# Promising Feed enterprises and interested entrepreneurs in the forage sector of Kenya

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Feed scarcity is still characterizing the situation in East African countries and the limiting factor for higher productivity in the livestock sector, especially for using the potential of improved genetic dairy cow 'material'.

The last years the dairy sector underwent some positive developments by introduction of 'exotic' breeds used either as pure breeds (e.g. Friesien,Holstein) or as cross breeds, better herd management, training in better dairy technologies and the number of dairy farmers was increasing. More farmers realized the business opportunities and invested in dairy activities others were supported by organisations like 'Send a cow' to get their first dairy cow. Meanwhile Kenya has about 1.8 million dairy farmers, the majority of them having 1-2 cows which account for 80% of the national milk production. The entire dairy herd is estimated at 7.6 million and all these cows have to be fed properly in quantity and quality to reach the production potential. Reality shows that most of the cows are not properly fed, neither in quantity nor in quality required which results in a poor productivity. Knowledge about the necessary feeding regime is one reason, but even more serious is the availability and the price for feed which represents up to 75 % of the production cost in dairy.

Increased forage production and conservation can mitigate that problem and offer an alternative source of income for farmers. Forage can be produced for feeding the own cows as it can be produced for commercial reasons, beside these two extremes there are (bigger) farms which sell their excessive production of hay or silage to other farmers. Beside that production of forage and its conservation, the forage production triggers the need for seeds, service provisions in the production and trade.

Actually Rhodes grass dominates the hay sector and silage is made either from Napier, used only in small-scale farms or from maize (yellow varieties are replacing more and more the traditionally white maize) which is used in a growing number by medium to small scale farmers. While medium farmers use the silage exclusively for the own farm needs, some bigger producers sell excessive production on the market.

The introduction of Brachiaria (by BECA-ILRI, CIAT, Advantage Crops and Amiran) and Panicum (CIAT) offers a wider choice of forages for hay and silage producers. These varieties have the potential for higher quality hay with better nutritional values and silage raw material production under conditions where maize is not performing well.

To meet the quantitative and qualitative requirements of the marked for feed it will not be sufficient to introduce improved forages to smallholder farming systems to feed their animals, but to demonstrate the potential of the forages for commercial production. This commercial production can offer business possibilities from small to large scale farms

The attached list of enterprises is showing some enterprise 'professionally' active in the forage value chain and for whom it might be a chance to introduce the improved varieties in their portfolio, if not yet done. For others it might be interesting to increase the production of e.g. Desmodium seeds, as for Kenya Seeds or Simlaw.

**Seed producers / traders**

4 seed companies have been identified for Kenya. Advantage crops Ltd and Amiran being the partners of Papalotla/Tropical Seeds in Kenya.

**Advantage Crops** started its activities in the forage sector in 2015 and was the first commercialisation partner of Papalotla / Tropical Seeds in Kenya. Their main activity is the trade with the Brachiaria Hybrids actually registered in Kenya. The commercial, especially the promotion activities look like they could be intensified, as they are not very present on the market and sales are not representing the market potential Hybrids could have. Nevertheless the cooperation with CIAT is good and open. The information flow especially from Advantage Crops concerning their sales and marketing activities could be more intensive, what would allow better coordination of scaling activities.

**Amiran Kenya** became the second distribution partner of Papalotla /Tropical Seeds in Kenya. Established in 1963 Amiran is an input supplier active in a wide range of activities and has a well-established network in the country, present with representations and shops in all major agricultural and horticultural production areas. CIAT has not yet a well-established working relation to Amiran, as we have not been informed by Papalotla, nor by Advantage that they also have been licenced to sell the Brachiaria Hybrids in Kenya and found that out 'by chance'. Nevertheless we will try to establish a productive work relationship to coordinate scaling efforts and to push the marketing potential of Brachiaria by this well-established input supplier.

**Kenya Seeds Company** and **Simlaw Seeds Company** are the leading seeds companies in the market. As being concentrated in staple food seeds, forages only play a minor role in their portfolio, e.g. Desmodium, which is an important element in the 'push-pull system'. While a conference on push pull system organised by ICIPE they expressed however the possibility of more intense engagement in Desmodium and other forage seed production. They might also become at least a distributer of Brachiaria cv seeds when these will be registered for Kenya, which is expected by mid-2019.

**Eden Field Agri-Seed** is a private seed company in Ethiopia and might be a potential partner whenever Brachiaria and Panicum will become more 'important' or even registered in Ethiopia.

**Forage producers and processors**

The number of farms producing forages is steadily increasing, but seeing the huge number of about 1.8 million dairy farmers there is still a lot of work ahead to reach a satisfying percentage of dairy farmers.

Encouraging is that the awareness for the importance of feed provision out of the own production is rising and that more farmers realise the opportunities of forage production. The list of forage producers shows a number of bigger farms already active in forage production, mainly Rhodes grass hay and maize silage. These agricultural enterprise are interesting addressees for the introduction of improved forages like Brachiaria or Panicum, as well as for productivity, quality as diversification aspects.

The farmers which have already been planting improved forages under the 'demonstration plot activities' are not figuring in that list with one exception. Magut Farm in Eldoret is producing different forages for their own cows but excess production in coming years will offer additional

income sources. As they are one of the model and innovative farms in Eldoret, they are also a nucleus for spreading the improved forages in the area.

Magut Farm conserved a part of first harvests of Brachiaria as hay and feeding trials with that hay showed promising increasement of milk productivity of about 30 %.

Instead of addressing a big number of hay producers individually, which would be an enormous work, we intend to address a number of hay producer associations to reach small and medium hay farmers.

Processors are not listed separately as the farmers producing forages, feed a part of their production as fresh material and another part is conserved, in general as hay.

**Conclusion**

By addressing strategic enterprises the introduction of the improved forages in the respective areas will be fostered, business opportunities demonstrated and the number of farmers planting forages will increase.