

Professionalising a dairy cooperative's extension services: experiences from Kenya

Extension capacity building requires an integrated approach that works at both the management and implementation level to be successful.

The functioning of an agricultural extension team can be substantially improved through the increased use of virtual communication – made more apparent by Covid-19 – between team members themselves, and with farmers.

Extension services are much more effective with improved beneficiary targeting; strengthened lead farmer roles; and diversified extension methods.

Providing follow-up support to trained extension staff on extension content and approach is critical in building their capacities and confidence.



Credits: BAMSCOS

Agricultural advisory services are often considered to be the domain of the government, however, in practice, many other organisations also provide these services, such as commercially-oriented organisations that sell farm inputs or purchase products from farmers. This has become known as Agribusiness-based Advisory Services or ABAS. But how does ABAS work in practice and how can support agencies work with ABAS providers to strengthen their services? The experiences of the Baringo Agricultural Marketing Services Cooperative Society Limited (BAMSCOS), a Kenyan dairy cooperative, has generated important insights.

BAMSCOS and the development of its extension service

In early 2017, BAMSCOS partnered with [Agriterra](#) to help review service provision to its members and organise a farmer-led extension service matching local realities. In a 3-day workshop with board members, cooperative staff and lead farmers, foundations were laid for the development of a sustainable extension service, and an extension programme on breeding and feeding developed.

After 2 years of putting plans into practice and using the opportunity of a call for Tailor-Made Training (TMT) projects by [NUFFIC](#),

BAMSCOS in brief

In 2012, 19 primary dairy agricultural marketing cooperatives (PCs) in Baringo, Kenya create the union BAMSCOS with the aim of coordinating the collection and marketing of milk, providing production support services, and championing farmers' interests through lobbying and advocacy.

Active membership is 13,194 farmers (30% female) and BAMSCOS currently sells an average of 35,500 kg of milk per day. As a union, BAMSCOS is managed by a staff of eight that includes the union manager, and two extension specialists. Sixteen extension staff members are employed by the PCs. Being a farmer cooperative, BAMSCOS has a board to govern the organisation, with an active sub-committee for extension.



KIT Royal
Tropical
Institute

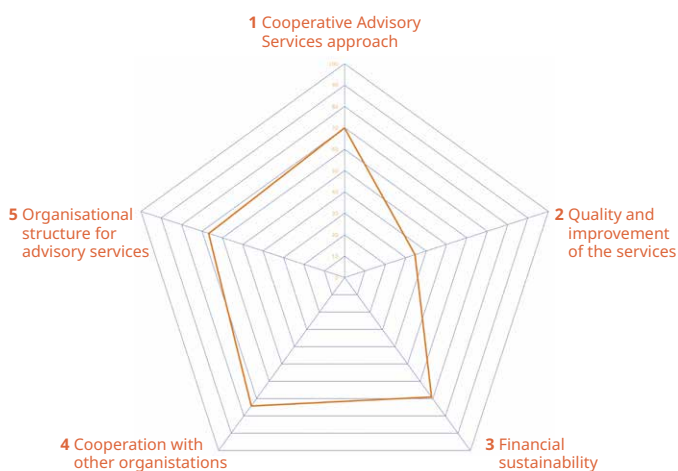


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BAMSCOS decided to team-up again with Agriterra and [KIT Royal Tropical Institute](#), an ABAS resource organisation, to further professionalise its service. It was agreed that the project would work at both the management level, looking at issues relating to the institution's overall strategy and extension design, as well as at the implementation level and realisation of extension services in the field. Several trainers and participants were a part of activities at both levels to ensure their effective integration.

In August 2019, Agriterra facilitated an Advisory Service Health Check to review the performance of BAMSCOS extension service. The Health Check tool works by responding to a set of pre-designed questions covering basic dimensions of extension performance. Using this tool, BAMSCOS identified strong and weaker elements of its system, and set the agenda for the TMT capacity building process.

Outcome of the Advisory Service Health Check



In a 3-day workshop, BAMSCOS board members, cooperative management staff and senior extension officers discussed the results of the health check analysis and received important input from the trainers. Based on this, BAMSCOS drafted a short and medium-term action plan to strengthen its extension system. Following this workshop, extension officers (EOs) and lead farmers (LF) met for a 1-week training co-facilitated by a

Kenyan dairy extension specialist, to build their capacities in providing extension advice.

The TMT included substantial coaching to BAMSCOS and its staff in implementing learnings from the two workshops. Agriterra Kenya undertook this coaching at the level of BAMSCOS management through regular visits and online communications. The Kenyan dairy extension specialist provided coaching to extension staff and lead farmers which helped build their confidence in applying the learning in practice.

