



E-SLIP



LIVESTOCK INFORMATION CORNER

Issue No. 1 2021



HIGHLIGHT STORIES

- Forage and Pasture Seed Demo Plot Launched at Kapasa Makasa University
- Kazungula Keeps CBPP at Bay through Cattle Brandings
- E-SLIP helps to reduce overfishing in Kaputa
- E-SLIP Empowers Kasama Women with Dairy Cattle
- Double Profits in Forage Production
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EDITORIAL

Dear readers

We are thrilled to share with you the third issue of our Livestock Information Corner. This edition highlights success stories of the Enhanced Smallholder Livestock Investment Program (E-SLIP).

The Program which set out to improve rural incomes and enhance rural household food nutrition security, has been empowering rural farming households with various livestock accompanied with livestock management skills and disease control interventions most especially East Coast Fever immunizations and Contagious Bovine Pleuropneumonia vaccinations.

These interventions were well received by the intended target groups and this appreciation is one key reason why E-SLIP interventions have been successful.

As you flip through the pages, more success stories have arisen from E-SLIP's livestock stocking and restocking exercise through which its beneficiaries have been receiving various livestock accompanied with necessary training. In response to the COVID-19 pandemic, E-SLIP scaled-up its stocking and restocking exercises by adding rabbits as a COVID relief package.

Rabbit production is a lucrative venture that guarantees quick returns on investments and stories show that farmers have appreciated this initiative.

In enhancing the sustainability of livestock production and productivity, E-SLIP has also been promoting forage and forage seed production. Through such an effort, the project aims to encourage good animal nutrition practices among its beneficiary farmers. At the same time, the looming market for forage seed which is also expensive to the rural farmer has compelled E-SLIP to promote forage seed production using selected rural farmers.

While this initiative is still gradually yielding impressive result, the forage seed farmers are already attesting to the positive impact forage seed production is having on their household incomes.

Coupled with this intervention is the revamping of rangelands around the country as climate change is contributing to less available grazing land on the one hand, and livestock production is contributing to greenhouse gas emissions.

E-SLIP's promotion of rangeland and pasture production has been recognized as critical and has culminated into the creation of Pasture and Rangeland Unit under the Department of Livestock Development in the Ministry of Livestock and Fisheries.

The grand finale to this magazine is a warm welcome to our new Minister, Hon. Makozo Chikote who took time to chat with NAIS and shared his vision and expectations for the Ministry.

We hope you enjoy this edition



ABOUT E-SLIP

PROGRAMME FUNDING

US\$ 46.28 Million

IFAD LOAN

US\$ 15.09 Million

CO-FINANCIERS (International)

OFID US\$12 Million

CO-FINANCIERS (DOMESTIC) GOVERNMENT OF THE REPUBLIC OF ZAMBIA

US\$10.57 Million

LOCAL BENEFICIARIES

US\$ 8.62 Million

TARGET BENEFICIARIES

180,000 smallholder livestock-keeping households

COVERAGE

National

PROGRAMME GOAL

Sustainably improved incomes of rural poor households in targeted provinces and districts in Zambia, which is consistent with the goals of the Revised Sixth National Development Plan (RSNDP 2011 – 2015)

PROGRAMME OBJECTIVE

The production and productivity of key livestock systems of targeted female and male smallholder producers in all provinces of Zambia are sustainably improved.

PROGRAMME COMPONENTS

- 1) Animal Disease Control Sustainably Improved
- 2) Livestock Production Systems Sustainably Improved

STRATEGIC PARTNERS

- Rural Financial Services Extension Programme (RuFEP)
- Livestock Development and Animal Health Project (LDAHP)
 - Livestock Infrastructure Support Project (LISP)
 - Food and Agriculture Organization (FAO)
 - World Food Programme (WFP)
 - Enhanced Smallholder Agribusiness Promotion Programme (E-SAPP)

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FOREWORD



The Enhanced Smallholder Livestock Investment Programme (E-SLIP) has been working to scale-up the control of key cattle diseases; introduce improved grazing and fire-resistant leguminous and grass forage species in smallholder communal grazing lands; and support Government's livestock stocking and restocking capacity for sustainable livestock health and productivity.

The aim of these efforts has materialized into households reporting an increase in production; cattle offtake rate in programme targeted districts increased by 15%; livestock assets of poorest quintile of rural households in programme-targeted districts increased by 30%.

In addition to this, 20,509 women and 7,642 youth have received livestock packages to date, as means for income generation, employment creation and; food and nutrition security assurance.

Furthermore and as one way of ensuring intervention sustainability, E-SLIP has facilitated the training of 76,000 farmers in forage production and utilization countrywide; and currently has contracted 55 certified forage seed growers.

As livestock production and productivity is heavily dependent on good animal health such as nutrition, E-SLIP also facilitated the vaccination of 62,186 out of 65,0000 cattle against Contagious Bovine Pleuropneumonia(CBPP) through its CBPP sub-component. Furthermore, a total of 326,936 cattle against the cattle population of 586,408 were branded. Under our East Coast Fever sub-component, a total of 24,801 calves were immunized against ECF in the second round bringing the cumulative figure to 70,814 against the target of 140,000.

As the COVID-19 pandemic continued to threaten the livelihoods of these smallholder farmers, the Programme was able to increase support to farmers through rabbit packages which are expected to enhance income generation amidst an unpredictable pandemic.

COVID-19 did not only affect our farmers countrywide but also our members of staff in an expected way. E-SLIP however continued to work under the new normal by engaging

In this first edition for 2021, E-SLIP is glad to share success stories collected with the help of partners under the National Agricultural Information Services (NAIS) and the Knowledge Management and Communication Unit.

Dr. Chibwe Kaoma
Programme Coordinator E-SLIP

Kaputa residents happy with the E-SLIP cattle intervention

By Josiah Mpofu

Economic emancipation will always be possible with government putting up more programmes that are aimed at stimulating production and productivity in the fisheries, livestock and crop sub-sectors.

An empowerment programme being implemented by the Ministry of Fisheries and Livestock in all the 10 provinces of Zambia dubbed the Enhanced Smallholder Livestock Investment Programme (E-SLIP) is among government programmes that is undoubtedly uplifting people's lives especially in the rural areas.

The objective of the Programme is to empower people in the country with livestock such as cattle, goats, pigs and chickens among others, and encourage them to venture into pasture and forage production with a view to improve their livelihoods. Since the countrywide stocking and restocking exercise began many people have continued to benefit from the Programme, even districts

that never had interest to rear cattle have now considered engaging in livestock production.

Kaputa district of Northern Province is one of the districts which never had a single cow but now due to the E-SLIP intervention, the district boasts of having one of the best quality beef cattle.

This development has cheered many Kaputa residents who described the gesture as a blessing and they thanked government for providing them with livestock such as cattle and goats among others.

One of the beneficiaries from Mafwe cooperative of Chibale village in Kaputa district, Japhet Chibale expressed joy over the 12 cattle he received which have now increased to 30 heads with 7 female cows pregnant.

Mr. Chibale says he never knew that rearing cattle is profitable as he only used to rear chickens and goats which did not give him much profit. He explained that he also grows rice,

cassava and maize which are not very profitable due to long distances to access the market.

"In this place, we have a lot of briefcase buyers who take advantage of us because we don't have anywhere to sell our farm produce. Without options, we sell to them at cheaper prices," said Mr. Chibale.

He narrated that he never knew that rearing cattle is one of the most lucrative ventures that one can engage in, as he was able to sell one heifer at K15,000.

"I am no longer having challenges to feed my family and take my children to school because I have gold near me. Through the heifer I sold I was able to buy farming inputs for my field which helped me to record a bumper harvest in the last farming season," narrated Mr. Chibale.

Mr. Chibale, who harvested more than 200 by 50 kilograms bags of rice and 300 by 50 kilograms of maize said hunger and poverty are a thing



Richard Chisamba (R) and Headman Chibolya Chashele of Kaputa District (L) showcasing their cattle

of the past as he now has alternative sources of income generation.

He further said without the Programme's intervention he would have remained at the same level where he hardly ate a proper meal.

Mr. Chibale explained that he was not worried even if the Programme was to come to an end now because he has obtained the necessary skills required for the sustenance of his business.

"Through E-SLIP we learnt how to grow pasture for our livestock and we were taught proper ways of rearing beef cattle in order for it to fetch a good price on the market," he explained.

He has since called on government to establish several dip tanks in the area as the district has only one dip tank, which requires him to move 50 Kilometers away to access it.

Mr. Chibale added that for the cattle business to realize its full potential, services such as provision of dip tanks and veterinary clinics should be brought closer to the farmers, especially the smallholders.

Another beneficiary of Luchili Cooperative of Kaputa Central Camp, Richard Chishimba who received 11 beef cattle disclosed that his cattle have now increased to 19.

Mr. Chishimba expressed joy over the cattle saying the venture has helped him to diversify as he used to only grow cassava and maize.

"I will not have challenges to generate income because I have different sources where I will be having money from as I will be selling my livestock whenever my crops fail," explained Mr. Chishimba.

He expressed confidence that he

would increase his cattle to more than 300 heads due to the knowledge and skills he has learnt from the Programme.

"If my cattle expand I will open a butchery where I will be selling my meat because we learnt that it is more profitable to sell the actual meat than a live animal," said Mr. Chishimba.

Mr. Chishimba who for a long time has been using hand hoes to cultivate his field said he will now use cattle which will enable him to cultivate a bigger portion of land thereby increasing his food basket.

Indeed, with such programmes in place there is no doubt that the country's Gross Domestic Product will improve thereby eradicating hunger and poverty especially in rural households.



Some members of Luchili Cooperative pose for a photo



Kaputa District can now boast of having one of the best quality of beef cattle

Chipangali Farmers reaping benefits of E-SLIP's Chicken pass-on initiative

By Gloria Siwisha

HE poultry industry in Zambia is a crucial sector for the national economy which constitutes about 4.8 percent of the agricultural Gross Domestic Product and 48 percent of the livestock sector.

According to national data, while the sector is dominated largely by commercial farmers and corporate companies, about 35 percent of the market is taken up by small scale producers who sell live birds, mostly 'village chickens', and unpackaged and ungraded table eggs either in local markets, by the road side, or within their communities.

This small-scale poultry keeping usually plays a crucial role in improving the food and nutrition security of rural populations, sustains their incomes, and helps to alleviate poverty in homes.

Meat and eggs from poultry for example, are not only good sources of protein for households especially women and children, but also boost incomes when they are sold at a reasonable price.

However, most small scale poultry farmers face challenges of limited knowledge and skills, lack of resources and infrastructure, high costs of feed, and limited access to markets, all of which impede the growth of the sector in the long term.

For instance, Chipangali district of Eastern Province, is one area with enormous potential to contribute to the growth of the province's economy through poultry but for the many challenges that its more than 60,000 farmers face, this has not been so.

However, with the intervention of the Ministry of Fisheries and Livestock, through its Enhanced Smallholder Livestock Investment Programme (E-SLIP), the narrative will change.

E-SLIP is a US\$ 48.14 million worth, 2014 to 2022 national project, which is financed by the Zambian government, in partnership with the International Fund for Agricultural Development (IFAD), the OPEC Fund for International Development (OFID), and beneficiary groups.

