inputs and services on check-off basis</p> <p>Sensitize group on consumer coops and joint procurement of inputs</p>	<p>Transport</p> <p>Funds</p> <p>Experts</p> <p>Time</p> <p>Venue</p>	<p>Project</p> <p>Group</p>	<p>LGA</p> <p>Project</p> <p>Group</p>		<p>Check-off system operational</p>
5	Livestock diseases	<p><b>Potential solutions:</b> Conduct training on animal health.</p> <p>Link group to input supplier</p> <p><b>Opportunity:</b> The village and neighboring villages have no input suppliers services so easy to convince one to invest a shop</p>	<p>Conduct training on animal health</p> <p>Facilitate group members with vaccination calendar at least on six-months basis.</p> <p>Link group members to input service providers on check off basis.</p>	<p>Transport</p> <p>Funds</p> <p>Experts</p> <p>Time</p>	<p>Project</p> <p>LGA</p> <p>Group</p>	<p>Project</p> <p>LGA</p> <p>Group</p>	<p>Since June 2014</p> <p>As soon as possible</p> <p>October 2014</p>	<p>Attendance list</p> <p>Handouts</p> <p>Application of knowledge.</p> <p>Vaccination calendar</p>

6	Low producer milk price during wet season and long distance to collection centre	<p><b>Potential solutions:</b> Establish production cost of 1 litre of milk</p> <p>Group members could discuss with coop on stabilizing prices (milk income) e.g. average milk price across the two seasons</p>	<p>Conduct training on record keeping, negotiation skills and gross margin analysis for 1 litre of milk</p> <p>Meeting between cooperative and group</p> <p>Participatory identification of other potential milk buyers and link them to group</p>	<p>Transport</p> <p>Funds</p> <p>Experts</p> <p>Time</p> <p>Stationery</p> <p>Venue</p>	Project	Project Cooperative society LGA	<p>Sept. 2014</p> <p>Since April 2015</p>	<p>Training reports and attendance list</p> <p>Minutes</p>
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Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 7: Lwandai site plan, Lushoto district

**Village:** Lwandai

**Name of Group:** MWAMKO

**No.:** HW/LT/UV/12

**Date:** 18 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1	Low productivity of indigenous cattle breeds due to their genetic potential	<p><b>Potential solution:</b> Improve the genetic potential of the dairy cows kept by the producers</p> <p><b>Opportunities:</b> Presence of indigenous cattle, of which some can be used to finance acquisition of improved heifers</p> <p>Presence of group members with basic education who can be trained on AI.</p>	<p>Identify services providers who can supply improved cow breeds and AI services.</p> <p>Link group with AI service provider</p> <p>Use of improved bull service.</p> <p>Use of improved heifers</p> <p>Select some group members who will be able to get training on AI services so that they can bring the services near the group members</p>	Funds	Project	HIT	<p>Sept. 2014</p> <p>List of various service providers availed to the group</p> <p>Contract between service providers and producers</p> <p>Select group members trained on AI</p>
2	A: Inadequate	<p><b>Potential solution:</b> Training on:</p>	Conduct training on animal health	Facilitators	Project	HIT	Mid June Attendance list

<p>Knowledge particularly of:</p> <p>Animal health</p> <p>Fodder conservation</p> <p>Milk production</p> <p>Animal breeding and breeds</p> <p>Dairy animal housing</p> <p>Dairy cows feeds and feeding</p> <p>B: Lack of business skills: Specifically entrepreneurship skills on animal products i.e. milk and milk product</p>	<p>Animal health</p> <p>Fodder conservation</p> <p>Milk production</p> <p>Animal breeding and breeds</p> <p>Dairy animal housing</p> <p>Dairy cows feeds and feeding</p> <p><b>Potential solutions:</b></p> <p>Training on:</p> <p>*Record keeping</p> <p>*Entrepreneurship</p> <p>Gross margin analysis</p>	<p>Conduct training on raising environmental awareness and conservation</p> <p>Conduct training on milk production</p> <p>Conduct training on animal breeding and breeds</p> <p>Conduct training on dairy cows feeds and feeding</p> <p>Conduct learning exchange visits</p> <p>Conduct training on animal production with respect to environmental conservation</p> <p>Conduct training on business awareness.</p> <p>Conduct training on record keeping, negotiation skills</p>	<p>Funds</p> <p>Transport, for:</p> <p>*participants to and from village to training destination</p> <p>*facilitators to and from training destination.</p>	<p>Group</p> <p>LGA</p>	<p>LGA</p>	<p>Since 2014</p>	<p>Training notes</p> <p>Training handouts on the subject matter</p> <p>Visitors record book</p>
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			and gross margin analysis					
3	Inadequate capital and credit to run dairy cattle as business.	<p><b>Potential solutions:</b> Link farmers with reliable microfinance institution so that they can access soft loans</p> <p>Implement check off</p> <p><b>Opportunity:</b> Availability of various microfinance institutions which can be linked with the group</p>	<p>Facilitate farmers to access various services on check off basis through service providers.</p> <p>Conduct training which can enable farmers to recognize opportunities which are within their vicinity</p> <p>Link farmers to microfinance institutions so that they can access soft loans.</p>	<p>Facilitators</p> <p>Funds</p>	Project	Faida MaLi	Oct. 2014	<p>MoU with Microfinance</p> <p>Linkage in place</p> <p>Training notes and handouts</p> <p>Attendance list</p>
4	Inadequate veterinary services	<p><b>Potential solution:</b> Collectively sourcing for veterinary services.</p> <p><b>Opportunity:</b> Willingness of farmers to outsource services on collective basis</p>	<p>Conduct training on basic services for sick dairy cow (first aid service)</p> <p>Mobilize on collective purchase of veterinary services</p> <p>Conduct business meeting between farmers and service provider and sign</p>	<p>Facilitators</p> <p>Funds</p>	Project	HIT	Nov. 2014	<p>Contract/MoU with service providers</p> <p>Training notes and handouts</p> <p>Attendance list</p>

