

BEEF ENTERPRISE STRENGTHENING AND TRANSFORMATION (BEST PROJECT)

In this issue

COVID 19 Awareness	2
Dry season preparedness	3
Fodder production reduces high cost of stock feeds for Makoni Lead farmer	4
Hay harvesting gives hope to Shurugwi beef cattle farmers	5
High Nutrient Feed, a boost for Small to Medium scale farmers in Mt Darwin	6
Women and Youths inclusion in the BEST project	8



Editorial

Welcome to the 2nd issue of BEST project newsletter. BEST is a European Union funded project under the Zimbabwe Agricultural Growth Programme (ZAGP), and is being implemented in 5 provinces of Zimbabwe: Manicaland, Masvingo, Mashonaland Central, Midlands and Matabeleland North. World Vision (WV) in collaboration with Welthungerhilfe (WHH), Sustainable Agriculture Technology (SAT) and Nurture Education Program Trust (Nurture), are the implementing partners in collaboration with Livestock and Meat Advisory Council (LMAC) and Zimbabwe Agriculture Development Trust (ZADT).

The project seeks to create a robust, competitive beef value chain that promotes enhanced trade, employment creation,

Livestock and Meat Advisory Council

food security, and inclusive green economic growth by 2023 and is targeting 24,900 small to medium scale beef cattle producers. BEST is working in Mwenezi, Chiredzi, Umguza, Lupane, Kwekwe, Shurugwi, Gokwe South, Mt Darwin, Makoni, and Buhera districts. In the past, these districts have experienced significant cattle losses due to poverty deaths.

This issue of the newsletter is focusing on dry season preparedness through growing of fodder crops, a measure that will protect cattle herds from poverty related deaths during the dry period (August to December). BEST project showcases success stories of interventions to increase availability of cattle feed during the dry period.





COVID 19 Awareness

Continual dipping and disinfecting animals is encouraged during the COVID-19 outbreak





People with COVID-19 should restrict contact with animals

People can spread the virus to animals in some situations

STAY HEALTHY COVID-19



Avoid close contact and travel with animals that are sick

Advice for animal owners when visiting your vet for animal treatment and vaccination during the COVID-19 outbreak

Make an appointment by **phone** or on-line



Avoid contact (NO handshaking) and keep at least **2 metres distance** from other people



Try not to touch anything in the waiting and consultation room



Contactless payment is preferred

.... 0

Disinfect your hands with soap and water or any other disinfectant at your disposal



COVID-19

Wash you hands with soap and water or alcohol-based hand rub before and after handling an animal for dehorning procedures



Dry season preparedness

The rationale behind irrigated pasture development, a case for Lapache Irrigation Scheme

BEST project is creating a comprehensive beef value chain which networks across private sector, government and rural communities. In light of this, in Mwenezi district of Masvingo province, the project has installed

a 35 hectare (Ha) centre pivot irrigation system which is being used for all year round pasture production. In this innovation, BEST project has partnered with Tongaat Hullet and Sabie Meats to grow irrigated pastures for cattle. In past years, Masvingo province has lost significant numbers of cattle due to drought, thus availability of irrigated pastures during the dry season will help to safeguard the Zimbabwe cattle herd. More than 9.000 households are expected to benefit from this intervention. In Mwenezi, the project will draw water from the largely underutilized Mwenezana dam on the Mwenezi river to irrigate the pastures.

The period August to November is characterized by loss in nutritional value of natural pastures. Without supplementary feeding, the nutrient supply

from natural pasture is far less than the nutrient demands of the animals for maintenance. This is most severe in communal grazing lands, which lack grazing management plans, with risks of veld fires and increased exposure to droughts. This is compounded by increased distance travelled by livestock to access water and feed in the dry season.

Nutritional deficiencies are associated with low fertility, increased abortions, poor growth and low carcass grades. Irrigated pastures can provide an

> alternative to expensive commercial stock feeds and allow deliberate choice of nutritive pastures to be grown, timely harvesting and subsequent optimization of animal performance. It is possible to create quality pastures that beef cattle can consume during the lean season as well as providing a food source for backgrounding prior to undertaking pen fattening.

> To date the project has planted 17.5 ha of Rhodes Reclaimer grass. The grass is highly nutritious, palatable, adapts very well to harsh climate conditions and is easy to manage. When mature, the grass will be harvested for hay. The hay bales will be sold to surrounding farmers for a fee between September and December.