Under its pro-poor stocking and restocking programme, E-SLIP aims at sustainably improving the production



480 females benefitted from E-SLIP's chicken distribution in Chipangali district

and productivity of poultry small scale farmers in Chipangali district, their nutrition status, and incomes, through provision of improved village chickens by way of passing-on or direct placement to beneficiary households.

With proper feeding and care, each improved village chicken distributed under the programme, can lay between 110 and 140 chickens.

According to the provincial Livestock officer, Grace Lungu, Chipangali district, received 1,000 chickens last year which benefitted 41 groups.

"Of the beneficiaries, 480 were female, 350 youths, and 234 males. Overall, the province received a total of 34,553 chickens. The district also received 124 goats which benefitted 22 groups; 278 beneficiaries were female, 308 youths, and 89 males," she said.

Pemba Livestock farmers' group of Kalichero agricultural camp, is one of the 41 groups in Chipangali district that received chickens last year.

Group vice chairperson Madson Sakala, said the group received 24 chickens (17 hens and 7 roosters) on 29th September, 2020.

He said the hens started laying eggs by December, 2020 and that to-date, about 63 trays or 1,890 eggs had been laid.

"Because this breed of chickens only lays eggs without hatching them into chicks,

the group resolved to start selling some of the eggs in order to raise funds to take the rest to the incubator in Chipata town," he said.

He said the group eventually managed to take 22 trays or 660 eggs for incubation out of which 424 eggs were successfully hatched.

Mr Sakala said the group has since passed-on a total of 45 chickens to 9 out of the 21 group members with each beneficiary receiving 5 chickens.

"The pass-on of either parent chicken or the offspring will continue until all 21 group members have received at least 10 chickens each. What will remain will be co-owned by all members and be used to earn income for the group," he said.

He commended Government for the investment as it has helped to strengthen the capacities of smallholders in poultry keeping, boosted farmers' incomes and also improved access to protein food.

He however urged the project to consider supporting the group with an incubator in order to reduce the costs of travelling to Chipata district, and accessing incubation services.

Barbara Banda who received 5 chickens from the group's recent pass-on exercise, said she had learned a lot about rearing chickens as this was the first time that she was engaging in

poultry keeping.

"I urge other farmers to join groups or cooperatives as it is easier for Government to help organized groupings unlike if we worked as individuals," she said.

The group has employed a care-taker to maximize on profits and prevent thefts.

The pro-poor stocking and restocking programme targets to benefit over 28,000 poor smallholder households countrywide, through direct placement and passing-on, which includes 50 percent women headed households, 30 percent youths, and 20 percent men.



Good livestock management skills are key in ensuring the restocking exercise is a success

Forage and Pasture Seed demo plot launched At Kapasa Makasa Univeristy

By Natasha Mhango

Demonstration plots, or demo plots as they are popularly called, are meant to be learning sites to teach, share and experiment best agricultural practices. They are safe havens for their clientele to make mistakes and start over as many times as their perseverance allows.

Kapasa Makasa University in Chinsali district, established a demo plot for pasture and forage seed to enable agriculture science students put their learning into practice, and to encourage farmers to engage in pasture and forage seed production.

Their initiative was appreciated by then Fisheries and Livestock Minister, Nkandu Luo, who expressed her support by visiting the Kapasa Makasa demo plot in person, to officially launch it.

During the launch, Prof. Luo said that access to proper food for livestock was still a challenge in Zambia and as such initiatives like the University's demo plot were needed to generate accurate information and promote pasture and forage production.

"You are a university, and one of your biggest strengths is research, the students here can all have a research topic in relation to what you are doing here," Professor Luo said.

She explained that initiatives like the creation of the demo plot would enhance the Ministry's livestock



Livestock & Fisheries Minister, Prof. Nkandu Luo, planted the first line of forage seed as part of the launch

stocking and restocking exercise because forage production highlights the importance of animal nutrition.

"We are telling every farmer that for the amount of animals you have received, get a piece of land to grow some pasture for them. Now the question is, if we haven't done the trials and seen, if I have 10 animals, what hectareage of pasture should I grow? What mixture of pastures should I do? This is information you can provide to our Ministry so that as we distribute these animals, we give the farmers correct information," Professor Luo told the students and lecturers in her midst.

In an ironic twist, it came to light that the demo plot that the Minister was launching was born from a failed trial. Bentley Chivweta (popularly referred to

as Mr. Grass by his peers) who is pursuing a bachelors' degree in animal science was the student behind the failed trial.

Bentley was doing a project in which he was trying to compare the difference in nutritive values and growth rate in Rhodes Grass when it is fertilized with compound D and when it was fertilized with microbial fertilizer.

"I grew Rhodes grass but it didn't germinate, the germination rate was very poor so I couldn't carry on with my project," Bentley said.

The positive outcome that arose, however, was that his failed project fueled the inception of the much needed pasture and forage seed demo plot.

Bentley said that one of his lecturers, Dr.

Oliver Mwale, contacted the Ministry of Fisheries and Livestock to assist with pasture seed for Bentley to restart his project. In response, the Ministry recommended that a demo plot be established to not only help Bentley but other agriculture science students scale-up their learning through practice.

Through the Enhanced Smallholder Livestock Investment Program (E-SLIP), the Ministry is promoting pasture and forage seed production as one way of enhancing sustainable livestock production and productivity. As such, they supplied Kapasa Makasa University with different varieties of pasture and forage seed to kick-start the establishment of the demo plot.

Fourth year agroforestry student, Susan Mubanga, is as enthusiastic about the

demo plot as Bentley is. In her opinion, the establishment of a pasture and forage seed demo plot was a response that will contribute to improving animal nutrition in the country.

“During the dry period, there's usually less food for animals, so we thought that the same way we even have the Food Reserve Agency so that we have food even during the dry season, there is also supposed to be food for our animals during the dry season,” Susan explained. Through the demo plot, students at Kapasa Makasa University hope to graduate well-equipped with the ability to impart appropriate knowledge and recommend best practices to farmers and in the long run promote pasture and forage production.



Some students preparing the land for pasture seed cultivation

Martin Mwamba makes strides in cattle rearing

By Happy Mulolani

“Ever since I engaged in agriculture in the late 90s, I never reared any cattle as I never knew its value, it merely looked to be prestigious,” disclosed Martin Mwamba, a farmer in Chaiwila village under Musa Agriculture Camp in Kasama district in Northern Province.

Mr Mwamba aged 69, is married with 10 children and five grandchildren, and lives on a 20 hectares farm. In the past, he only managed to utilize eight hectares, which mainly focused on crops rather than livestock.

He used to cultivate 2.5 hectares of maize, 2.5 hectares of cassava, one lima of finger millet, one lima of sorghum and half a lima of groundnuts and rear a few chickens. This was mainly for home consumption and very little for sale to gain household income.

This perception only changed when the Enhanced Smallholder



Martin Mwamba (left) explaining the benefits and challenges of cattle rearing

Livestock Programme (E-SLIP) embarked on the Pass-on the gift of cattle to farmers. The pass-on the gift of dairy cattle is meant to empower farmer households, to

reduce poverty, and to increase household income.

The National Livestock Policy seeks to actualise “one livestock unit per rural household programme” and

the “pass-on-the-gift scheme.”

On March 20, 2021, Mr Mwamba was given a cow as part of the pass-on programme under the dairy cooperative. He stressed that the secret to succeeding in dairy cattle rearing is constant feeding, spraying and dipping to ensure the cattle are healthy. “Ever since I was given a cow, and learnt lessons on how to spray and dip cattle to curb any diseases, I have managed to keep the cow healthy,” he revealed.

Mr Mwamba is aware of the high cost of drugs for cattle but with good sales of milk, he is able to save and purchase the much needed drugs for the cattle.

Though drugs for cattle are expensive and beyond the reach of most smallholder farmers, that in itself is an opportunity for cooperatives to come up with a strategy of raising adequate funds, given that when farmers are empowered with cattle, they need to meet the cost of drugs for their cattle.

He explained that since he started the milking business, he is able to sell eight litres of milk per day to the Milk Collection Centre in Musa, which is just one Kilometre away from his farm. In a month, he makes K3,000 from milk sales. The Milk Collection Centre has a standard price of K12 per litre from all dairy farmers who sell milk to the centre.

He narrated that one of the positive changes that have taken place in his life since he ventured into keeping dairy cattle is that he has been able to build an iron roofed house from milk sales.

“Previously, I used to live in a grass thatched house as I did not have the financial capacity to build an iron roofed house, but now I have

built an iron roofed house,” a jovial Mr Mwamba said.

It is a fact that with limited financial muscle, one cannot invest in any meaningful venture but with Mr Mwamba's financial status changing, he is planning to expand his livestock activities by building a piggery. He has already purchased two sows and a boar. He also envisions to embark on village chicken rearing soon.

He is also elated that he has a regular income from milk sales as opposed to depending on maize sales to either Food Reserve

To him, the involvement of his family in the livestock value chain is key in boosting production and improving family livelihoods.

While Mr Mwamba appreciates E-SLIP's intervention, he is wary that the programme will soon phase-out. In view of this, he reaffirms his commitment to continue rearing cattle and expand in the long-term. Clearly, expanding dairy cattle will accord him the opportunity to constantly supply the Milk Collection Centre and beyond the life of the programme, this will increase his financial muscle.



Martin Mwamba and his entire family

Agency or prospective buyers which is seasonal.

It is pacifying that as a sustainability option, Mr Mwamba has involved his family, two of his older sons and his wife to take care of the cow and also do the milking. The idea is meant to facilitate continuity, when he is not able to milk, his family will still continue milking and sell milk in order to meet the daily family needs.

It is encouraging that farmers such as Mr Mwamba now realize that cattle rearing is not a prestigious symbol but is a profitable venture worth undertaking to not only empower households but also impact positively on household livelihoods.

Sioma District farmers empowered with Rabbit Covid relief packages

By Angela Kabamba



Rabbit production is one form of livestock rearing that can guarantee a quick return on investment

Government has through the Enhanced SmallHolder Livestock Investment Programme (E-SLIP) given 100 rabbits and 10 cages as housing for the rabbits to about 10 cooperatives in Sioma district of Western Province as a way of helping them recover from the effects of COVID-19 in terms of food and nutrition. E-SLIP Stocking and Restocking Specialist, Mwape Mweni, disclosed that about USD15,000 had been injected in the procurement, placement and training of targeted smallholder farmers in the district.

Mr Mweni said that the beneficiaries have been given 10 rabbits each and were required to pass on the off-spring of another 10 set of rabbits to a new set of households within a period of two months.

Speaking after a training of smallholder farmers on rabbit management in Sioma district, Mr. Mweni said that currently, the project was targeting two districts in Western Province namely, Sioma and Nalolo.

He said E-SLIP, a Programme under the Ministry of Fisheries and Livestock was also trying to promote the production of rabbits.

He further said the Programme was also promoting new technologies and

aspects of livestock production that could result in quick reproduction of livestock such as rabbits, which only take six months to reproduce, and are ready for consumption within a space of two months.

Mr. Mweni explained that in deciding an appropriate relief for farmers against the impact of COVID-19, the Ministry of Fisheries and Livestock had considered a type of livestock which could be easily multiplied and distributed to the most affected farmers in various parts of the country, hence the selection of rabbits.

He added that the importance of rabbit production was that they gave nutritional requirements in terms of protein, as well as income because they were prolific in breeding and fast in growth.

