



Western Cape  
Government

Agriculture

BETTER TOGETHER.

**LONG-TERM  
DAIRY EVALUATION  
MANAGEMENT IMPROVEMENT PLAN**

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**DAIRY RESEARCH NEEDS EVALUATION  
MANAGEMENT IMPROVEMENT PLAN**

**1. KEY EVALUATION FINDINGS**

1.	Dairy farmers are not aware of and/or did not access and read research conducted and published by Elsenburg Dairy Unit.
2.	The dissemination, utilisation and practicality of Elsenburg Dairy Unit's research for dairy producing farmers are unsuitable for these farmers.
3.	There is a demand for relevant research and information with regards to specific needs and challenges faced by dairy producers.
4.	Farmers' perceptions and expectations of what constitutes reliable and valid research are mixed. They do not know what resources are necessary to do proper research.
5.	Training needs of dairy producers and their personnel centres mainly around personal development and social skills training and not technical training.
6.	No current BEE and/or small holder dairy farms in this region.

**2. RECOMMENDATIONS BY SERVICE PROVIDER**

1.	Increase farmers' awareness of and access to research conducted by Elsenburg Dairy Unit. Two ways in which this can be achieved include leveraging on existing relationships between farmers and role players as well as making use of appropriate platforms and mediums to disseminate research.
2.	Make use of appropriate platforms and mediums to disseminate research done at Elsenburg Dairy Unit. Farmers utilize other sources than those used by Elsenburg Dairy Unit to access information. These were mainly farm visits from consultants, sector-specific, open days or information days, local and international farms walk-and-talk visits, sector-specific magazines and e-newsletters.
3.	Align the research done at Elsenburg Dairy Unit with the needs expressed by the producers. These needs include the following: <ul style="list-style-type: none"> <li>a) Nutritional studies, mainly about silage cultivars and their ability to be combined to give the best dry matter yield and crude protein yield,</li> <li>b) Correct and best ways of raising calves,</li> <li>c) Alternative housing options for dairy cows, and</li> <li>d) Reproduction management</li> </ul>
4.	Farmers need to be made aware of our infrastructure and labour constraints and put this in perspective to their research needs. Opportunities for on-farm research in collaboration with industry role-players could also be investigated.
5.	Farmers are happy with the technical training courses that are supplied by MPO for their personnel. Elsenburg Dairy Unit could possibly play a role in personal and social skills ("soft skills") development of farm workers and personnel.

### 3. MANAGEMENT RESPONSE TO RECOMMENDATIONS

1.	<p>Establish and rebuild a working and trusting relationship between Elsenburg Dairy Unit and dairy producers. This could be done by regularly attending the informal study group in the Swartland region as well as on-farm visits. Since there is a lack of formal MPO research grouping in the Western Cape region, we should enhance these structures during engagements with existing relationships between farmers and role-players. Cooperation with the MPO with regards to identifying research needs from producers and planning new research projects should be increased. We should actively engage and explore relationships/partnerships with key role players (feed manufacturing companies, Dairy Management Consulting, etc.), because this will help relationship building. Data made available by Dairy Management Consulting could be utilized in identifying new research needs and problems.</p>
2.	<p>Publish our research and information in more practical and user-friendly platforms, like the internet and sector-specific popular magazines. Update our website to include popular versions of our scientific articles. Rather create infographics and condensed and visual depictions of our research information. Dairy producers could be reached through face-to-face farm visits (walk and talk), open or information days at Elsenburg Dairy Unit and sector-specific meetings.</p>
3.	<p>Re-align our research objectives with the needs identified by the farmers. With regards to the four needs mentioned above, the following response:</p> <ol style="list-style-type: none"> <li>1) We need to focus on nutritional studies for the farmers by investigating the small grain silage competition, evaluating different silage cultivars for milk production, different varieties of legumes that could be used with oat silage to get high dry matter production as well good protein yields. Plant production could investigate energy values and fibre digestibility values for legume crops like faba beans and lupines.</li> <li>2) Calf raising: This is more likely a best practise issue on each farm. We could possibly do a survey with the farmers to establish how big the problem of calve deaths is and why they are dying. We could also get this data from Dairy Management Consulting which they collect from the farmers.</li> <li>3) Cattle housing: The more cheaper housing as researched by Dr Carel Muller could be made available again to farmers in a more condensed way like infographics or internet brochures. The question remains if this is an issue for engineering services?</li> <li>4) Reproduction: Heat detections in herds are a very common problem. We can try to bring in some other technology like security cameras or drones to help farmers with this issue. Maybe we can investigate different heat detection systems.</li> </ol> <p>Review and re-align the dairy herd and infrastructure at the Elsenburg Dairy Unit by upgrading infrastructure to be more in line with commercial dairy farming. This will encourage farmers to take note of our research because it will be research done using similar animals and environmental factors that they are dealing with every day. Given our current financial</p>

	constraints, this is something we cannot do immediately. It would need to be an ongoing upgrading process.
4.	In cases of research that cannot be executed at our facilities, on-farm research in collaboration with industry role-players could be investigated further.
5.	Collaboration with the Elsenburg Agricultural Training Institute in supplying soft skill training to the personnel of commercial dairy farmers.