Figure 2: Rhodes Reclaimer Grass at 8 weeks after planting, Lapache irrigation scheme, Mwenezi, Masvingo



Fodder production reduces high cost of stock feeds for Makoni Lead farmer

Despite the drought this year, fodder production is set to save Mr. leremiah Mukuwamombe money in supplementary feeding costs. Jeremiah is a young lead farmer from Ward 35 of Makoni district in Manicaland province who is among the ten pioneer fodder production farmers in the district. When the 2019/2020 rains commenced, Jeremiah planted 0.7 hectares of velvet beans and a small portion of sun hemp. While the fodder crops did not produce seed due to a crippling dry spell during this harsh season of below normal rainfall, Mr Mukuwamombe still harvested 27 hay bales of velvet beans, totaling 0.46 tonnes. He intends to use the fodder to supplementary feed six lactating cows from his herd of 34 animals from the end of August going towards the end of the year. This will save the farmer around US\$ 250 in stock feed which he would otherwise have had to buy in to feed the cows to save his calf crop.

Pluralistic extension support provided to lead farmers like Jeremiah, played a key role in the successful growth, harvesting and baling of fodder crops.



Figure 3: Mr Jeremiah and Mrs Chisakaitwa Mukuwamombe holding one of their velvet bean hay bales

Despite the COVID-19 lockdown, BEST project continued to reach out with extension support to farmers. Private sector players, government extension workers and BEST staff generated technical bulletins which were conveyed to farmers through podcasts, electronic pamphlets, SMS messages, and short videos among others.

These were shared via WhatsApp, Kurima Mari and SMS. One on one supervision provided by AGRITEX and DVS extension staff during the lockdown also enabled Jeremiah to practice recommended measures of harvesting and post-harvest management of fodder such as drying and storing under shade. Currently Jeremiah is constructing a shed to store fodder for his dry season supplementation needs. In addition, he plans to dig a pit to use for urea treatment of stover to enhance palatability and crude protein content.

Despite the COVID-19 lockdown, BEST project continued to reach out with extension support to farmers



Hay harvesting gives hope to Shurugwi beef cattle farmers

Mr. Jackson Magomana, a beef farmer aged 72, lives in Nkani Village, Ward 11 of Shurugwi District. He owns a herd of 10 cattle and his vision is to become a fully-fledged small-scale commercial beef farmer.

Shurugwi district lies in Natural Region III. Major challenges facing beef cattle farmers in Shurugwi include overgrazing of rangelands, poor rainfall patterns resulting in drought induced cattle deaths and lack of formal markets. The 2018/2019 season was a drought season in Shurugwi District which resulted in poor crop yields and poor regeneration of grazing lands.

Over a hundred cattle died of poverty in Shurugwi district last year during the dry season due to lack of grazing. Beef Enterprise Strengthening and Transformation project with its objective to commercialize the beef value chain in Zimbabwe came as a timely relief to Shurugwi farmers like Jackson.

One of the BEST project key outcome areas is to increase production and productivity using high nutrient feed from locally produced material such as fodder crops and grass from the rangeland for silage making and hay baling. This also acts as a mitigation strategy to safeguard against cattle losses due to drought, thus preserving the national herd. Jackson was one of the pioneer farmers who received fodder seeds, training, mentoring and support on fodder production, harvesting and post-

Figure 4: Mr. Jackson and and Mrs. Sekai Magomana showing some of their hay bales

harvest management from AGRITEX and private companies as well as BEST staff.

Amid the COVID-19 outbreak, extension support continues to reach Shurugwi famers via podcasts, SMS, and videos shared through mobile platforms such as WhatsApp. To date Mr. Magomana has harvested more than 40 hay bales weighing an average of 15 kg from the rangeland and is still preserving more. The farmer has also gone an extra mile to preserve crop residues such as ground nut stover for fodder. Mr. Magomana is confident that in the lean season he will be able to preserve his cattle from poverty deaths by feeding them the hay he has stored.



High Nutrient Feed, a boost for Small to Medium scale farmers in Mt. Darwin

Everson Kadirire is a small to medium scale farmer who resides in Ward II of Mt. Darwin. Mt. Darwin district is in Mashonaland Central province with two distinct areas as defined by the plateau that divides the Northern and the Southern part of the district. The Northern side is characterized by low and poorly spatially distributed rainfall below 300 mm while the southern part receives much better rainfall although it is still generally below 350 mm. Ward II is just on the boundary between the Northern and Southern parts of the District.

Everson has 5 head of cattle and the family of six survives on subsistence farming to feed the household. His herd of cattle mainly serves as a source of draft power and manure for additional soil fertility challenges they face as a household. Just like many farmers in this part of the district, grazing for animals is a challenge, especially during the dry season with the rangeland characterized as sour as compared to the Northern part (Dande valley) where the grass is sweet and palatable all year round. Livestock in this area always decline in body condition in the dry season with the decline in quality and quantity of the rangeland. Competition for the remaining patches of grazing land also affects the availability of grazing for Everson's cattle while at the same time fires often destroy the remaining grass left.