In March 2020, the Covid-19 pandemic struck, reducing the coaching support. However, the pandemic also catalyzed a number of developments that proved useful, such as accelerated interest in and use of mobile phones in extension, and increased virtual exchange and coordination between extension staff – most of whom normally work in relative isolation. Coaches and resource people were also able to join the virtual meetings. They resulted in weekly rather than monthly work planning by field staff which proved very useful.

In conclusion of the TMT project, workshops were held with management and field implementers who reviewed progress made, developed lessons learnt and formulated further action areas for strengthening the BAMSCOS extension system. The workshops used a blended approach involving both physical and virtual communication with the local participants meeting as group at the BAMSCOS office along with the Kenyan coaches as co-facilitators, and the NL-based resource people joining online.

Extension quality and its improvement

The health check analysis at the beginning of the TMT process showed that issues related to extension quality and the systems for its improvement contributed to relatively low levels of extension advice adoption. It became evident that extension needs were not the same for all farmers. As a response, BAMSCOS undertook a simple survey on farmer needs and categorised the farmers in terms of their production system, production level per cow and interest shown in new technologies. BAMSCOS used this for targeting farmers and choosing extension approaches.

Action planning a key final step in the workshop process.



Credits: Willem van Weepere



Individual farm visits following a group training proved very useful.

BAMSCOS' farmer categorisation

A. Intensive dairy farmers, practicing zero grazing, average production 15 liters per day per cow, keeping records and using many innovations. Approach: Individual farm visits and phone calls for one-to-one extension, exchange visits and Farmer Field Schools.

B. Farmers with semi-intensive production systems and an average production of 10 liters per day per cow. This category includes those with cows grazing on natural pastures but supplementing lactating animals and willingness to change. Extension approach: Group training with lead farmers, exchange visits, field days, mobile phone messages.

C. Other farmers with a demonstrated interest in learning and adopting new technologies. Extension approach: Group trainings, exchange visits, field days, exhibitions.

The categorisation discussion helped BAMSCOS to become more focused and strategic in its extension work. The union has engrained in its extensionists the understanding that farmers are different, and work under different conditions with important consequences for extension. Unintentionally, the categorisation created a sense of competition as some extension workers treated the categories as 'achievement levels'. It was also realised that a considerable number of farmers did not appear to belong to any of the three categories as they were less proactive and/or had low production levels. It was agreed to include these farmers under an additional category with its own extension approach. The discussion also looked at inclusion of women and youth, creating 'sub-categories' across the other categories. The importance of a monitoring and evaluation system to improve quality of extension is now widely accepted, due to the TMT collaboration.

Extension approach and implementation

Efforts to strengthen the extension approach focused on effectively engaging lead-farmers and clarifying their role, defining the process and criteria for their selection, and determining incentives. The position of the lead-farmers has thus gained visibility and their interaction with extension workers has improved. BAMSCOS intends to consolidate this into a lead-farmer guidelines manual.

A second area of work was a review of current extension implementation, diversification of extension methods and capacity building of staff and lead farmers to use these new methods. This included strengthening of staff communication and facilitation skills. Specific attention was given to making group training and demonstrations more interactive, while creating opportunities for sharing farmer experiences. And to the importance of individual farm visits as follow-up to farmer group training.

Extension organisation

Both extension implementers (EOs and LFs) and BAMSCOS' board and management reviewed the extension organisation and coordination, checking roles and responsibilities, planning and reporting procedures, and updating the organisation organogram. BAMSCOS being a union, it must be critical in defining the level of outreach and its roles and responsibilities as compared to those of the PCs. The semi-independent PCs employ most of the field extension staff while BAMSCOS focuses on service coordination and quality. The costs of and responsibilities for mobilising funds for extension are shared by the PCs and union.

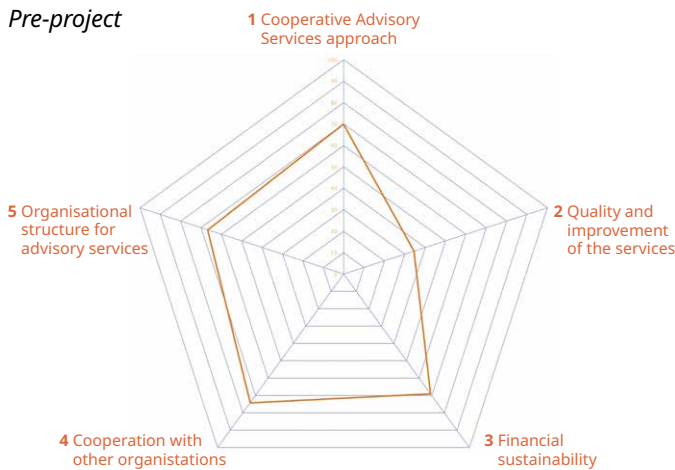
Increased communication and sharing among extension staff facilitated by the union proved very useful. It remains important, though, that PC managers play a central role in

Increased use of Whatsapp in sharing among extension staff catalyzed by COVID-19.