He said that there was a lot of demand for rabbits mostly in urban areas like Lusaka, Central and Copperbelt Provinces, and the Ministry was trying its best to see how it could promote production of rabbits at a commercial level, and enhance farmers' household incomes.

Mr. Mweni said that farmers would get additional support from the Ministry such as being enrolled under the sub-programme which is promoting forage

production to reduce the cost of feeding.

Meanwhile, Ministry of Fisheries and Livestock Chief Livestock Production Officer, Vincent Simoongwe, said the type of rabbit breed being distributed in Sioma district included pure and crossbreeds as well as local strains.

Mr. Simoongwe has since advised the beneficiaries to take rabbit production as an important venture which could improve their livelihoods if kept well and grown to a point where they could fetch an attractive price on the market.

And one of the beneficiaries, Mwambwa Mitala, said the training on rabbit management had educated her and other small scale farmers, as most of them had no knowledge on how rabbits could be taken care of.

Mrs Mitala said that the initiative by E-SLIP would help change their lives, as they had learnt that one rabbit could fetch more money than one chicken on the market.

She thanked the Ministry through E-SLIP for empowering farmers in Sioma district, adding that such interventions would help reduce poverty at household level.



Figure 1: Part of the 100 rabbits that were distributed to small scale farmers of Sioma district in Western Province by the Ministry of Fisheries and Livestock, under government's E-SLIP Programme.



Figure 2: Part of the 100 rabbits that were distributed to small scale farmers of Sioma district in Western Province, by the Ministry of Fisheries and Livestock, under government's E-SLIP Programme.



Figure 3: Part of the 100 rabbits that were distributed to small scale farmers of Sioma district in Western Province, by the Ministry of Fisheries and Livestock, under government's E-SLIP Programme.



Figure 4: Chief Livestock Production Officer, Ministry of Fisheries and Livestock Vincent Simoongwe showing the distributed rabbits to the small scale farmers of Sioma district who benefited from the 100 rabbits under government's E-SLIP Programme.



Figure 9: Small scale farmers of Sioma district in Western Province during a training on rabbit management, before the handover of the 100 rabbits to the beneficiaries by the Ministry of Fisheries and Livestock under government's E-SLIP Programme.

Kazungula Keeps CBPP at bay through cattle branding

By Prisca Kabwe

Livestock movement is necessary as part of agriculture trade. However, such direct contact among animals is one of the main avenues of livestock disease spread. Hence sustainable disease control requires measures that curb disease outbreaks.

Kazungula district was one district that was seriously affected by a livestock disease outbreak. Contagious Bovine Pleuropneumonia (CBPP) - a highly infectious cattle disease - broke out in the district in 2004 and led to the loss of a significant number of cattle.

"I lost 98 cattle in one day through the process of test and slaughter which was used to control CBPP in 2006. It is unbelievable to date. I thought that was the end of my life", Christopher Munalula recounts.

Such incidents compelled the government to scale up on improving the production and productivity of the livestock sector. Through the Enhanced Smallholder Investment Program (E-SLIP), the government has been implementing efforts towards effective disease control. Kazungula District Veterinary Officer, Dr. Cliff Kakandelwa, says since 2016, E-SLIP has introduced a disease control system which is proving helpful to farmers.

He said through the programme's support, the district has embarked on a cattle branding exercise which is an animal identification and traceability system aimed at enhancing the efficiency of disease control.

"For example if cattle are being slaughtered at the abattoir and then maybe one is found with a disease, we can trace the source using the brand mark, we can then go to inspect the entire herd, confine and treat the animals right at the source to avoid spread of the disease," Dr. Kakandelwa explained.

Dr. Kakandelwa said that CBPP is a major disease of concern for

Kazungula district, therefore an identification system purely tailored for CBPP has been adopted in form of zonal brand marks.

He mentions that Kazungula has 11 veterinary camps which have been divided in four zones.

Dr. Kakandelwa further revealed that over 75,000 adult cattle have so far been branded since 2016 in the 11 camps, with concentration in the high risk areas.

He recalled that in the beginning of the branding exercise, most farmers resisted the brand mark for fear of being stigmatized for having animals from Kazungula – a district with a history of a severe CBPP outbreak.

"...The good news is that over the years, the farmers have now accepted zonal brand marks as a means of disease prevention and control," he said.

Dr. Kakandelwa reveals that since the last outbreak of CBPP in Kazungula in 2017, there are no cases of CBPP and the district is now a surveillance zone.

Christopher Munalula of Kazungula Central camp said that branding animals with a zonal brand mark will



Freshly branded cow with a Zonal brand in Kazungula Central Veterinary Camp at Lupani Village

heighten surveillance to control any introductions of diseases.

“I learnt lessons in a harsh way and I wouldn't want to lose my animals again, therefore I have branded all my animals to safeguard them, when my animals are safe then I'm also safe” he said.

Mr Munalula who is also a CBPP task force member in his area says the group was now more alert to identify any stray animal with no zonal brand mark.

“We quickly report to our Veterinary Assistant if we see any strange animal that is not branded as we consider it to be a danger,” he said.

Mr. Munalula disclosed that his cattle have started increasing in number and he encouraged other farmers to remain alert so that cattle population in Kazungula can continue to increase and provide a stable source of income for their households.

And Athenesious Hamankolo, a Veterinary Assistant for Kazungula Central camp said that farmers were responding positively to the branding exercise and urged all farmers that have not yet have their animals branded to do so, with both personal and Government zonal brand marks.

Mr. Hamankolo has tipped the farmers that by January 2022, farmers with un-branded animals would not be allowed to trade their animals on recognized markets. Kazungula district has had not recorded any cases of CBPP since the 2017 and it is believed that cattle branding exercise is one effective measure to ensure that the outbreak of 2004 is not experienced again.



Branded herd of cattle



Branding a cow



Cattle branding will help trace and reduce disease outbreaks

PASS-ON

the gift initiative changes Robert Mudenda's life

By George Mtonga

After retiring from the Zambia Air Force in 1998, life became uncertain with a lot of anxiety for Robert Mudenda.

Engaging in income generating activities, agriculture in particular, his efforts proved futile as he had little technical knowledge in the sector.

In 2005, almost seven years down the line after he left formal employment, Robert developed interest in animal husbandry which compelled him to join a livestock cooperative with a membership of 30 smallholder dairy farmers in Mbala District of Northern Province.

The novice dairy farmer, who was identified by Agriculture Support Programme (ASP) together with other cooperative members, was sponsored with two Friesian heifers, a gesture that marked the beginning of life transformation for him.

Unfortunately, Robert's dream was seemingly aborted as some of his animals died as they could not endure the unfavourable climate change in the region.

"I was among the first lucky upcoming smallholder dairy farmers to be adopted and given animals for milk production in the district, an action that spiked a lot of hope to restart my self-employment venture, despite along the way losing some of the heifers since they could not stand the weather condition here" said Mr Mudenda.

A highly purpose driven smallholder dairy farmer like Robert, could not give up on striving with the process of achieving his dream of becoming a prominent milk producer in the

region.

In 2020, his persistence caught the attention of Government, which was rolling out a programme of supporting over 60 dairy

smallholder farmers with dairy heifers to meet the steadily increasing demand for milk, especially for vulnerable rural households in the District.

The project dubbed pass-on the gift under Ministry of Fisheries and Livestock through the Enhanced Smallholder Livestock Investment Program (E-SLIP), the International Fund for Agricultural Development (IFAD) and its cooperating partners has since empowered 68 out of 83 smallholder dairy farmers with cattle to enhance milk production in Mbala.

Mr. Mudenda has commended the government for the gesture and technical support provided to him as a beneficiary.

"Government has made it possible for me to sell milk every day since these heifers have been producing not less fourty litres daily, a situation that has proved to be financially profitable and has made my life easier," he explained. Expressing his joy, Mr Mudenda narrated that he is now able to raise about K11,200.00 monthly from his milk production sales which have been so sustainable to meet his family needs.

He said the milk production scheme has positively transformed his life, family and of those that have



Robert Mudenda smallholder dairy farmer in Mbala District

benefited from the pass-on the gift concept to be independent and economically stable.

He further explained that he is able to pay school fees for his children and financially support other family members.

"Recalling the days after retirement, my financial package was very small and could not have sustained me up to this time, I am proud to be among prominent milk producers and suppliers in this region including other neighbouring districts that purchase milk every day," narrated Robert.

He said said the commodity which has attracted more customers from the surrounding locality is pressing a high demand for more milk production hence more dairy farmers should get involved in the business.

Mr. Mudenda who is also a seed grower for pasture has been mobilizing his local community to educate and guide them in effective dairy farming schemes and further urged the youth and women in the district to take keen interest in dairy farming to utilise every opportunity and create more jobs in the area.

He added that the dairy production scheme has helped him diversify into fish farming, and bee keeping among other ventures to improve the social



Robert Mudenda Smallholder Dairy Farmer With His Wife In Mbala District.

and economic standard of his family. Acting District Fisheries and Livestock Coordinator, Brightone Ndumba expressed happiness with Mr Mudenda's performance in line with the project's implementation guidelines. Mr Ndumba said this when he visited the dairy farmer to monitor compliance levels provided by the department.

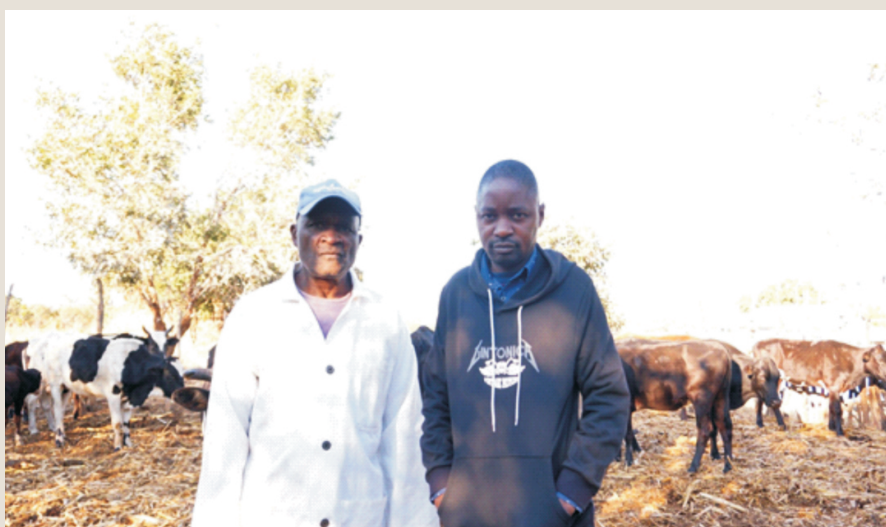
"It is very impressive to see Robert Mudenda who is among the 68 sponsored dairy farmers adapt effectively to the pass-on the gift programme under E-SLIP. Government will continue providing dairy smallholder farmers with technical support such as pasture for improved animal nutrition levels to achieve increased milk production," said Mr. Ndumba.

He explained that the dairy farming programme is not only meant to help provide the local community with nutrition at household level, but is also a source of wealth and is creating jobs for the majority of people especially in rural parts of Mbala.

"The pass-on the gift initiative promotes income generation for self-sustainability and alleviates poverty for household living in rural areas," highlighted Mr Ndumba.