			contract.  Link farmers to service provider Enable preparation of annual vaccination program.					
5	Unavailability of inputs and services within the village	<b>Potential solutions:</b> Collectively sourcing of inputs	Mobilize on collective purchase of inputs  Link group to potential input suppliers on check-off basis  Conduct business meeting with service provider and sign business contract  Collectively outsource of inputs  Conduct training on need and use of extra feeds to dairy cows	Funds  Facilitators	Project	Faida MaLi		Attendance list  Linkage with BDS providers
6	Insufficient quality pastures	<b>Potential solution:</b> Growing of improved pastures.	Training on improved pastures and how to recognize quality	Funds  Facilitators	Project	HIT		List of participants  Training

		<b>Opportunity:</b> Availability of land to grow improved pastures.	pastures  Establish pasture demonstration plot. Conserve pasture					Handouts and notes  Demo plot  Conserved pasture
7	Unreliable milk market	<b>Potential solutions:</b> Mobilization of collective marketing of milk  Source for alternative buyers and value addition  <b>Opportunity:</b> Readiness of farmers to make collective sales of milk.	Mobilize on milk collective sells.  Link farmers to potential buyers.  Conduct business meeting between buyers and farmers and sign business contract  Link with service provider who can supply milk collection equipment.	Funds  Facilitators	Project	Faida MaLi	Jan. 2015	Contract with buyer  Collective milk bulking
8	Shortage of water for livestock	<b>Potential solution:</b> Conduct training on efficient way of water utilization.  <b>Opportunity:</b> Availability of river in the village	Conduct training on environmental conservation with respect to water  Conduct training on efficient utilization of water.	Funds  Facilitators	Project  LGA	HIT  LGA	Since June 2014	Attendance list  Handouts

<b>Activity</b>	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 8: Masatu site plan, Handeni district

**Village:** Masatu

**Name of Group:** MAZIWA ZAIDI MASATU

**No.:** HW/HD/UV/0259

**Date:** 8 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1 Inadequate Knowledge in:  Animal health  Cost of animal and milk production  Business awareness (entrepreneurship)  Gross margin analysis.  Land use management  Livestock insurance	<b>Potential solution:</b> Training on: *Animal health *Milk production *Business awareness skills(entrepreneurship) *Gross margin analysis *Land use management *Livestock insurance  <b>Opportunity:</b> Cattle keepers are eager and willing to learn	Conduct training on animal health.  Conduct training on animal health  Conduct training on milk production  Conduct training on business awareness  Conduct participatory training on gross margin analysis  Conduct training on potential benefits of livestock insurance and how a potential livestock insurance scheme can work  Conduct training on efficient land use management Conduct learning exchange visits	Facilitators  Funds	Project	Faida MaLi  HIT	Since mid June 2014	Attendance list  Training notes from cattle keepers  Training handouts

2	Unavailability of inputs and services at the village	<p><b>Potential solutions:</b> Linking groups with input suppliers</p> <p>Collective sourcing of inputs</p> <p><b>Opportunity:</b> Presence of Input suppliers in nearby village.</p>	<p>Establish group input shop at village level</p> <p>Link group to reliable input suppliers at Korogwe town</p>	<p>Facilitator</p> <p>Funds</p>	Project	Faida MaLi	June 2014	<p>MoU/contract in place with an input provider</p> <p>Linkage in existence between group and input supplier</p>
3	Livestock diseases especially mastitis	<p><b>Potential solutions:</b> Training on animal health</p> <p>Link group members to potential input suppliers</p> <p><b>Opportunity:</b> Group is close to Korogwe town, so it is easy to access input suppliers</p>	<p>Conduct training on milk hygiene with respect to mastitis control and improve milk quality</p> <p>Link group members to potential input suppliers</p>	<p>Facilitators</p> <p>Funds</p>	Project	HIT	August 2014	<p>Training handout</p> <p>Attendance list</p> <p>MoU/contracts with <b>agro inputs</b> suppliers</p>

4	Inadequate grazing land due to the encroachment of some outsiders.	<p><b>Potential solution:</b> Follow up of village land use plan and stock routes</p> <p><b>Opportunity:</b> Availability of the old stock routes and grazing lands which can be reclaimed</p>	Working with LGA Make follow up for reclaiming the allocated grazing land in the different village forums	Funds	LGA Group	Group LGA	Since April 2014	Field reports Land use policy
5	Inadequate livestock extension staff	<p><b>Potential solutions:</b> Link one livestock extension staff to the village</p> <p>Potential group members to learn paravet course</p> <p><b>Opportunity:</b> Group is ready to provide some members to learn paravets to serve the group members</p>	<p>To make follow for livestock extension staff allocation from LGA</p> <p>Identify potential group members for paravet training.</p> <p>To train identified group members on livestock health services (Paravet).</p>	Funds	Project Group	HIT Group LGA	Sept. 2014	Field reports Paravets trained Group linked with a paravet

Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 9: Mbuzii plan, Lushoto district