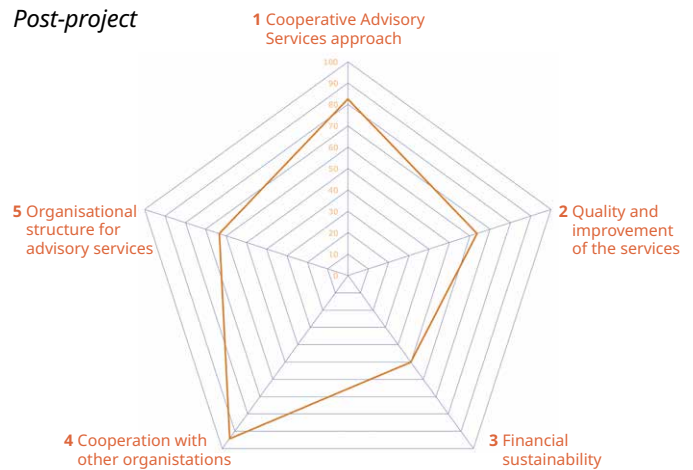


Comparison of the Advisory Service Health Check pre- and post-project

Pre-project



Post-project



strategising, planning and monitoring extension to ensure matching local needs.

Financial sustainability

Financial sustainability of the extension service turned out to be a challenging issue. A lack of deeper insight into the real costs of extension, the management of the different sources of funds for extension, and the need to expand and diversify the resource base – contributed to this.

BAMSCOS is currently able to reach close to 4,000 farmers with an annual budget for extension of around €20,000. This covers salaries (65%), as well as staff mobility and costs of extension activities. The key question is how to reach more farmers without substantially increasing the budget. One option is increasing the role of lead-farmers.

To cover extension costs, a levy of 50 Ksh cents is applied on milk delivered by farmers to BAMSCOS while the main company buying the milk adds another 50 cents per litre. Donor funds are used to complement these sources. Apart from the levy on milk supplied by farmers, accessibility to the other funds is not assured over time. Joint bulking of inputs is being considered as one option to create additional sources of funds.

Results

While it is early to assess the impact of this work, there are a number of developments that suggests impact for both BAMSCOS and farmers. The profile of extension has increased within the organisation as an important, professionally-organised service. BAMSCOS decided to further invest in extension by employing additional staff and improving their mobility.

The Advisory Service Health Check repeated at the end of the TMT showed considerable progress on strengthening the extension approach and quality. Organisation, coordination and

financial sustainability however, scored somewhat lower in the assessment and need further attention.

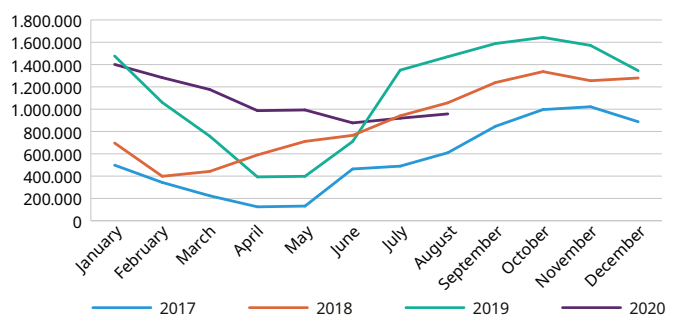
The increased presence and quality of extension has increased the visibility of the service among farmers, who increasingly contact extension workers to ask for support. This has created a more demand-driven dynamic.

BAMSCOS noted an 8% increase in active membership during the project period. This is important as a large membership base leads to higher volumes of milk handled by the PCs.

Ultimately, stronger extension should lead to better performance of dairy farmers and to higher volumes of milk intake by the PCs. Data from farmers who participated in the extension activities around fodder crops production suggest that they reduced production costs up to 47%. Similarly, increases in milk production from 3,5 to around 4,5 kg of milk per cow per day are being reported.

As for BAMSCOS, the overall annual volume of milk handled by BAMSCOS has increased from around 18,000 to 35,000 liters over the past 3 years, while the dip in milk supply during the dry season has levelled out. Unfortunately, Covid-19 has impacted milk supply in 2020 but overall, BAMSCOS is confident that its investments in extension are generating adequate returns.

BAMSCOS monthly milk volumes graph



This brief summarises insights captured from workshop reports and other internal documents. It is prepared by Laurens van Veldhuizen, Sharon Bundotich, Wilfred Chepkwony, Bertken de Leede, Mary Muthoni, and Willem van Weeperen. For further information please contact the authors through l.v.veldhuizen@kit.nl, deleede@agriterra.org or bamscosextenstion@gmail.com.