#### 4. IMPROVEMENT OBJECTIVES

<b>Recommendation 1:</b>	Build working relationship between MPO, farmers and Elsenburg Dairy Unit
<b>Improvement objective 1:</b>	Investigate possibility of closer working relationship between Elsenburg Dairy Unit and MPO to encourage collaboration in identifying research needs and planning of future research projects.
<b>Improvement objective 2:</b>	Feedback from the Dairy Evaluation (by Creative Consulting & Development Works & Elsenburg Dairy Unit) to the relevant farmers and role-players (MPO, Feeding manufacturing companies, seed companies, etc.)
<b>Improvement objective 3:</b>	Regular attendance of Malmesbury study group meetings by Mrs M. Burger to gain access to research needs as they develop.
<b>Recommendation 2:</b>	Publish research in more practical and user-friendly platforms.
<b>Improvement objective 1:</b>	Make our research available on social media by publishing popular articles, e-brochures and infographics on our website as well as various other social media platforms. Use Mr Arie van Ravenswaay to make articles and infographics eye-catching.
<b>Improvement objective 2:</b>	Official launching of the new Dairy Cow Manual to MPO, Malmesbury study group and other relevant farmers and role-players.
<b>Improvement objective 3:</b>	Gather information that we could disseminate to farmers. Search for latest updated research at most trusted research institutions and make this available to farmers in a user-friendly way like infographics.
<b>Recommendation 3:</b>	Align future research with needs identified by farmers.
<b>Improvement objective 1:</b>	Silage survey study with Prof Robin Meeske: Farmers in Cape Winelands and Swartland could possibly take part in Small grain silage competition that will start early 2017.
<b>Improvement objective 2:</b>	Plant Sciences to evaluate different silage legume (faba bean & lupine) crops for dry matter yield and protein content yield on Langgewens Experimental Farm.

<b>Improvement objective 3:</b>	Possible testing of a nutritional product and/or ration evaluation trials on Elsenburg Dairy herd, but there must be a mechanism that prescribes these requests. The company that wants us to test their product need to know the results would be made public knowledge. Requests must not come from companies or only one farmer, rather from the study groups.
<b>Recommendation 4:</b>	Infrastructure and herds of Elsenburg Dairy Unit to be aligned to commercial farmers.
<b>Improvement objective 1:</b>	Some old buildings that are not in use could be changed into dairy cow housing. Sell crossbreed cows to get our herd in line with commercial farmers.
<b>Improvement objective 2:</b>	Build another 10 Calan gates that we can add to existing 10 gates. This is perfect for nutritional trials whereby we need to know individual dairy cow feed intake per day.
<b>Recommendation 5:</b>	Give information to MPO and Elsenburg Agricultural Training Institute to see how and if they can accommodate soft skill training for farm workers and personnel.

## 5. IMPROVEMENT PLAN

<b>Improvement Objective 1</b>	Build working relationship between MPO, farmers and Elsenburg Dairy Unit			
<b>Activity 1</b>	<b>Deliverable</b>	<b>Time</b>	<b>Person</b>	<b>Progress</b>
Meeting between MPO & Elsenburg Dairy Unit	Establish collaboration between MPO & Elsenburg Dairy Unit	15 November 2016	Dr Trautmann	Scheduled
<b>Activity 2</b>				
Open day/meeting for industry, role-players & farmers	Feedback about Dairy Evaluation results & decision on way forward	End January or beginning February 2017	RTDS – Dr Olivier, Mrs Burger & Ms N van der Merwe	Pending
<b>Activity 3</b>				
Attend Malmesbury Study groups on regular basis	Relationship building between Elsenburg Dairy Unit & farmers	From 2017	Mrs M Burger	Pending
<b>Improvement Objective 2</b>	Publish research in more practical and user-friendly platforms.			
<b>Activity 1</b>				
Upgrade website to	Using more	2017	Mr Arie van	Ongoing

include more popular articles on dairy research	user-friendly e-brochures & infographics		Ravenswaay	
<b>Activity 2</b>				
Launch updated Dairy Cow Manual book	Updated information available to farmers	2017	RTDS	Pending
<b>Activity 3</b>				
Search internet & trusted research institutions for updated information about identified research needs	Updated information available to farmers	2017	Mrs M Burger	Ongoing
<b>Improvement Objective 3</b>				
Align future research with needs identified by farmers.				
<b>Activity 1</b>				
Silage survey study	Relationship building & problem identification	February 2017	Prof. R. Meeske	Pending
<b>Activity 2</b>				
Evaluation of different legume silage crop dry matter & crude protein yields	Address research needs identified by farmers	2017 – 2021	Ms A Swanepoel	Pending
<b>Activity 3</b>				
Ration/product evaluations at Elsenburg Dairy Unit	Address research needs identified by study groups	2017 – 2021	RTDS – Elsenburg Dairy Unit	Pending
<b>Improvement Objective 4</b>				
Infrastructure and herds of Elsenburg Dairy Unit to be aligned to commercial farmers.				
<b>Activity 1</b>				
Upgrade existing buildings to suitable cow housing & sell crossbreed cows	Address research needs of farmers	Ongoing Crossbreeds sold by end 2017	RTDS	Pending
<b>Activity 2</b>				
Build another 10 Calan gates	Address nutritional research needs of famers	Ongoing	RTDS	Pending
<b>Improvement Objective 5</b>				
Training of farm workers & personnel				
Meeting with MPO & Elsenburg Agricultural Training	Give information through to	2017	RTDS	Pending

Institute	these two parties to accommodate soft skill training of farm workers			
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