Robert Mudenda (left) Smallholder Dairy Farmer with Acting Fisheries and Livestock Coordinator, Brightone Ndumba in Mbala District



Robert Mudenda (left) Smallholder Dairy Farmer with Acting Fisheries and Livestock Coordinator, Brightone Ndumba in Mbala District

578 Chipangali Farmers Benefit From E-SLIP's Forage Production Programme

By Gloria Siwisha

The major economic activity that Chipangali district's 127,604 population is engaged in, is crop production and livestock keeping. As per 2021 district records, the area has a total number of 61,679 registered farmers, out of which about 24,000 farmers own various kinds of livestock.

However, just like any other district in the Eastern province, the growing of forage or pasture as feed for livestock, is a relatively new concept for many of the farmers in Chipangali.

This is because from time immemorial, the common practice has been that of allowing livestock, especially cattle, to wander about in search of food and water.

This trend to not properly feed livestock, makes them vulnerable to chronic malnutrition and disease; and consequently reduces its productivity and the incomes of farmers as such animals, usually do not sell at good prices on the market.

One of the reasons for this continued practice, is that smallholders have limited knowledge and skills in pasture production as well as the economical utilization of these products. If fully embraced, pasture production can be used to supplement the diet of livestock, or as the sole feed source.

Experts in the field argue that pastures for cattle improve fertility and conception; improve milk production, provide a cheaper source of feed for stock than store-bought feeds, and provide feed for animals during the dry seasons of the year when there is little no food at all.

Rodwine Mwale, of Kefa village in Chipangali district, is a farmer who participated in the production of pasture as feed for livestock for the first time during the 2020/2021 agricultural season. Under the Enhanced Smallholder Livestock Investment Programme (E-SLIP), he received a kilogram of seed each of pigeon pea, cowpea, and brachria (which is a grass species).

According to him, the Programme could not have come at a better time than now when many farmers in the area were showing growing interest in keeping livestock as a source of nutrition and income.

"I planted each variety of seed received from E-SLIP, through the veterinary officer, on a one Lima field. I have already harvested the cowpeas and the brachria grass and only left with the pigeon pea, which has not yet dried. As

guided by our extension officer, I have kept the cowpeas and grass in a secure storage house so that the pastures are able to retain their nutrients, as I wait for the officer to provide the equipment to process the grass," Rodwine said.

He said the beneficiaries of the forage packages had also learned how to use the pastures as fodder for livestock or silage.

"With this pasture that I have produced this season, I am assured of having food for my livestock especially in September, October and November when there's a shortage of grazing lands," he said.

Rodwine said he hoped to expand the area of production of pastures from one Lima, to 2 acres in the next farming season since he had learned the importance and benefit of producing livestock feed.

"This programme should be extended to all livestock farmers in the province," he appealed.

According to Provincial Livestock Officer for Eastern Province - Grace Lungu - 8,021 farmers grew pastures in Eastern Province during the 2020/2021 agriculture season.

"Specifically for Chipangali district, 578 benefited from E-SLIP's forage programme and 352 actually planted the pastures. In Chipata district, 1,174 farmers were recruited, while 893 planted," she said.

E-SLIP is a Government initiative that mainly seeks to sustainably improve rural household incomes and; the production and productivity of the livestock sector through improvement of livestock production systems and disease control.

Its sustainable forage and forage seed production and utilization component in particular, hopes to reach 80,000 stallholder farmers and aims at



Forage field

addressing the need for them to correctly feed their livestock in a competitively cheaper manner to maximize on profits.

The component also aims to introduce improved grasses and legume species into integrated livestock-crop farming systems, and improve over 100,000 hectares of communal grazing areas through over-sowing of well-adapted leguminous species, and distribution of start-up forage seed to 80,000 households.

It would be for the benefit of the livestock sub-sector in the province if all livestock farmers embraced such progressive initiatives.

E-SLIP helps to reduce overfishing in Kaputa

By Josiah Mpofu

Government through the Enhanced Smallholder Livestock Investment Programme (E-SLIP) has empowered over 300 local farmers with beef cattle in Kaputa district of Northern Province.

The empowerment programme which is currently being implemented by the Ministry of Fisheries and Livestock with financial support from the International Fund for Agriculture Development (IFAD) and the OPEC Fund for International Development (OFID); is aimed at increasing incomes and improving the nutrition status of rural communities across the country.

Kaputa District Acting-Livestock Technician, Nervin Madubanse, expressed joy over the farmers' improvement in rearing livestock which has gradually started transforming their lives.

Mr. Madubanse said it was overwhelming to see the people in the district getting interested to rear livestock as they only depended on growing rice, maize, cassava and

fishing.

"The initiative has helped to reduce overfishing which led to the depletion of fish stocks in Lake Mweru wantipa, because farmers in the district have now devoted their time towards livestock production," said Mr. Madubanse.

Mr. Madubanse explained that the ministry was doing everything possible to ensure that people in the district engage into beef production as it is profitable.

"In order to create self-sustainability among the local people in Kaputa district, our district staffs have and will continue training people on the proper management of livestock to alleviate hunger and poverty at household," explained Mr. Madubanse.

He said despite various challenges such as high prices of cattle medicine and lack of livestock facility centers among others experienced by farmers in the District, the Ministry has continued working hard to ensure that they increase their

livestock.

Mr. Madubanse emphasized the need for a veterinary clinic in the area so that farmers can easily access medicines to treat their livestock as they are currently relying on Kasama and Lusaka.

He stressed that farmers also need dip tanks to dip their cattle at least twice a month to prevent diseases.

And one of beneficiaries from Katwesheko farmer group, Isaac Chileshe expressed gratitude to government for the gesture saying it will help to improve his life and that of his neighbors.

Mr. Chileshe noted that he would no longer experience challenges in generating income to feed and educate his family.

Mr. Chileshe said his passion to rear cattle started in 2018 when his group received 10 beef cattle from E-SLIP which have now increased to 18 in number, after passing on three to other members as per requirement by the Programme.



E-SLIP is contributing to diversification of farming through its restocking exercise

Livestock Pass on successful in Kasama

By Josiah Mpofu

The Ministry of Fisheries and Livestock in Kasama District of Northern Province has expressed happiness over the successful implementation of the 'livestock Pass on the gift concept' under the Enhanced Smallholder Livestock Investment Programme (E-SLIP).

The pass on concept is the key requirement under the Programme's pro-poor stocking and restocking exercise that aims to increase livestock production and productivity among rural farming households.

Kasama District Livestock Production and Extension Officer, Chilando Makumba, disclosed that over 90 percent of farmers who received livestock such as cattle, goats, pigs and chickens through the stocking and restocking exercise, have so far been shared with other farmers in the district through the pass on.

Mrs. Makumba said the district had recorded a steady increase in livestock production since the inception of the E-SLIP in 2018.

"The district is doing fine in livestock production because our district staff are always on the ground to ensure that farmers adhere to the livestock rearing guidelines such as dipping and; pasture and forage production," Mrs. Makumba said.

Mrs. Makumba explained that during the past farming season, E-SLIP provided farmers with 224 kilograms of forage seed which included legumes and improved grasses to help them enhance their capacity to feed their livestock appropriately and at an affordable cost.

She explained that other beneficiaries who have not yet passed on livestock to other farmers in the district were expected to do so in November this year.

Mrs. Makumba explained that if the 'pass on the gift' concept continued to be correctly implemented, this would help to improve food and nutrition security at household level as everyone would access the benefit of owning livestock.

She emphasized that the concept would also promote unity in the farming communities and the as people would learn to share what they have with those who do not have.

Mrs. Makumba further disclosed that the female beneficiaries in particular, were doing fine regarding passing on of livestock as they are few female defaulters.

She explained that the 'pass on the livestock concept' was a serious necessity of the livestock stocking and restocking exercise, stating that if beneficiaries failed to meet the obligation, their livestock would be repossessed by the Ministry.

Mrs. Makumba said after an assessment that was carried out by the Ministry of fisheries and Livestock to ascertain

the E-SLIP's performance in the district, it was observed that the Programme has contributed to increased incomes among rural households in the district by 95 percent.

The 'pass on the gift concept' is the only sure and most sustainable way of uplifting living standards of rural communities in rural areas as it allow individuals to own livestock thereby improving their livelihood.

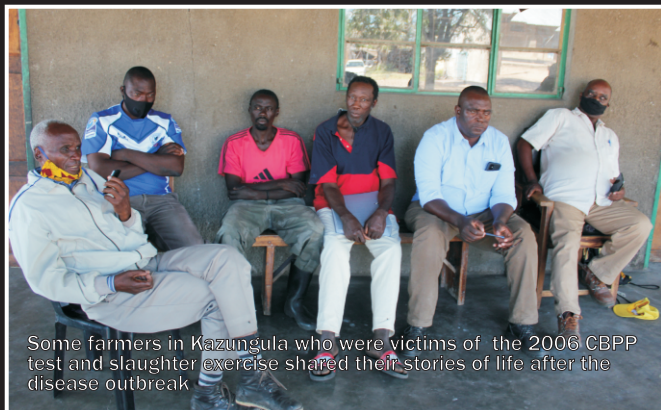


Mrs. Makumba - a beneficiary of the 2019 cattle that was stocked in Choma



Milk is an affordable source of nutrition for rural households

PHOTO FOCUS



Some farmers in Kazungula who were victims of the 2006 CBPP test and slaughter exercise shared their stories of life after the disease outbreak



Office Assistant, Wilard Hamwela taking 5 amidst his numerous assignments



Hon. Nkandu Luo listening to Bentley Chivweta aka Mr Grass who inspired the establishment of the demo plot at Kapasa Makasa University in Chinsali, Muchinga Province



German Lungu is one of E-SLIP's pasture seed growers based in Chongwe



Forage seed growers in Kasama (Northern province) having their crop inspected



Fisheries and Livestock Permanent Secretary, Dr. Benson Mwenya, handing over chickens to beneficiaries in Kabompo during an E-SLIP stocking and restocking exercise



E-SLIP's Coordinator for the Livestock Production & Productivity Unit, Dr. John Nyrongo, participating in the official launch of a demo plot in Chinsali district, Muchinga Province



E-SLIP facilitated the vaccination of close to 500,000 cattle in Western and N. Western provinces against CBPP

PHOTO FOCUS



Collection of doses of CBPP vaccine by Dr. Cornelius Mundia - CBBP Epidemiologist for E-SLIP



A female youth gladly receiving a goat during a stocking and restocking event in Mpika. Muchinga



A beneficiary of the 2019 cattle that was stocked in Choma



Taona Women's Group displaying some eggs produced by improved village chickens they received from E-SLIP in 2020



Then-Fisheries and Livestock Minister, Prof. Nkandu Luo, officially launched the pasture and forage demo plot at Kapasa Makasa University in Chinsali. Muchinga Province



Youth beneficiary of the livestock restocking exercise in Nkeyema, Western Province



29 year old Ophelia Nkando received a calf from E-SLIP in 2019 as part of a beef cattle stocking and restocking exercise in Choma district, Southern Province



With support from E-SLIP, students at Kapasa Makasa University established a pasture and forage seed demo plot



The establishment of milk collection centres area catalyst to stimulating dairy production

Milk collection centre established in Musa

By Happy Mulolani

One of the concerns of farmers who engage in dairy cattle rearing is a strategic place to supply milk to potential buyers. This status quo has motivated experts in the Ministry of Fisheries and Livestock and Ministry of Commerce and Trade to craft a proposal aimed at lobbying for support to set-up milking centres in Mpika, Mbala and Kasama in Northern province.