"I always wondered why cattle in the Dande valley fared better than our cattle above the valley" said Mr. Kadirire during training from the BEST project on fodder production in the ward, referring to the differences in quality of grazing between the two areas. Everson was one of the early innovators of the fodder production project that was introduced by BEST. He became one of the lead farmers in the District and was chosen by other farmers to host a fodder demonstration plot in Ward I I (Pachanza). Mr. Kadirire benefited from the seed he got from the ZAGP BEST project to grow fodder for demonstration. He received training on fodder production from the project through the demonstration plot as well as how to utilize the fodder especially during the winter time when grazing is poor.

At the end of the 2019-20 season, the farmer harvested 36 bales of fodder and stored them as hay and kept a small portion of sun hemp, velvet beans and sorghum seed for seed multiplication in the coming season. The farmer has also taken on his own initiative to collect 5 x



Figure 5: Mr. Kadirire in his harvested fodder

"I always wondered why cattle in the Dande valley fared better than our cattle above the valley"



50 kg bags of acacia pods and $2 \times 50 \text{ kg}$ bags monkey bread pods from the bush which he has stored as he works towards accumulating nutritious supplementary feed for his herd.

Taking lessons from BEST trainings, Everson Kadirire has already started utilizing the fodder he harvested from the demonstration plot to feed his two oxen which he values for provision of draft power. "Since I started feeding my two oxen on this high nutrient feed, I have realized that there is no longer need to send my children to fetch the animals in the evening as they have developed a habit to come back home at the time I feed them," said Mr. Kadirire, happy with the intervention of BEST project. Besides the benefit of feeding his own cattle, Mr. Kadirire has kept some seed which he has already distributed to other farmers in his group as a seed pass-on program. Although the quantities harvested in this current season remain small compared to the quantities needed by each animal for maintenance of body condition, Mr. Kadirire plans to increase his area under fodder crops in the coming season to increase the quantities harvested for his animals. The farmer also wants to check his two oxen for improvement in body condition as this will guarantee him a good source of draft power in the coming season.

The BEST project intends to continue giving support to Mr. Kadirire and his group, training them to utilize other sources of feed such as crop residues by turning them into high nutrient quality feeds so he and his group can continue to benefit as they look forward to providing good quality feed for their animals.

"Since I started feeding my two oxen on this high nutrient feed, I have realized that there is no longer need to send my children to fetch the animals in the evening as they have developed a habit to come back home at the time I feed them"



Figure 6: Part of the fodder stored in Kadirire's Shed



Women and Youths inclusion in the **BEST** project

Women and youth in Zimbabwe constitute more than 50% and 60% respectively of the national population, and contribute 86% of livestock farming labour. Despite this, they operate smaller farms, keep fewer livestock, typically of smaller breeds, earn less from the livestock they own, have weaker property rights and tenure security, have reduced incentives to invest in their land and are poorly represented in leadership structures.

Cattle production is perceived as a male and elderly dominated enterprise, thus women and youth participation in the Beef Enterprise Strengthening and Transformation (BEST) project has been low. In comparison to other livestock value chains, the return on investment in cattle production is perceived to be low, thus not lucrative for youths, who are attracted to "quick return" business ventures.

In an effort to increase women and youth participation, BEST project has intentionally targeted these groups by having a minimum of 30% representation in leadership roles such as lead farmers and Cattle Business Centre (CBC) Management Committees. Furthermore, the project is working closely with Women Affairs and Youth government departments to identify existing women and youths farming groups to groom them into cattle marketing groups. During the 2019/2020 agricultural season the project targeted women and youths to grow fodder crops such as velvet beans, sun hemp and lab-lab among others, through establishment of fodder demonstration sites. A total of 101 lead farmers successfully established fodder demonstration sites during the season; 69 males, 28 females and 4 youths.

Information Communication Technology for Development (ICT4D) is an important component of BEST project. Through ICT4D the project will target youths as champions to roll out the Kurima Mari Beef App. In addition, youth lead farmers will pioneer digital learning through using podcasts and other learning videos at CBCs. The project is partnering with Nurture Education Program Trust to digitalize the Stockman Academy curriculum. This move will provide a virtual learning platform to mitigate restrictions imposed under COVID-19. Currently the project is procuring multimedia equipment to support this innovation.







Figure 7: Mrs. Chirarapasi, Chiredzi District, chopping fodder for silage making



Figure 8: Youths in Chiredzi employed to construct the Cattle Business Centre (CBC)



"This publication has been produced with the financial support of the European Union. The contents of this publication are the sole responsibility of BEST consortium and can in no way be taken to reflect the views of the European Union."