**Village:** Mbuzii

**Name of Group:** BAHATI

**No.:** HW/LT/UV/24

**Date:** 19 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1	Inadequate Knowledge in animal husbandry particularly in animal production	<p><b>Potential solution:</b> Training on dairy husbandry</p>	<p>Conduct training on animal production</p> <p>Conduct field visits</p>	<p>Facilitators</p> <p>Funds</p>	Project	HIT	<p>Since mid June 2014</p> <p>Attendance list</p> <p>Training notes</p> <p>Training handouts</p> <p>Visitors record for the field visit</p>
2	Low milk production by the existing breeds due to their genetic capability	<p><b>Potential solution:</b> Improve genetic capability of dairy cows kept by the producers</p> <p><b>Opportunity:</b> Presence of indigenous cattle, which can be used to finance acquisition of improved heifers</p>	<p>Linkage with AI service provider</p> <p>Use of improved bull service.</p> <p>Use of improved heifers</p> <p>Conduct training on recognizing of improved dairy breeds to group members.</p> <p>Avail information on vaccination</p>	<p>Facilitators</p> <p>Funds</p>	Project	<p>HIT</p> <p>Group</p>	<p>Sept. 2014</p> <p>June 2014</p> <p>Contract between AI service providers and producers</p> <p>Select Group members trained on AI</p>



			<p>calendar and where to outsource improved dairy cow breeds</p> <p>Identify services providers who can supply improved cow breeds and AI services.</p> <p>Link farmers with Service providers services</p> <p>Solicit few potential members who can get training on AI services so that they can bring services to the group members</p>				<p>August 2014</p> <p>Oct. 2014</p>	
3	Livestock diseases and inaccessibility of related inputs (“high cost”)	<p><b>Potential solutions:</b></p> <p>Link group members to potential input suppliers/service providers.</p> <p>Access inputs on credit through a check off</p> <p>Knowledge dissemination on cost of treatment</p>	<p>To train some group members as paravets, who can serve group members.</p> <p>Provide knowledge on the cost of treatment per animal on</p>	<p>Funds</p> <p>Facilitators</p>	Project	HIT	<p>Sept. 2014</p> <p>June 2014</p>	<p>Contracts with agro inputs dealers</p> <p>Inputs and services accessed through a check off</p>

		<p><b>Opportunity:</b> Group is willing to combat diseases.</p>	<p>Mobilize group members on collective input purchases.</p> <p>Link group members to potential input suppliers/service providers willing to be paid on check off basis</p>				Oct. 2014	
4	Low producer milk price	<p><b>Potential solutions:</b> Outsource more potential milk buyers.</p> <p>Collective selling</p> <p><b>Opportunity:</b> Willingness of group to make collective sells.</p>	<p>Participatory identification reliable milk buyers</p> <p>Sensitize collective milk selling to group members</p> <p>Conduct business meeting between group and buyers to discuss sells contract</p>	<p>Funds</p> <p>Facilitators</p>	Project	Faida MaLi	Since Feb. 2015	<p>Training reports and attendance list</p> <p>Milk sales contract with buyers</p>
5	Cattle disease (mastitis) and low milk yield due to Lack of improved dairy cow Sheds	<p><b>Potential solution:</b> Training of farmers on improved cattle sheds</p> <p><b>Opportunity:</b> Availability of local cheap</p>	<p>Conduct training on improved dairy cow sheds utilizing locally available building materials</p>	<p>Funds</p> <p>Facilitators</p>	Project	HIT	June 2014	<p>Handouts</p> <p>List of participants</p>

		building materials in their vicinity	Linking of group members to service providers of building				Feb. 2015	
6	Inadequate animal feeds(Pastures)	<p><b>Potential solution:</b> Growing of improved fodder on the available land</p> <p><b>Opportunity:</b> Availability of land to grow pastures</p>	<p>Training on pasture management (establishment and conservation)</p> <p>Conduct field visits.</p>	Funds Facilitators	Project LGA	HIT LGA	Since August 2014	<p>Handouts</p> <p>List of participants</p> <p>Pasture plots</p> <p>Conserved pasture</p>

Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 10: Msomera site plan, Handeni district

**Village:** Msomera

**Name of Group:** MAZIWA ZAIDI MSOMERA

**No.:** HW/HD/UV/0429

**Date:** 19 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1	Inadequate Knowledge of animal production	<b>Potential solution:</b> Improved animal production practices	Conduct training on animal production in general.  Visit to model farmers	Facilitators  Transport, for: *participants to and from village to training destination. *facilitators to and from training destination.  Stationery  Venue  Funds	Project  Group  LGA	HIT	Since mid June 2014  Attendance list  Training notes  Training handouts on the subject matter
2	Low milk yield from the existing cows due to their low genetic potential	<b>Potential solution:</b> To improve the genetic potential of the existing herd through use of improved bulls and improved heifers  <b>Opportunities:</b> Presence of mixed breeds in the village, which can be crossed with dairy breeds	To efficiently utilize the existing breeding bulls in the village  To identify and link the group to more source of improved bulls and	Experts  Funds	Project  Group  LGA	Project  Group	Sept. 2014  Action plan  List of various service providers  Contract between service providers

		<p>Some farmers have already purchased the improved bulls</p> <p>There is government (Mr President) promise to provide improved cattle</p>	<p>cows/heifers</p> <p>To linkage with AI service provider in Handeni town on check off basis</p> <p>Select some potential group members who can get training on AI services so that they can bring the services near the group members</p> <p>Facilitate the availability of AI facilities ( equipment) to trained village AI service provides</p>					<p>and producers</p> <p>AI service provision in place</p>
4	Low producer milk price given by few milk traders	<p><b>Potential solutions:</b></p> <p>Outsource more potential milk traders to initiate price competition among milk traders</p>	Conduct training on record keeping, negotiation skills and gross	Transport Funds	Project Group	Faida MaLi	Since Feb. 2015	Training reports and attendance list