Mwengu Sikazwe, an Economist in the Ministry of Commerce and Trade, explained that due to lack of a market for farmers' milk, there was need to source for support to set up milking centres.

"A proposal was written and submitted for funding to the African Development Bank (AfDB) in 2011. The proposal was accepted and financed in 2013," Mr Sikazwe said.

The financing was towards the construction of the milk centre, processing plant, spray race and borehole to cater for the farmer community engaged in dairy cattle production.

The construction cost of the plant, which has a daily operation capacity is 2,000 litres per day was K889,000, while the processing plant equipment was purchased at US\$220,000.

The processing plant was set up at Musa Farm Institute in the Dairy Scheme in Kasama, and it is meant to improve

collection of milk from farmers in the district. It became functional in 2018 and was launched in 2020.

Mr Sikazwe said the plant is able to produce yoghurt, cheese, ice cream, and butter, among other products.

Musa Dairy Cooperative runs the Milk Collection Centre in Kasama, which is located 10 Kilometres away from town. The understanding is that the cooperative will be able to sustain the daily operations of the Milk Collection Centre.

Against this backdrop, some farmers in Kasama benefited from the pass-on-gift of dairy cattle under the Enhanced Smallholder Livestock Investment Programme (E-SLIP).

The rationale of the pass on arrangement is that every household under the cooperative will be given an animal. This enhances milk production once the animal begins producing milk.

Livestock Production and Extension Officer for Kasama, Chilando Zemba, explains that the milk centre is strategically located and enables more dairy farmers to access milk and also make use of the facility.

Ms Zemba says the presence of dairy cattle in the area through the pass-on gift initiative has enabled more farmers to have increased income, improved nutrition and has resulted in job creation. She notes that some farmers

who never knew the benefits of dairy cattle rearing, have now developed a business acumen as they have realised that keeping dairy cattle is a profitable enterprise.

She emphasized that the pass-on arrangement ensures farmers are empowered through cooperatives and farmer groups, which are legally registered entities. These cooperatives need to adhere to 50 per cent gender participation, 30 percent youths, while 20 percent constitutes men, the elderly and other beneficiary farmers. It is encouraging that the Dairy cooperative has a significant number of females who are active members of the group.

Livestock Technician for Kasama, Ackim Mwalilino, further said E-SLIP provided forage seed which is basically improved grass for the cattle to feed on.

In order to sustain feeding of the cattle on forage, Mr Mwalilino narrated that three seed growers were identified and trained in Kabwe. This training equipped farmers with knowledge on how to grow forage seed so as to ensure beneficiary farmers of dairy cattle already had a reliable and constant supply of forage.

A beneficiary farmer, Alice Nawaki, explained that she benefited one cow under the pass-on gift arrangement. Currently, she supplies eight litres of milk which she sells at K12 every day to the Milk Collection Centre.

Ms Nawaki, who is also a Treasurer of the Dairy Cooperative, says her milk sales reach K3,000 per month.

"This milking business is good, it is actually better to involve myself and other farmers in milk business, it is very profitable," she said.

The funds raised from the milk sales enable her to purchase fertilizer in order to cultivate maize.

"In the past, I used to depend on Farmer Input Support Programme (FISP) but

now I am able to buy four bags of fertilizer to apply in my maize field," Ms Nawaki said.

She also disclosed that she has managed to buy 15 layers which are two months old from her milk sales.

Ms Nawaki's vision is to set up a pharmacy to stock medicines for the cattle and supply farmers within the vicinity of Kasama. She adds that this will cut down on transportation costs of buying medicines for cattle from Lusaka.

"I wish to take advantage of the opportunity to be supplying drugs for cattle, because as a cooperative we always buy from Lusaka," she emphatically said.

It is anticipated that the Dairy cooperative will explore opportunities to draw more dairy farmers to supply their milk to the centre in order to meet its capacity and supply the existing market.

Land tenure favours Kaputa farmers

By Happy Mulolani



Land is valuable asset of citizens in any country

One of the pitfalls in livestock farming is access to grazing land. This situation has been in existence for a long time due to the land tenure system.

According to the National Livestock Policy 2020, the most prevalent land tenure system in Zambia is centred on customary land. This entails that the system of granting authority to livestock farmers is vested in the traditional leadership, thereby leading to "social conflicts between livestock farmers and other land users leading to land degradation and the spread of animal diseases."

As a result of this system of

granting authority to land, smallholder farmers engaged in livestock farming are only able to access land communally. Sadly, this system of land acquisition does not guarantee security of tenure. The status quo denies farmers not only access to larger tracts of land for livestock rearing but also allocation of land for livestock use is of low priority coupled with prolonged procedures to acquire. But this situation is changing in Chibale village in Kaputa district in Northern province. Headman Japhet London Chibale is one of the few traditional leaders, who is cognizant of the importance of

farmers acquiring bigger size of land for livestock farming.

Headman Chibale, who is also chairperson of Mwafwe cooperative society, realized the potential benefits of cattle rearing after seeing the value of rearing cattle. He vehemently pushed the agenda to ensure farmers in his area secure their land by starting the process of converting traditional land to have title deeds in order to secure legal ownership of land.

He revealed that he facilitated the group to be given 100 limas by 100 limas of land in order for the group to own grazing land for the cattle

they benefited as a cooperative.

“The paperwork for securing land 100 limas by 100limas is in the process of being finalised,” Headman Chibale said.

This was after the cooperative benefitted 11 beef cattle from the pass on gift of beef cattle under the Enhanced Smallholder Livestock Investment Programme (E-SLIP). The group has since managed to multiply the cattle to 20.

Headman Chibale said that the group expects to multiply the cattle by September. But a major challenge was that the dip tank is located far away from where the cooperative is located thereby making it difficult to regularly dip the cattle. Amidst this situation, he calls for setting up a closer dip tank. He further says cattle rearing is beneficial to farmers as they are appreciating the importance of owning cattle because they have been able to increase their area under cultivation through mechanization and income.

Headman Chibale said the cooperative sold a bull at K15,000 to E-SLIP which they felt was profitable. The group has since multiplied a few more bulls.

It is a fact that rearing of cattle has generally not been a culture of the people in the area. Thus, this shift to cattle rearing through E-SLIP's intervention is breaking cultural barriers and also positively impacting on rural households in the area.

Headman Chibale narrates that prior to the pass on, most farmers in the cooperatives reared goats and village chickens.

“We had 400 goats but realized that cattle was more beneficial after the series of trainings on cattle rearing. We also realized the use of cattle for cultivating our fields will help us increase the area under cultivation,” he said.

The Headman said farmers in the group had since purchased ploughs to enable them increase their areas under cultivation.

Veterinary Assistant for Kaputa, Melvin Mabanse, explained that the trainings to the farmers have helped in changing their mind-set and not focus on crops only but also engage in cattle rearing.

Mr Mabanse said that he regularly monitored the farmers' involvement in beef cattle rearing under Mwafwe cooperative society. He described their performance in the pass on exercise, as positive for the farmers.

“It is encouraging that Headman Chibale is pushing the agenda for acquisition of more land for the group, this means farmers can rear more cattle,” he said.

This notion of acquiring larger grazing land will enable farmers expand their livestock farming if they are to increase their production and income.

Clearly, access to land meant to rear livestock is now a priority and calls for more farmers to actively take up livestock farming if they are to contribute to increased production and income.



Limited grazing land for livestock is one major challenge for smallholder livestock farmers.

E-SLIP empowers pig farmers

By Happy Mulolani

"I decided to quit lecturing at the University of Zambia and concentrate on my farming activities," Paul Moyo, a farmer in Six Miles in Lusaka proudly narrated.

Dr Moyo made the decision to leave his job after seeing the tangible benefits of pig rearing. After benefiting from the pass on the gift of pigs under Sekeseke cooperative society - where he is a member - he was given one pig, which has already multiplied to 12 piglets.

Prior to benefiting from the pass on, Dr Moyo was already engaged in the pig value chain. Thus, benefiting from the pass on exercise just helped improve the existing breed of pigs he had. He succeeded fairly well in rearing the pigs because he already had the know-how in terms of management.

"The mortality was minimal, only one pig died out of the pigs I benefited," Dr Moyo said.

He narrated that he decided to sell 40 pigs which he reared prior to benefiting from the pass on. He sold the pigs at a wholesale price of K60 and from the sales, it was clear that he was ready to focus on pig rearing as it is a profitable enterprise.

Dr Moyo said his desire is to inspire more people to take up pig rearing as the benefits are worth working for.

"For instance, the market for pigs is readily available and the price is lucrative. The wholesale price is K60 per kilogramme while live weight is K70," Dr Moyo revealed.

He encouraged farmers to seriously consider value addition if they were to have a return from their investment.

"Buying equipment to enable processing of pig products is inevitable if pig farmers are to gain marginal profits," he emphasized.

Another farmer, Joseph Zulu and his wife are also members of Sekeseke cooperative society. Both benefited five pigs each which they have managed to multiply to 100 pigs.

Mr Zulu said his long-term goal was to be one of the major suppliers of pigs to buyers such as Zambeef and Real Meat.

He was assertive to the fact that though the pig market was very lucrative, dealing with markets such as Zambeef and Real Meat, required a consistent supply of pigs.

"When one identifies and establishes potential markets for pigs, it is important to be able to keep the flow

than fail to meet the demand. Normally, the bigger markets require constant supply of pigs weekly or fortnightly," Mr Zulu explained.

He stated that he was considering value addition to produce pig products such as sausages, pork, among others. In this way, the return on pig sales can be re-injected in boosting pig production.

The major challenge was the high levels of theft which tends to threaten the enterprise.

For continuity purposes, the couple has empowered each of their three children with a pig. The idea is for the children to get involved in the production process and also effectively sustain the pig rearing value chain as a family.

While, another beneficiary farmer, Moses Mwale, explained that rearing pigs came with its own set of challenges such as mortality and feeding. But to meet regular demands, it was always best to learn how to formulate feed once raw materials are purchased.

"Feed is very expensive now but farmers should consider buying ingredients and formulate feed in order to cut down on the costs of



There is a lucrative market for pigs in Zambia



Dr. Paul Moyo received one pig through a pass-on and it has given him 12 piglets



Feeding pigs can be expensive for farmers who do not grow some of the ingredients

feed,” Mr Mwale said.

His vision still remains to expand his enterprise if he can get financing. Mr Mwale also rears goats and village chickens on his farm size which is eight hectares.

Mr Mwale applauded the Enhanced Smallholder Livestock Investment Programme (E-SLIP) for the intervention and support in the pig value chain. As the programme phases-out, continuity is assured as farmers in the area have seen the tangible benefits in the pig value chain.

The testimonies of Moyo, Zulu and Mwale typically reflect varying trajectories in their pig value chain with E-SLIP's support. This should serve as a leaf to would be pig farmers, suffice to state that for farmers to make strides in the pig value chain, they should seriously consider value addition to supply potential markets in order to gain higher returns.

E-SLIP to put smiles on livestock farmers

By Gloria Siwisha

ACKSON Mawere, 63, of Kanyanja Agricultural Camp in Chipata District, used to only cultivate field crops like maize, soybean and groundnuts until 2006 when he diversified into cattle rearing.

According to him, embracing livestock farming alongside crop production, was the only way he could realize the much needed resources to meet all of his households basic needs like shelter, food and nutrition security, and education.

From having just four calves in 2006, Mr. Mawere now has 20 herds of cattle.