		<p>To establish collective (group) selling of milk to traders in one price argument</p> <p>To find out the alternative usage or processing of abundant milk during the wet season</p> <p>Improve dairy business knowledge such as price negotiation skills</p> <p><u>Opportunity:</u> The established farmer group</p> <p>Availability of abundant milk during the wet season</p>	<p>margin analysis for 1 litre of milk</p> <p>Participatory identification of reliable milk buyers</p> <p>Identify range of value added products that can be profitably produced</p> <p>Conduct business meeting between group and buyers to discuss MoU</p> <p>Signing of MoU between group and buyers</p>	<p>Experts</p> <p>Facilitate</p> <p>Stationery</p> <p>Venue</p>				Milk sales contract
5	Livestock diseases and high costs of veterinary inputs and services	<p><b>Potential solutions:</b> To combat the most common diseases whose medication and/or preventions mechanisms are known</p> <p>Improve the availability and accessibility of veterinary</p>	<p>Link group members to potential inputs and services providers willing to offer their services on check-off basis</p>	<p>Transport</p> <p>Funds</p>	<p>Group</p> <p>Project</p>	<p>Faida</p> <p>Mali</p>	<p>July 2014</p>	<p>Contracts with agro inputs dealers</p>

		inputs and services <b>Opportunity:</b> Group members have some knowledge (traditional) on animals diseases	Follow-up the government routine on vaccination					
6	Limited grazing land	<b>Potential solutions:</b> Growing high yielding varieties of pasture on the existing land  Increase awareness of appropriate grazing land management  <b>Opportunity:</b> Availability of grazing land and willingness of group to grow improved fodder	Training on grazing land management.  Establishment of farmer field school on improved high yielding pasture	Transport  Funds  Facilitators  Time  Seeds  Venue	LGA  Group  Project	HIT	Since August 2014	Handouts  List of participants  Farmer field School

Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 11: Mwangoi site plan, Lushoto district

**Village:** Mwangoi

**Name of Group:** USHIRIKA UWAMWA

**No.:** HW/LS/UV/517

**Date:** 20 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1. Low cow productivity due to genetic potential of the cows	<p><b>Potential solution:</b> Improve genetic potential of indigenous cows through crossing</p> <p><b>Opportunity:</b> Availability of AI practitioner and services in the village</p>	<p>Training group members on breeds and breeding issues</p> <p>Facilitate the selection of some group members to be trained on AI and paravet services to meet producers' requirements</p>	<p>Facilitators</p> <p>Funds</p>	<p>Project</p> <p>Group</p> <p>AI technician</p>	HIT	October 2014 - January 2015	<p>Training notes and handouts</p> <p>Attendant list</p>
2. Inadequate capital for running dairy business.	<p><b>Potential solutions:</b> Training cooperative members on entrepreneurship skills</p> <p>Link cooperatives with financial institution and individual lenders.</p> <p><b>Opportunity:</b> Availability of financial institution which can provide soft loans.</p>	<p>Training cooperative members on entrepreneurship skills to get information on capital sources</p> <p>Link cooperatives with reliable financial institutions.</p> <p>Introduce check-off arrangements</p>	<p>Funds</p> <p>Facilitators</p>	Project	Faida Mali	August 2014	<p>Training reports and attendance list</p> <p>Training notes and handouts</p>
3. Low producer milk price	<p><b>Potential solutions:</b> Training on gross margin</p>	<p>Conduct training on record keeping, gross margin and</p>	Funds	Project	Faida Mali	Sept. 2014	Training notes and reports



		<p>analysis for one litre of milk to know production costs</p> <p>Market intelligence to know the prevailing milk prices</p> <p><b>Opportunity:</b> Availability of milk from cooperative members</p>	<p>negotiation skills</p> <p>Conduct business meeting between cooperative society and current milk buyers to negotiate on the prevailing sells milk price</p> <p>Conduct rapid participatory market research to identify other potential milk buyers and link them to cooperative society</p>	Facilitator				<p>Attendance list</p> <p>Milk sales MoU/ contract</p>
4	Inadequate livestock feeds during dry season.	<p><b>Potential solution:</b> Pasture establishment and management</p> <p><b>Opportunity:</b> Favorable climate for pasture establishment</p>	<p>Conduct Training on pasture management and fodder conservation.</p> <p>Supply of planting materials</p> <p>Establish Farmer Field School on improved pastures</p>	<p>Funds</p> <p>Facilitators</p> <p>Planting materials</p>	Project	HIT	Sept. 2014	<p>Handouts</p> <p>List of participants</p> <p>Farmer Field School in place</p>
5	<p>Inadequate Knowledge in animal husbandry and business skills particularly in:</p> <p>A: Animal husbandry Animal health</p>	<p><b>Potential solutions:</b> Training on identified needs such as: *Animal husbandry *Animal health</p> <p><b>Opportunity:</b> Cattle keepers are eager and willing to learn on the above subjects</p>	<p>Conduct animal husbandry</p> <p>Conduct training on milking and health</p> <p>Conduct training on entrepreneurship skills</p> <p>Conduct training on record keeping, negotiation skills and</p>	<p>Facilitators</p> <p>Funds</p>	<p>Project</p> <p>Cooperative Society</p> <p>LGA</p>	<p>Project</p> <p>Cooperative Society</p> <p>LGA</p>	Since June 2014	<p>Attendance list</p> <p>Training notes</p> <p>Training handouts on the subject matter</p>

	B. Lack of business skills: Specifically entrepreneurship skills on milk and milk products.	<b>Potential solution:</b> Entrepreneurship and Gross margin analysis  <b>Opportunity:</b> Cattle keepers are eager to know their costs of production	gross margin analysis					
6.	Lack of access to inputs	<b>Potential solution:</b> The cooperative society to upgrade their present input shop  <b>Opportunity:</b> The cooperative owns an input shop	Train cooperative members on check off arrangement so that they can access services from their Cooperative shop.	Facilitators Funds	Project	FAIDA MALI	June 2014	Attendance list  Training notes and handouts  Records on check off

Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 12: Ngulwi site plan, Lushoto district

**Village:** Ngulwi

**Name of Group:** UWANGU

**No.:** HW/LS/UV/62

**Date:** 23 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1 Inadequate Knowledge in animal husbandry and business skills:  (Animal husbandry, production, health)  Pasture management  Improved dairy cattle sheds  Entrepreneurship skills on dairy and dairy's products	<b>Potential solution:</b> Training on: *Animal production *Animal health *Pasture management *Improved dairy cattle sheds *Record keeping *Gross margin analysis  <b>Opportunity:</b> Experience in dealing with Indigenous cows	Conduct training on animal production.  Conduct training on animal health, pasture management  Training on improved dairy cattle sheds.  Conduct field visits.  Conduct training on record keeping, negotiation skills and gross margin analysis on production of one litre of milk and cost of raising one cow	Facilitators  Funds	Project  Group	HIT and Faida Mali	Since June 2014	Attendance list  Training notes  Training handouts on the subject matter
2 Prevalence of animal diseases and lack of commitment in combating cattle disease	<b>Potential solutions:</b> Training on animal health  Come up with an annual vaccination calendar	Training on animal health.  Make a follow-up on availability and implementation of	Transport  Funds	Group  Project  LGA	HIT	August 2014	LGA documentation on vaccination program

		<p>Link the group with animal health expert</p> <p><b>Opportunity:</b> Availability of animal health expert in the village and/or nearby vicinity</p>	<p>vaccination calendar on yearly basis as advised by the LGA</p> <p>Workings with LGA identify animal health extension to be linked with group</p>					Linkage with animal health expert
3	Lack of access to inputs by the producers citing high cost and lack of cash to purchase them	<p><b>Potential solution:</b> Collectively source for inputs and services</p> <p>Group member to acquire the said inputs to the suppliers willing to offer the service on check-off basis</p> <p><b>Opportunity:</b> Availability of dairy inputs suppliers in nearby vicinity</p>	<p>Mobilize and sensitize group members on collective input purchases</p> <p>Link group members to potential input suppliers/service providers and pay for inputs and services on check off system</p>	<p>Transport</p> <p>Funds</p>	<p>Group</p> <p>Project</p>	<p>Faida MaLi</p> <p>Group</p> <p>LGA</p>	<p>August 2014</p>	<p>MoU of the group and inputs suppliers</p> <p>Check-off system in place and producers accessing inputs using it (amounts accessed)</p>
4	Low milk yield related to low genetic potential of most existing herd stock	<p><b>Potential solution:</b> To improve genetic potential of the dairy herd</p> <p><b>Opportunity:</b> Presence of indigenous cattle, which can be crossed with dairy breeds</p>	<p>To link the group with identified improved bulls and/or in-calf heifers service centres like government farms</p> <p>Support ward extension staff with transport for improvement of AI services</p>	<p>Facilitators</p> <p>Funds</p>	<p>Project</p> <p>Group</p>	<p>Faida MaLi</p>	<p>June 2014</p> <p>August 2014</p>	<p>MoU between service providers and producers</p> <p>List of various service providers</p> <p>Select members trained on AI as</p>

			<p>Train potential members particularly youth who can get training on AI and offer the services within the village</p> <p>To link the group with AI service provider</p>				October 2014	paravets
6	Inadequate operational capital for running dairy cattle business.	<p><b>Potential solution:</b> Enhance capital/wealth creation among the group members</p> <p><b>Opportunities:</b> Availability of dairy cattle</p>	<p>Conduct training on entrepreneurship and capital requisition skills</p> <p>Linking of group members to financial institutions</p> <p>Pilot a check off system to offset the acquisition of inputs and services</p>	Funds Facilitators	Project	Faida MaLi	June 2014  April 2015	<p>Handouts</p> <p>List of participants</p> <p>MoU/linkage with MFIs</p> <p>Check use for access to inputs and services</p>

Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 13: Sindeni plan, Handeni district

**Village:** Sindeni

**Name of Group:** UMOJA MAZIWA ZAIDI SINDENI

**No.:** HW/HD/UV/0493

**Date:** 09 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items	
1	Inadequate supply of drinking water for livestock during dry season	<p><b>Potential solutions:</b> Construction of dams and boreholes</p> <p>Feed lactating cows with succulent forage such as fodder melons</p> <p><b>Opportunity:</b> Availability of land for construction of dams bore holes and cultivation of fodder melons</p>	<p>Follow up of planned dam construction from LGA</p> <p>Participatory site selection for dam and borehole excavation.</p> <p>Construction of dams and boreholes.</p> <p>Link group to water service providers (well/bore hole drilling companies).</p> <p>Follow up on growing of fodder melons as agreed in the MilkiT</p>	<p>Facilitators</p> <p>Funds</p>	<p>Project</p> <p>Group</p> <p>LGA</p>	<p>LGA</p> <p>Group</p>	<p>May 2014 – Jan. 2015</p>	<p>Group linked to LGA and borehole drilling company</p> <p>Plot of fodder melon</p>