“At one time, I had close to 40 herds but sold some of them for my family's

survival. Today I'm happy to share that, through livestock keeping, I have successfully supported two of my children through university and they have since graduated,” he said.

He recalls however that the journey to where he stands today wasn't always an easy one because of the burden of livestock diseases such as the East Coast Fever (ECF) or Chigodola, as it is common known in Eastern Province.

“In a year that you neglect to immunize your cattle against ECF, you can lose up to about 15 herds in a day once the disease breaks out. That's how fatal it can be if the disease is not controlled. And for a farmer, there's nothing as painful as having to watch

your animals die helplessly,” he said.

According to Mr. Mawere, when he heard about ECF immunizations offered by the Department of Veterinary Services in 2010, he believed that they could be a remedy to the problem of high mortality in cattle and decided the programme was worth a shot.

Regular immunizations of his calves against ECF not only reduced mortality rates but also allowed him have healthy animals that earned him good income when on the market.

He also reduced the costs of accessing farming inputs like fertilizer since he had a consistent supply animal manure for his field crops.

“Other than increasing the incomes of

farmers, and providing households with proteins like meat, and milk from dairy animals, livestock also produces manure that enriches the soils for our crops, and as such, I don't have to spend much on purchasing chemical fertilizers which are usually pricey," he said.

The success of livestock keeping on Mr. Mawere's farm motivated him to encourage other farmers in his village to also regularly immunize their animals.

"With proper planning, a farmer can sell a part of his crop yields and save money for cattle immunization, since it is an activity that enables farmers have healthy and productive animals," he said

Today, Mr. Mawere has gained recognition as a model farmer for his success in livestock keeping and by 2014, was recruited by the Ministry of Fisheries and Livestock to be one of 1,117 beneficiaries of the Enhanced Smallholder Livestock Investment Programme (E-SLIP) in Chipata District through Mugonono Livestock Group where he is not only a lead farmer but also a vice-chairman.

Thanks to Mr. Mawere and other forerunners like him for making strides

in reducing ECF prevalence in Chipata District.

For example, Nicholas Banda also of Kanyanja Camp now has 9 healthy cattle because of regular immunizations.

Another farmer, Dorothy Chisenga, 64, of Chipata Central Agricultural Camp, owns 25 local cattle breeds and three dairy animals.

"I thank Government for the programme and would appeal that sensitizations against ECF continue so that small scale livestock farming becomes a more productive business in the district," she says.

In August, 2021 the Veterinary Department targeted to immunize 4,000 calves against ECF in Chipata, Kasenengwa, and Chipangali districts through E-SLIP's support.

Provincial Veterinary Officer, Arthur Mumbolomena explained that ECF remains one of the most prominent livestock diseases that affects cattle in Eastern Province and a major constraint to cattle improvement in the region.

ECF is a deadly disease of cattle which is caused by a blood parasite *Theileria parva* and transmitted by the Brown Ear Tick.

The parasite multiplies in the tick's salivary glands and the disease is introduced into the animal through the tick's saliva.

Once inside the animal, the parasites invade the lymphatic system, where they multiply and interfere with the animal's immunity, making it sick and often causing its death.

"Over the past five (5) years, the average immunization has been 18,000 per year by Government working ASVEZA, LDAPH, SLIP and this year E-SLIP. We are expected to immunize 15,000 this time around and E-SLIP has provided that continuity in the vaccination process," Dr Mumbolomena said.

According to the 2017-2018 Livestock and Aquaculture Census summary report, Eastern Province currently has a cattle population of 591,149.

Therefore, the efforts by E-SLIP to contribute to sustainable production and productivity of key livestock systems of targeted smallholder producers through reduction of ECF prevalence to levels, is paving the way for a more sustainable livestock sector, and thus changing the livelihoods of beneficiaries in the province for the better.



A freshly vaccinated calf is tagged to provide evidence that it has been vaccinated

E-SLIP empowers Kasama women with dairy cattle

By Josiah Mpofu



Through milk production Ms Nandazi is able to send her children to school

Since time immemorial livestock farming has always been considered as a man's business but now due to the government's desire to empower the woman folk, the narrative is progressively changing as more women are beginning to actively participate in the venture.

The Enhanced Smallholder Livestock Investment Programme (E-SLIP) is one of the programmes which were initiated by the government that is aimed at encouraging women to engage in both beef and dairy production.

The empowerment programme is currently being implemented in all the corners of Zambia through the Ministry of Fisheries and Livestock where women are getting a larger percentage regarding livestock empowerment.

The development has cheered many women in the country who feel their lives will never be the same as they will have enough food and incomes to sustain themselves and their families. Ireen Nandazi, 46, a Musa Camp resident of Kasama District, Northern Province is a widow who has expressed gratitude to Government

for empowering her with one dairy cow which has two calves which has become the source of her livelihood. From the cow, Ms. Nandazi is able to collect more than seven (7) litres of milk every day for home consumption and excess for sale.

Ms. Nandazi noted that she no longer has challenges to feed her 3 children and pay for their tuition fees due to the money she obtains from selling of milk.

"I have three children, the first born is in grade 12, the second born grade nine while the third born is in grade seven, I manage to take care of them because now I have an income from milk sales," said Ms. Nandazi.

She explained that before the empowerment she used to depend on crop production which for the past seasons didn't perform well due to the effects of climate change and lack of farming inputs.

Ms. Nandazi added that she previously couldn't manage to sustain herself and her family financially as she only grew a little of Maize and Cassava due to lack of enough capital to cultivate portions of land.

"I appreciate the government through

E-SLIP for considering to empower me as a widow, for it was hard to manage a family when one is a single parent, especially if there is no employment or business that generates income," explained Ms. Nandazi.

She expressed optimism that her dairy business will improve greatly as she is equipped with much knowledge such as how to vaccinate the cattle against diseases and how to grow pasture for her livestock.

Ms. Nandazi received forage seed from E-SLIP in the 2020/2021 farming season that planted currently stocked enough pasture to feed her cattle in the dry season when there is shortage of pasture.

"When the E-SLIP team came at my home they gave me seeds for cowpeas, velvet beans and improved grass which have since performed very well and my cattle will not starve," said Ms. Nandazi.

She exclaimed that she does not have any words for the government other than appreciating the empowerment she had received which would completely have transformed her family's nutrition and livelihood.

Ms. Nandazi has called on the

government to reduce the price of cattle medicines and install more boreholes in the area as there is scarcity of water for her cattle.

She emphasized on the need for more constant sharing of knowledge to farmers to ensure the project's sustenance as it is nearing the end.

Meanwhile, another farmer from Musa Agricultural Camp in Kasama District Purity Musumali who received one dairy cow said that she has earned money every day after selling her milk which has ready market.

"I do not worry about customers because many people from the surrounding area frequent my place to buy milk which I sometimes fail to meet the demand," said Ms. Musumali.

Ms. Musumali who used to only grow maize and beans at small scale explained that livestock business was far much profitable compared to crop production.

She disclosed that she has now managed to employ one person, a situation that she could not do in the past, where she barely fed her family

due to lack of enough income.

Ms. Musumali has since called upon the Ministry of Fisheries and Livestock staff to keep on encouraging farmers by teaching them on the proper management of livestock to guarantee profitability.

She added that that Northern Province has potential to be a hub for livestock production as the province is blessed with large water bodies and excellent climatic condition.

"With good rainfall patterns and temperature that we experience here in Kasama, I have no doubt that we can produce as much livestock as that of Southern, Western and Eastern provinces," Explained Ms. Musumali.

Ms. Musumali collects eight to ten liters of milk from her cow every day and is optimistic that she will continue with the venture and increase her dairy cattle.

For sure these and many interventions are needed in order to improve dairy farming thereby providing employment for rural communities and the dairy industry.



Milk production can help improve household nutrition and income generation

Impact of cattle rearing among youths in North

By Happy Mulolani



The youth are key players in the transformation of the agriculture sector

To accelerate livestock development, Government has reaffirmed its commitment through appropriate policies like the National Livestock Policy. The policy aims at promoting "main livestock species that are being promoted for stocking and re-stocking of suitable breeds of cattle, pigs, small ruminants and village chickens.

Stocking and re-stocking are conducted through the "pass on the gift". This programme is being promoted countrywide through the "one livestock unit per rural household" programme."

For this reason, some youths have taken heed as they have taken an active role in becoming agents of change in order to contribute to livestock development. In the past, most youths would rather take up white collar jobs as opposed to livestock farming. Interestingly, the trend is changing as some



Passing on the gift is a key strategy in ensuring that the restocking exercise is a success

youths venture in livestock rearing.

Kennedy Mulinda, aged 32, married with three children is a youth farmer in Kapampa village under Musa Agriculture Camp in Kasama, Northern Province. His farm size is two hectares and is a member of Bombaluleya Cooperative Society.

Mr Mulinda only focused on crop farming which included; maize, cassava and groundnuts. He mostly depended on cultivating maize on a slightly higher scale because he was able to access inputs under the Farmer Input Support Programme (FISP). His highest maize harvest is 12.5 bags by 50 kilogramme and lowest six bags by 50 kilogramme.

"The yields are relatively low here in Musa due to acidic levels of the soil, mostly whatever I harvest would be for home consumption and sell very little," he said.

But, the inception of the Enhanced Smallholder Livestock Programme (E-SLIP) Pass on gift was a glimmer of hope to Mulinda.

In the first place, he never had any experience of cattle rearing neither did he understand how to go about cattle rearing. However, the starting point for him was the lessons offered on management of cattle which focused on dipping, spraying and other related management practices by Veterinary Assistants and other livestock experts from the district office.

"After the lessons I gained insights on cattle rearing and applied the knowledge I acquired through the cooperative," Mr Mulinda said.

He realised the potential that livestock rearing offers and took a bold step to join the cooperative, where he benefitted from the pass on gift of Dairy cattle in 2020.

After benefitting from the pass on gift, it took seven months for him to start milking and would sell the milk to the Milk Collection Centre, which is just three kilometres from the farm.

"I was amazed at how profitable milking was. A day, I would supply 2.5 litres of milk to the milking centre and with time, I believe I will increase. In a month, I am able to make about K2,000," Mr. Mulinda giggled.

He notes that what is good about these Dairy cattle is that it provides a regular stream of income to cater for the daily needs of households.

"I have increased my garden and use manure from the cow dung which is even better than using fertilizer," he said.

But like any venture, there are bottlenecks which tend to affect the farmers, such as the high cost of medicine to treat the cattle. However, this requires a sustainable way of dealing with the cost of addressing the cost of medicine.

His vision is now to purchase a vehicle to ease transportation movement.

Another beneficiary youth farmer in Musa Agriculture camp, Jackline Mushota, aged 33, is a single mother with three children. She belongs to Twashalashani cooperative under the Dairy Resettlement Scheme.

Ms Mushota is a novice farmer, who

ventured in agriculture five years ago. She cultivates one lima of maize, half a lima of cassava, and a one lima of sweet potatoes. As opposed to most smallholder farmers who would benefit from FISP, she used to buy fertilizer from shops to apply in her fields.

"I did not rear any livestock because I just could not afford," she revealed.

However, when E-SLIP began the pass on gift in 2020. She happened to be among one of the beneficiaries in her group, she realized the enormous benefits of Dairy cattle especially milking. She intends to increase her hectareage because there is abundance of manure which she can make use of in the garden, which recently started.