2	Inadequate grazing land.	<p><b>Potential solutions:</b> Follow up of village land use plan and stock routes</p> <p>Grow and conserve fodder</p> <p><b>Opportunity:</b> Availability of grazing land and willingness of group to grow and conserve fodder</p>	<p>Conduct training on land use management including livestock land carrying capacity potential</p> <p>Make follow up on allocated grazing land from the village</p> <p>Grow of improved fodder</p> <p>Conduct training on pasture management</p> <p>Conduct field visits</p> <p>Establish improved pasture and distribute improved planting material</p> <p>Facilitate farmers to establish and run on farm trials for pasture</p>	<p>Funds</p> <p>Facilitators</p> <p>Seeds and planting material</p>	<p>LGA</p> <p>Group</p> <p>Project</p>	<p>Group</p> <p>LGA</p> <p>HIT</p>	<p>June – Oct. 2014</p>	<p>Village land use plan implemented</p> <p>Training handouts</p> <p>List of participants</p> <p>Established pasture plots and conserved fodder</p>
3	<p>Low milk production and low price</p> <p>A. Production</p>	<p><b>Potential solutions:</b> Improve livestock feeding and management.</p> <p>Improve the genetic capability of the existing cows by crossing</p>	<p>Conduct training on milk production with respect to quality feeds acquisition so as to increase milk production.</p> <p>Link group to reliable service providers i.e. suppliers of improved bulls, AI services, improved dairy</p>	<p>Funds</p> <p>Facilitators</p>	<p>Project</p> <p>Group</p>	<p>HIT</p>	<p>Sept. 2014</p>	<p>Training reports and attendance list</p> <p>Linkage between group and BDS providers</p>

		<p><b>Opportunity:</b> Farmers willing to acquire quality dairy breeds.</p>	<p>stock and inputs</p> <p>Build capacity of selected potential group/village members on AI so as to bring service to other group members</p>					
4	Low milk prices	<p><b>Potential solutions:</b> Explore other potential milk buyers.</p> <p>Collective bulking and selling of milk</p> <p><b>Opportunity:</b> Willingness of group to make milk collective sells.</p>	<p>Identify other reliable milk buyers</p> <p>Train on cost of production and contract negotiation.</p> <p>Signing of business contract between group and buyers.</p>	Funds Facilitators	Project	Faida MaLi		<p>Collective milk selling</p> <p>Contracts with milk buyers</p>

Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												



## Site 14: Ubiri site plan, Lushoto district

**Village:** Ubiri

**Name of Group:** UWAU

**No.:** HW/LS/UV/104

**Date:** 24 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1	Low cow productivity due to genetic potential of the cows	<p><b>Potential solution:</b> Improve genetic potential of indigenous cows through crossing</p> <p><b>Opportunities:</b> Availability of AI practitioner and services in the village</p>	<p>Training group members on breeds and breeding issues</p> <p>Link farmers with Service providers on check off basis so that they can access improved bulls, heifer and AI services</p> <p>Conduct field exchange visit</p> <p>Facilitate the selection of some group members to be trained on AI and paravet services to meet producers' requirements.</p>	<p>Facilitators</p> <p>Stationery</p> <p>Venue</p>	<p>Project</p> <p>Group</p> <p>AI technician</p>	HIT	<p>October 2014 – January 2015</p> <p>Training notes and handouts with cattle keepers</p> <p>Attendant list</p> <p>Action plans in place</p>
2	<p>A: Inadequate Knowledge in animal husbandry and business skills particularly in animal husbandry:</p> <p>Animal health and breeding</p>	<p><b>Potential solution:</b> Training on identified needs such as:</p> <ul style="list-style-type: none"> <li>*Animal health</li> <li>*Fodder conservation</li> <li>*Milk production</li> <li>*Animal breeding and breeds</li> <li>*Dairy animal housing</li> </ul>	<p>Conduct training on animal health and animal breeding</p> <p>Conduct training on fodder conservation</p> <p>Conduct training on milk production</p> <p>Conduct a practical training on</p>	<p>Facilitators</p> <p>Funds</p>	<p>Project</p> <p>Group</p>	HIT and FAIDA MALI	<p>Since June 2014</p> <p>Attendance list</p> <p>Training notes</p> <p>Training handouts</p>

	<p>Fodder conservation</p> <p>Cost of milk production</p> <p>Improved dairy cattle housing/shed</p> <p>B: Lack of business skills, specifically entrepreneurship skills on milk and milk products.</p>	<p><b>Opportunities:</b> Availability of local building materials</p> <p>Indigenous experience in dealing with cows</p> <p><b>Potential solution:</b> Provide Business skills</p> <p><b>Opportunity:</b> Producers' willingness to transform their local cows to dairy cows</p>	<p>dairy cattle shed construction using available local materials.</p> <p>Conduct training on business awareness</p> <p>Conduct training on record keeping, negotiation skills and participatory gross margin analysis on production of one litre of milk and cost of raising one cow.</p>					
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3	Lack of access to inputs	<p><b>Potential solution:</b> Prepare simple bankable business plan for accessing funds to start inputs shop.</p> <p><b>Opportunity:</b> Farmers are planning to start their own inputs supply shop.</p>	<p>Facilitate the producers to develop a bankable business plan to get working capital for operating the input supply shop.</p> <p>Train farmer group and input supplier on check off arrangement.</p> <p>Develop and use vaccination and dipping calendars for preventable diseases</p>	Facilitators Funds	Project	FAIDA MALI	June 2014	<p>Attendance list</p> <p>Training notes and handouts</p> <p>Records on check off, amounts and frequency</p> <p>Template a bankable business plan</p>
4	Poor milk collection process and low milk price.	<p><b>Potential solutions:</b> Collective bulking and sells</p> <p>Improve entrepreneurs' milk collection and transportation equipment.</p> <p>Explore for other potential milk buyers</p> <p><b>Opportunity:</b> Availability of entrepreneurs who collect milk in the village to UWALU (collection centre)</p>	<p>Sensitize milk collective sales</p> <p>Facilitate entrepreneurs within group to improve milk collection and transportation equipment</p> <p>Conduct training on record keeping, gross margin and contract negotiation so as they can know cost of production and negotiate milk sales prices</p> <p>Conduct business meeting between group and current buyer to review milk prices as per gross margin analysis calculation results</p>	Funds  Facilitator	Project  Group	Faida MaLi	Since August 2015	<p>Training reports and attendance list</p> <p>Milk sales MoU/contract</p>