Ms Mushota said the Dairy cattle is beneficial as it provides a regular stream of income which has helped to cater for children's school fees.

But one of the challenges is that access to nearby boreholes is far away for the cattle to properly drink water. Another setback is the onset of COVID-19 which has affected regular trainings offered to the farmers every month. Instead, trainings are conducted every two months to the farmers.

Mulinda and Mushota's testimonies show their appreciation and involvement of Dairy cattle rearing.

Clearly, youths need to re-position themselves and take advantage of Dairy cattle rearing and the potential benefits it offers.

Livestock Farmers urged to upscale Forage Production

By Dorcas Kabuya Chaaba

Livestock production is a critical component of agriculture that can support livelihoods and food security of most people in developing countries and Zambia is not an exception.

Likewise, this sector supports the livelihoods of rural farmers through draught power, cash income, manure, meat and milk.

However, deterioration of livestock natural grazing land was one major challenge that had contributed to low productivity in the livestock sub-sector and it is believed to have been caused by effects of climate change, among other things.

This has been coupled with shortage of quality forage seed - mostly legumes - among smallholder.

It is for this reason that the Enhanced Smallholder Livestock Investment Programme (E-SLIP) has been igniting in farmers a passion for forage seed growing under its seed multiplication programme.

Sylvester Nkakila is one such farmer that was identified in Chilanga District in 2019 and was given forage seed such as cowpeas and velvet beans for multiplication purposes.

"My involvement in forage seed multiplication started with invitation to attend the Agritech Expo in Chisamba under E-SLIP, where other seed growers were selling a 5kgs pack of forage seed at K200. This prompted me to become a forage seed grower," he explained.

The objective of E-SLIP programme is to sustainably improve incomes of rural poor households in targeted provinces and districts through the restocking exercise and; the promotion of forage and forage seed production.



forage seed production by smallholder farmers is largely untapped despite offering diverse opportunities for income generation

Mr. Nkakila notes that the potential of forage seed production by smallholder farmers is largely untapped despite offering diverse opportunities for income generation adding that it is time farmers started viewing forage production as a lucrative business.

"...I received 12kgs of velvet beans and 8 kgs of cowpeas for the 2020/2021 farming season. Though the seed came in a bit late, I managed to harvest 30 by 50kgs of velvet beans and 15 by 50kgs of cowpeas," he narrates.

Indeed there is need for forage seed production, utilization and marketing in smallholder systems for the improvement of livestock production cannot be overemphasised.

"Under irrigation, a farmer is able to grow forage such as cowpeas, velvet beans, sun hemp, sorghum among other legumes throughout the year and supply forage to livestock farmers especially during the dry season when natural grazing feed is a primary concern," he says.

Mr. Nkakila says good quality seed is very important for sustained agricultural production thereby

making community seed bank system very strong.

Forage, especially legumes, contribute to the economic and environmental sustainability of smallholder farming systems.

"Improved forage production - although it would compete for land with food crop production - can make a significant contribution to narrowing the seasonal livestock feed gap. Facilitating soil conservation and generating income," echoed Mr. Nkakila.

Mr. Nkakila as further called government through E-SLIP to speed up the purchase of forage seeds from forage growers by linking them to the markets.

With the support from E-SLIP, farmers are expected to benefit on availability and improved quality forage legume seeds which is said to be scarce.

Meanwhile Chilanga Livestock Assistant, Sharon Munsanje, said the seed multiplication programme under E-SLIP has not yet reached expected levels adding that farmers should be sensitised on the benefits of seed production.

Forage Seed Growers in Kasama reaping the rewards

By Natasha Mhango

Engaging small holder farmers as seed growers is a common avenue that is used to make quality seed accessible and affordable to the farming community. What continues to be novel to smallholder farmers is the various kind of seed that is being promoted for the agriculture and livestock sectors to continue to grow.

Forage seed is one type of seed that smallholder farmers are taking an interest in. Firstly this because of the much needed nutritive supplement that can enhance livestock nutrition during the dry seasons of the year. Secondly, forage seed production is also proving to provide attractive financial returns to farmers.

Through the Enhanced Smallholder Livestock Investment Program (E-SLIP), the Ministry of Fisheries and Livestock is using seed growers to boost the production and accessibility of pasture and forage seed to improve and increase livestock productivity. Some smallholder farmers attest to reaping increased income from this seed which is not yet readily available in Zambia and therefore is pegged at a lucrative price.

The Northern Province is among the few provinces in Zambia which enjoys a longer rainfall season than the rest of the country. Consequently, the Province has been recording gradually increased success in pasture and forage seed production. In Kasama, E-SLIP has engaged three farmers as pasture and forage seed growers.

Lavender Musonda is a female farmer who unlike most women in her area, voluntarily participated in E-SLIP facilitated trainings to learn how to become a pasture and forage seed grower.

"Some of our neighboring farmers laughed at us at first, saying we were investing our time and energy in growing nothing but grass," she chuckled.

The pessimism expressed by her neighbors made Lavender insecure and as a result, she was only willing to cultivate 3 lima of land during her first attempt.

"But this year, I have cultivated two and half hectares of red sun hemp and three hectares of velvet beans," Musonda said.

This because through this seed, she is pleased with the increasing income she is generating for her household. She added that she has observed that she has been reaping more economic benefits from forage seed production than what she gets from her production of maize.

Musonda disclosed that her forage seed harvest from the 2019/2020 farming season, gave her slightly over K15,000 which encouraged her to continue expanding her area of cultivation.

Tuesday Shula - E-SLIP's second seed grower - explained that one reason for the increasing household income

stems from the fact that seed growers are contracted to sell 90 percent of their harvest back to E-SLIP who he said were offering attractive prices.

"Last year, they bought my velvet beans at K33 per kilogram, so from my 50kg I made K1650; and they bought my red sun hemp at K40 per 0.9g and dolichos lablab at K29 per kilogram," Shula disclosed.

Both Musonda and Shula are subsistence small livestock farmers. They keep chickens and a few goats and through their production of forage seed, they are learning how to utilize this seed to improve their animals' nutrition.

"When I start to rear livestock on a larger scale, I know I won't have many problems with finding food for them," Shula said.

Both Musonda and Shula have already received forage seed for the 2021/2022 farming season and anticipate another good harvest next year.

As the government continues to make aggressive strides towards increasing livestock productivity, forage seed growers like Musonda and Shula are playing a significant role in contributing to the accessibility and, eventually, the affordability of forage seed in their community.



Forage seed growers in Kasama(Northern province) having their crop inspected

CABINET assents to creation of rangeland unit

By Natasha Mhango

The livestock sub-sector has been a key priority in the government's efforts to make agriculture the driver of economic growth. The Ministry of Fisheries and Livestock, through its Enhanced Smallholder Livestock Investment Program (E-SLIP), has been implementing activities that are aimed at establishing market-oriented livestock systems which will in turn improve livestock production and productivity.

One key component under E-SLIP has been facilitating activities tailored to enhance sustainable forage and; forage seed production and utilization. Under this activity, E-SLIP has been promoting rangeland management in a bid to improve communal grazing areas for smallholder rural farmers.

Director for Livestock Development in the Ministry of Fisheries and Livestock, Chibwe Kaoma, explained that as a result of interventions of E-SLIP, among other things, the Ministry became more aware of the need for a unit for pasture and rangeland management.

"One of the main activities [E-SLIP] has been undertaking is the stocking and restocking of livestock in the rural provinces of Zambia. Some of the animals which are being stocked and restocked include goats and cattle. We are aware that these two livestock species rely on the rangeland for their nutrition...As we are...stocking and restocking these livestock we have, through the Project, encountered a number of challenges which have necessitated



Some members of Mushili Westland Rangeland Committee inspecting some of their legume forage

for us to request for the creation of the department of pasture and rangeland," Dr. Kaoma said.

The Unit will sit under the Department of Livestock Development and appointment of staff who will serve in that unit is currently underway.

Dr. Kaoma explained that pressing challenges such as inadequate institutional structures to manage the rangelands coupled with poor legal control of rangelands; and issues of climate change - among other things - also highlighted the need for a unit to be dedicated to improving rangeland management and closing the gaps that have been caused by those pressing challenges. Through E-SLIP, the Ministry has already started addressing these challenges by identifying rangelands that are used for animal grazing in every province and defining their boundaries. This has been

proceeded by the establishment of rangeland committees who will work with the newly established pasture and rangeland unit in improving the identified rangelands. "We have already trained these committees in rangeland production and productivity...Another thing we are doing... is creating nurseries near to these rangelands which will provide the seed for over sowing of these rangelands because from our analysis we've found that the nutritive value of these rangelands is quite low, so we're introducing perennial legumes which will improve the these rangelands," Dr. Kaoma added.

The Ministry, through E-SLIP, first begun over sowing of rangelands in Masaiti District in the Copperbelt Province. The exercise started in 2019.

Mushili Westland Rangeland Committee is the group of



Bombwe Community Rangeland in Katete District of Eastern Province is another site where E-SLIP has facilitated the over sowing of rangelands

community members in Masaiti who came together in to take the lead in revamping their communal grazing areas as well as local woodland.

Chairperson for the Rangeland Committee - Jackson Mulenga - explained that the formation of the committee was supported by the community members who were concerned with visible degradation of the environment as a result of over grazing by livestock and deforestation by human beings.

"What motivated the members of this group to form this committee was the poor growth of our livestock as a result of under nutrition," Mulenga added.

As a result, farmers in and around the Westland rangeland are willing to take time for them to be trained in pasture and forage production and then get empowered with seed to commence the over sowing of their rangeland.

Forage Development Specialist for E-SLIP, Bwalya Nkole, said that nurseries had been established to enhance the sustainability of the

over sowing exercise.

"Right now, the biggest challenge we have is unavailability of forage seed. So one of the strategies we came up with was to establish nurseries in each of the range lands areas so that when the forage seed is established in the nurseries it can be re-sown back into the rangelands," Ms. Nkole said.

She highlighted that community groups like Mushili Westland are being supported with legumes, perennial grasses, shrubs and plants for their nurseries.

Members of the Mushili Westland community have understood that rangeland management involves the harmonious use of natural resources to meet human desires and goals. As such they now intend on sensitizing other community members to buy into the need to actively participate in the over sowing exercise and rangeland management.

Committees like this one, are serving as rangeland management focal points for the Ministry and will remain key stakeholders as the

newly established pasture and rangeland unit begins to take shape. Revamping the rangelands is a long term exercise which is further justification for the relevance of the Rangeland Unit which will solely be committed to improving existing rangelands around the country.

Through E-SLIP, the Ministry targeted to reinforce 100 000 hectares of rangeland within 10 provinces which will improve the communal use of resources such as open grazing of livestock.

"When livestock are managed to graze properly in the rangelands, it contributes to plant regeneration and plant growth while improving animal nutrition and performance. This ultimately leads to improved pasture production in the rangelands," Ms. Nkole added.

Livestock productivity is reliant on nutrition. Hence it is expected that the newly approved unit will allow the country to see improvements in the quality and quantity of livestock.

Double profits in Forage Production

By Prisca Kabwe



Quality forage seed can significantly improve the quality of livestock being reared

Livestock rearing is one of the leading farming activities practiced by rural communities in Zambia. In recent years, Government has increased efforts to encourage farmers to diversify agricultural livelihoods to increase household incomes. These efforts are steadily yielding results.