5	Lack of improved dairy cow sheds	<p><b>Potential solution:</b> Train on improved cattle sheds</p> <p><b>Opportunities:</b> Availability of local cheap building materials in their vicinity</p>	<p>Conduct training on improved dairy cow sheds utilizing locally available building materials.</p> <p>Linking of group members to service providers of building materials.</p>	Funds Facilitators	Project Group	HIT	January 2015	Handouts and training notes Attendance list
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Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 15: Viti site plan, Lushoto district

**Village:** Viti

**Name of Group:** UWASHU

**No.:** HW/LS/UV/196

**Date:** 22 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items
1.	Inadequate Knowledge of animal husbandry particularly in breed and breeding, feeding, calf rearing, disease control, milking techniques, pasture /fodder conservation and housing	<b>Potential solution:</b> Improving knowledge in animal husbandry (breed and breeding, feeding, calf rearing, disease control, milking techniques, pasture /fodder conservation and housing)	Training on dairy cattle husbandry (breed and breeding, feeding, calf rearing, disease control, milking techniques, pasture /fodder conservation and housing) through workshops and field trips	Facilitators Funds	Project Cooperative Society (the group is also a coop) LGA	HIT Since June 2014	Attendance list Training notes and training manuals Experimental pasture plots and improved cattle shed
2	Limited access to credit	<b>Potential solution:</b> Increased access to credit	Identify MFIs and examine the nature of what would be a mutually beneficial credit contract  Link group member with milk and cattle traders who can provide service on check off basis	Facilitators Funds	Project Cooperative society	HIT FAIDA MALI July 2014	List of potential MFIs and potential traders-cum lenders
3	Low productivity due to low genetic potential	<b>Potential solution:</b> Introduction and adoption of dairy cattle and dairy	Identify potential sources of dairy animals to purchase or	Facilitators Funds	Project Cooperative	HIT July 2014	List of sources of dairy cattle breeds

		husbandry technologies	<p>cross with available breeds</p> <p>Introduce and demonstrate the use of AI technology</p> <p>Train farmers on management of dairy breeds</p> <p>Collectively acquire, manage and multiply dairy cattle through, for instance, passing on calves born of collectively-owned pure or cross-bred cows</p>		Society			Group strategy for acquiring and multiplying dairy cattle
4	Inadequate and high cost input supplier (drugs, feeds and minerals and other equipment)	<p><b>Potential solutions:</b> To sensitize Cooperative society to start input supplies shop</p> <p>Link cooperative society with service providers</p> <p><b>Opportunities:</b> Willingness of cooperative society members to start inputs shop</p> <p>Farmers in cooperative are able to make collective sells of inputs by providing services in check-off basis</p>	<p>Training in business development skills</p> <p>Development of business plan for startup of input shop</p> <p>Link cooperative society with input service providers so that they can access services on check off system</p> <p>Mobilize on collective purchase of inputs</p>	Funds Facilitators	LGA Cooperative society Project	Faida MaLi	July 2014	<p>Business plan</p> <p>Availability of cooperative input supply shop</p> <p>Contract/MoU</p> <p>Accessibility of Check off system in the place</p>

5	Low producer milk price	<p><b>Potential solutions:</b> Explore other potential milk buyers</p> <p>Milk processing i.e. value addition</p> <p>Collective bulking and selling of milk</p> <p><b>Opportunity:</b> Willingness of group to make collective sells and to explore other potential buyers</p>	<p>Conduct training on knowledge on cost of production, record keeping, negotiation skills and gross margin analysis for a litre of milk.</p> <p>Initiation of value addition</p> <p>Participatory identification other reliable milk buyers.</p> <p>Conduct business meeting between group and buyers to discuss sells contract.</p>	Funds Facilitator	Project Group	FAIDA MALI	July 2014	Training reports  Attendance list
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Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

## Site 16: Wena site plan, Lushoto district

**Village:** Wena – Bumbuli

**Name of Group:** MAZIWA ZAIDI WENA

**No.:** HW/LS/UV/03013

**Date:** 17 May 2014

Constraint (Ranked)	Potential solutions/opportunity/intervention	Activities needed towards solving the problem	Resources needed	Who provides the resources	Who does the task	When	Evidence items	
1	<p>Inadequate Knowledge in animal husbandry and business skills in animal husbandry:</p> <p>Animal health</p> <p>Fodder conservation</p> <p>Milk production</p> <p>Animal breeding and breeds</p> <p>Dairy animal housing</p> <p>Lack of business skills: Specifically entrepreneurship skills value addition and other animal products</p>	<p><b>Potential solution:</b> Knowledge in animal husbandry and business skills</p> <p><b>Opportunity:</b> Group has some basic knowledge in cattle keeping which can be built on</p> <p><b>Potential solution:</b> Entrepreneurship skills</p> <p><b>Opportunity:</b> Cattle keepers are eager and willing to learn on the above subjects</p>	<p>Conduct training on animal health.</p> <p>Conduct training on milk production and cost related</p> <p>Conduct training on animal breeding and breeds</p> <p>Organize video shows on different subjects on dairy husbandry.</p> <p>Field visits.</p> <p>Conduct training on entrepreneurship skills.</p>	<p>Facilitators</p> <p>Funds</p>	<p>Project</p>	<p>HIT</p> <p>Faida MaLi</p>	<p>Since June 2014</p>	<p>Attendance list</p> <p>Training notes</p> <p>Training handouts</p>