The Ministry of Livestock and Fisheries is implementing the Enhanced Smallholder Investment Program (E-SLIP) to uplift the lives of smallholder rural farmers through sustainable livestock production system which among others promote forage seed production.

A 43-year-old Jethro Sianyinyite of Katapazi Veterinary Camp in Manyemunyemu Village is the only forage seed grower in Kazungula District at the moment. He was trained in forage seed production by Seed Control and Certification Institute (SCCI) in 2018.

Sianyinyite realized that forage seed production is a lucrative business and he is proving to be a reliable source for velvet bean seed in the district.

"They told me I was the second largest producer of velvet beans seed in the 2019/2020 farming season among the 70 forage seed growers trained from all the 10 provinces under the sponsorship of E-SLIP since then,

forage production has become my passion", said Sianyinyite.

He was given 20kg of velvet beans seed for free by the E-SLIP that he planted on three limas where he harvested 614 KG of seed which was certified by SCCI.

"The good part is that market for forage seed is readily available, I sold 429.8 Kg to E-SLIP at K33 per Kg and raised K14,000. I also sold some seed cheaply to farmers in my area at K10 per kg so that I encourage my colleagues to grow forage," he said.

From the sale of velvet beans, Sianyinyite realized that forage seed production is a lucrative business and is proving to be a reliable source for velvet bean seed in the district.

He managed to buy five cattle of which two of them are dairy animals, increasing the number to 17 animals in total from the 12 he previously owned.

He explained that before he started growing forage, he faced some challenges in managing the livestock.

"My animals used to die and whenever veterinary officers did postmortem, I was ever told that my animals lacked vitamins due to poor and inadequate feed from the natural grass which could dry up in the dry season. Also calving intervals were

usually long and my milk yields from my two dairy animals by then were very poor," he laments.

Sianyinyite who has now five dairy animals said ever since he started feeding his animals with nutritive feed, his animal's body conditions have improved there is a resultant improvement in calving rate and milk production.

"I used to collect 8 litres per day from one cow but now I get 15 litres from each cow every day, I supply over 50 litres of milk at K5 per litre to Zimba Milk Collection Center every day ultimately receiving a minimum of K7000.00 at the end of the month. I am able to support my five children and wife from this income," he explained.

Mr. Sianyinyite said forage is a high value crop which gives high returns on a small portion of land and is labor intensive as compared to maize production.

He further stated that grain legumes like velvet beans and cowpeas improve soil fertility by fixing nitrogen in the soil.

"In the last season, I planted maize in the field which was previously used for velvet beans and did not apply basal dressing fertilizer. This reduced the costs as I only applying top dressing, but the maize crop performed well," he explained.

Mr. Sianyinyite said even when the E-SLIP comes to an end, he would still continue with forage production because he has been equipped with knowledge and equipment needed to run the business.

"The demand for forage is huge and so my plan is to increase the hectareage to five - 10 hectares of forage seed so that I supply to farmers in other districts in Southern Province," he explained.

Meanwhile, Kazungula district



Velvet bean is among various forage seed that is being supplied through local seed growers



Jethro Sianinyite showcasing velvet beans harvested this year, in the picture a scale and Sealing machine given to him by ESLIP for his forage seed production business.



Livestock Technician Hastings Mweete who is coordinating the ESLIP component of forage production said the district has distributed forage seed to 559 beneficiary farmers and three cooperatives under the E-SLIP.

Mr. Mweete said the project supplied various forage seed including forage sorghum, sugar graze, sun hemp, pigeon peas, cowpeas, Rhodes grass and velvet beans which is being supplied through a local seed grower.

He revealed that some farmers used to resist forage production especially those who live near the river because they felt their animals can graze even during dry season.

“The challenge was some farmers opted to eat some seed, only sorghum forage was spared.” Mr. Mweete complained

Mr. Mweete said the Ministry of Livestock and Fisheries in the district continued sensitizing all livestock farmers to grow forage for their animals to have improve body condition and fetch good prices on the market.

He advised farmers to grow both legumes and grasses as fodder for their animals to have a balanced diet.



Jethro Sianinyite showcasing velvet beans harvested this year

Enhancing data-driven agriculture through Kobo Collect

By Natasha Mhango

Data driven agriculture is a key avenue to improve decision-making, planning and policy formulation in the farming sector. As the use of mobile technology is gradually increasing and improving in rural households in Zambia, stakeholders in the agriculture sector are comfortable with digitalizing the collection of data from rural farming households. This data is needed to create agriculture programmes that are well-tailored to farmers' needs.

Digitalization of the collection of data can also enhance quicker problem-solving and feedback from the perspective of the farmers, while for stakeholders such as project implementors, researchers and extension service providers, such technology can aid in forecasting of possible events and outcomes.

The Enhanced Smallholder Livestock Investment Program (E-SLIP) has played a role in contributing towards the digitalization of data collection from rural farming households. Through an application called Kobo Collect, E-SLIP facilitated the purchase of mobile phones equipped with the app which were distributed to extension service providers in the Ministry of Livestock and Fisheries.

Monitoring and Evaluation Manager for E-SLIP, Miyanda Hakantu, explained that Kobo Collect is simply a tool that extension service workers were able to use to collect data from farmers real time.

"In the previous systems, they [extension service workers] would collect the data using the hardcopies and then they would have to pass it on through the ladders - through the



E-SLIP facilitated the purchase of 600 mobile phones that are being used by extension services officers

Ministerial structures - so that means it would start from the camp, it goes to the district from the district to the Province and then it would come to headquarters which could also be E-SLIP in this particular case. This particular process showed delays and as a result, the compilation of reports became ...a challenge," Mr. Hakantu said.

He added that it was for that reason that Kobo collect was adopted and the flow of data has significantly improved.

He disclosed that E-SLIP facilitated the purchase of 600 mobile phones and are being used by extension services officers in different districts around the country.

Felistus Mudenda, a Veterinary Assistant in Mufulira district is among the 600 extension service officers who have been using Kobo Collect. For her as a frontline user of the app, she attested to the fact that the sharing of data had been made easier.

"...now it is easier to get hold of information of a specific farm because if you've forgotten what really transpired on that farm you can go on the Kobo platform and it is easier to track information [and] in a case [an officer] is transferred, the person who comes next will be able to access the kind of activities that were happening on a specific farm," Ms. Mudenda said.

The data being collected included information on the kind and variety of seed planted, how much was harvested and even the number and location of animal vaccinations conducted in a particular agricultural or veterinary camp.

This data will significantly improve the efficiency and accuracy of reporting from the districts and provinces.

FREQUENTLY ASKED QUESTIONS (FAQs) ABOUT E-SLIP

PROGRAMME COMPONENT	Frequently Asked Question	Answer	Contact Number(TEXT OR WHATSAPP ONLY)
Livestock Stocking & Restocking	1. How can I get livestock from the stocking and restocking component?	A farmer can show interest through the Ministry of Livestock & Fisheries District office and must meet the following criteria to be eligible: <ul style="list-style-type: none"> Farmer must belong to a farmer group or cooperatives Must be ready to be trained and contribute to the animal health fund Must be ready to construct proper livestock housing Must be ready to pass on the first offspring of the livestock to new beneficiaries 	Livestock Restocking Officer 0979 - 314135
	2. What kind of livestock could I get through the stocking and restocking exercise?	E-SLIP empowers farmers with either: goats, chickens, pigs, rabbits and cattle.	
	3. What happens if I fail to pass on the first offspring?	If a farmer fails to pass on the first offspring to a new beneficiary, the initial livestock will be revoked.	
FORAGE SEED AND FORAGE PRODUCTION	1. How can I become forage farmer?	A farmer can visit the nearest Ministry of Livestock and Fisheries District office and must meet the following criteria to be considered eligible: <ul style="list-style-type: none"> A farmer must have land where (s)he farms and must dedicate at least a Lima of that land to the cultivation of forage Must be ready to be trained and attend regular follow-up meetings 	Forage Development Specialist 0966-219566
	2. How can I access forage seed?	An interested farmer must visit their nearest Ministry of Livestock and Fisheries district office to register	
	3. Do I need to pay for the seed?	No there is no fee charged. A farmer must demonstrate the availability of land to cultivate on as well as availability of labour	
CONTAGIOUS BOVINE PLEUROPNEUMONIA CONTROL	1. Do I need to pay for CBPP vaccination under the Animal Disease Unit	CBPP on of the diseases that are classified as Diseases of National Economic Importance. Diseases in this category are treated and controlled at the full cost by the government and hence farmers are NOT charged for CBPP vaccinations	CBPP Diagnostician 0966-925189
EAST COAST FEVER CONTROL	1. Do I need to pay for East Coast Fever(ECF) under the Animal Disease Unit	ECF falls under a category of disease classified as Management Diseases E-SLIP intervenes in the control of East Coast Fever	ECF Diagnostician 0979-578689

MEET THE MINISTER OF LIVESTOCK AND FISHERIES

By Natasha Mhango

Having been appointed as Minister of Livestock and Fisheries in September this year, Hon. Makozo Chikote is committed to improving the livestock-sub sector.

"My vision for the Ministry is to...change the mindset of our youths and women to realize that this is a job creation Ministry," Hon Chikote said.

He reiterates that farming is not an activity that people should continually wait to participate in after they are retired and tired.

"Agriculture is a commercial activity that can add economic value to the growth of our GDP," the Minister said.

Having held various leadership positions from the days of his youth, Hon Chikote believes that a leader must be a team player who can articulate his vision well, so that their team can buy in to his vision.

Hon. Makozo Chikote completed his secondary school education in 1992 at Kaoma Secondary School. Upon completion, he worked as a teacher before he proceeded to the University of Southern Africa (UNISA) where he earned his Bachelors' degree in Public Administration.

Before becoming Luampa Member of Parliament, Hon. Chikote worked as Manager for Luampa Agriculture Cooperative – evidence of his genuine interest in the agriculture sector.

"I want people to see my Ministry as a sub-sector that can compete with the mines...this sector has to start competing with the mines because it is capable," the Minister said.

He expressed concern at the continued livestock disease outbreaks which have inhibited the livestock sector's contribution to export earnings.

"Zambia is not doing well on the international market because we are known for disease prevalence...so before the end of these five years, Zambia should be able to compete with other countries...We must be exporters, we must be producing products locally, we must be having our own plants to be making vaccines," Hon. Chikote.

In this view the Minister implored all staff in the Ministry to buy into his vision.

"This time is not business as usual. I've told my staff that...they must bring in their skills to understand what it is that I want to achieve," he said.

He acknowledged that the Ministry he is



Honorable Makozo Chikote was appointed Livestock and Fisheries Minister in September 2021

now heading also plays a critical role in enhancing the food nutrition sector of the country.

Hon Chikote is the Member of Parliament for Luampa Constituency in Western Province since 2016. His first show of political leadership was when he served as a Ward Councilor in Luampa.

"I also did diplomatic training in 2006. In 2007 I was given an opportunity to serve as a diplomat in Kenya and South Africa where I spent most of my working years,"

In his free time, Hon. Chikote enjoys

listening to music – particularly gospel music. Like most Zambians, he also enjoys watching soccer though he emphasized that he only watches local teams.

He also enjoys learning from other people and said that he makes time to socialize as well.

Hon. Makozo Chikote was appointed as Minister of Livestock and Fisheries in September 2021 and he is wished well on his journey with the farming community.



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