2	Insufficient livestock feeds	<p><b>Potential solution:</b> Knowledge on pasture management</p> <p><b>Opportunity:</b> Willingness of group to grow/improve pasture</p>	<p>Training on pasture management</p> <p>Supply of planting materials to group</p> <p>Establishment of Farm Field School on improved pastures</p>	<p>Funds</p> <p>Facilitators</p> <p>Planting material</p>	Project	HIT	Since August 2014	<p>Handouts</p> <p>List of participants</p> <p>Farmer Field School in place</p>
3	Lack of access to inputs (veterinary drugs, feeds).	<p><b>Potential solutions:</b> Establishment of group input shop.</p> <p>Link group with reliable input suppliers</p> <p><b>Opportunity:</b> Readiness of group</p>	<p>Establish a group input shop at village level</p> <p>Conduct sensitization on collective purchasing of inputs</p>	<p>Transport</p> <p>Funds</p>	Project Group	LGA Faida MaLi Group	June - July 2014	<p>MoU/Contract with input provider</p> <p>Group input shop</p> <p>Handouts</p> <p>List of participants</p>

		members for collective purchasing of inputs.	Link group with reliable input supplier (initially)					
4	High incidences of Livestock diseases	<p><b>Potential solutions:</b> Knowledge on animal health skills</p> <p>Link group members to potential service providers</p> <p>Allocate a village livestock extension staff to the group</p> <p><b>Opportunity:</b> Group currently trying to find / invite investors to open input shop in their village so as to access inputs</p>	<p>Conduct training on animal health</p> <p>Link group members to potential service providers</p> <p>Follow up on allocation of village livestock extension staff</p> <p>Follow up on vaccination calendar</p>	<p>Facilitators</p> <p>Funds</p>	Project	HIT	Feb. 2015	<p>Training handout</p> <p>Attendance list</p> <p>MoU/Contracts with agro inputs</p> <p>Group linked with a village extension staff</p> <p>Vaccination calendar</p>
5	Low cow productivity due to genetic potential of the cows	<p><b>Potential solution:</b> Improve genetic potential of indigenous cows through crossing</p>	<p>Training group members on breeds and breeding issues</p> <p>Link farmers with AI service provider and other producers rearing improved heifers and bulls</p>	<p>Facilitators</p> <p>Fund</p>	Project	<p>HIT</p> <p>Faida MaLi</p>	Sept. 2014	<p>Training notes</p> <p>Handouts</p> <p>Attendance list</p>

6	High costs of transporting milk individually to the cooling plant due to it being located far from the village	<p><b>Potential solution:</b> Collective bulking and milk sells</p> <p><b>Opportunity:</b> Willingness of group to make collective sales.</p>	<p>Facilitate farmers to access measuring and milk storage equipment</p> <p>Sensitize producers on collective milk sales</p> <p>Conduct business meeting between group and buyers to discuss sales contract</p> <p>Signing of business contract between group and buyers</p>	Funds Facilitator	Project	Faida MaLi	Since August 2015	Milk sales MoU/contract  Group collectively bulking milk
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Activity	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	March15	April15
Activity 1												
Activity 2												
Activity 3												

**Notes**

*The dates indicated above are those that were agreed upon during the site planning discussion with farmer groups*

## Categorizing and scheduling of activities

Activities identified in all the villages fall under four broad categories:

1. Training in:
  - a. Various aspects of animal husbandry
  - b. Various aspects of dairy business management
  - c. Group cohesion
  - d. Land use and conflict aversion and resolution
  
2. Creating linkages between farmer groups and:
  - a. Input suppliers
  - b. Business service providers
  - c. Milk processors and traders
  - d. Local government agencies
  
3. Implementing:
  - a. Check-off arrangements
  - b. Collective action interventions including collective milk bulking and selling and collective procurement of inputs and services
  
4. Implementation of group own-projects outside the scope of MoreMilkiT:
  - a. Drilling boreholes
  - b. Constructing dams and ponds
  - c. Reclaiming/establishing livestock routes

Recommendations for scheduling of activities

- a. Trainings could be conducted concurrently with the implementation of the groups' own activities
- b. Creating business linkages could be implemented concurrently with the introduction of check-offs and collective action
- c. Scheduling should account for seasonality, school calendar, potential for synergies between implementing parties and complementarity between/among the activities, especially trainings. For instance, training in animal husbandry could be conducted simultaneously with or incorporate aspects of business management
- d. HIT and Faida MaLi should jointly determine the specific dates for the trainings

## Types of hubs to be implemented in the Tanga region

From all the site-specific plans, there is hardly any evidence for the need for hubs implementing check-offs that involve cattle traders as previously envisaged. Below are the proposed hubs to be implemented in each village.

Site 1: Kibaya village, Handeni District: milk traders

Site 2: Konje village, Handeni District: milk traders

Site 3: Kwabaya village, Handeni District: chilling plant and milk traders

Site 4: Kweditilibe village, Handeni District: milk traders

Site 5: Kwediya village, Handeni District: chilling plant and milk traders

Site 6: Kwemashai village, Lushoto District: milk traders

Site 7: Lwandai village, Lushoto District: milk traders

Site 8: Masatu village, Handeni District: milk traders

Site 9: Mbuzii village, Lushoto District: milk traders

Site 10: Msomera village, Handeni District: milk traders

Site 11: Mwangoi village, Lushoto District: chilling plant

Site 12: Ngulwi village, Lushoto District: chilling plant and milk traders

Site 13: Sindeni village, Handeni District: milk traders

Site 14: Ubiri village, Lushoto District: chilling plant and milk traders

Site 15: Viti village, Lushoto District: chilling plant

Site 16: Wena village, Lushoto District: chilling plant and milk traders