

## New life on the farm

Since the start of MMPA's Artificial Breeding program in early 2011 and the supply of liquid nitrogen made available with financial support from Flanders International Corporation Agency (FICA), we have imported 15000 doses of semen with the highest genetic value from Progeny Proven Bulls available to us from World Wide Sires in the US, that has been distributed through the 3 regional associations, to MBG's in the country. Many Holstein and Jersey calves have been born as a result of this program. From our statistics it has also been noted that several calves died during, or shortly after being born.

In this news letter we will give you some important tips to prevent these death's and help you to make the best of raising these valuable calves



The birth of a calf is one of the highlights on a dairy farm. It is also very important for the survival of the farm as a new calf will be the next generation of a dairy cow to replace older cows, to grow the number of dairy cows on your farm, or to sell the calf as it grows bigger to another farmer. All of these will increase your income from your business.

For these reasons it is very important to take very good care of the new borne calf and make sure it gets the best of care to get it off to a good start. Reports from the MBG's collected by MMPA indicate that too many calves die, either at birth or in the first 2 month after birth.

In this news letter we will discuss some of the things you can do to make sure you that your new borne calf gets a good chance to survive in her early life.

# Care of the mother before it calves down.

To have a healthy calf born, the farmer needs to pay special attention to the mother before she calves down. For this reason the farmer should stop milking the pregnant cow 6 -8 weeks before calving to give her a chance to build up her condition [ and that from the un borne calf] so she is ready to start a new lactation en can produce lots of milk. Make sure there is no mastitis in the udder and treat the cow with **Dry cow** penicillin in all 4 quarters on the day of drying her off, to heal all possible infections in the udder.

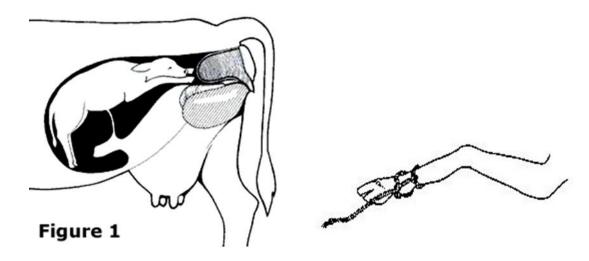
Do the needed repair on the khola, so the cow has a clean and dry area when she is going into labour. Also build a special place where the calf can be separated from the mother, in a dry and comfortable calf pen. Feed the cow well before she calves down.

# The calving process

Know the expected calving date of your cow. This will be 9 month to 9month plus 10 days after her last breeding day. **Make sure the khola is clean and dry with a comfortable place for the cow to lie down.** Before the actual labour begins, farmers will see the changes in the cow such as relaxing of the vulva and the relaxing of the muscle beside the tail of the cow. When this muscle is completely relaxed labour will start and the cow will become restless have her tail up in the air and start showing clear mucus from her vulva and have regular contractions where she is trying to push.

# It is absolutely necessary for the farmer to be there when the calving process is underway to assist the cow when the calf is coming.

The first to show is the water sac that has a yellowish thick fluid in it. This will break open through normal labour of the cow. Shortly after, another water sac will appear with the feet and nose of the calf. If the birthing process takes too long [More than 2 hours] with the feet showing it is time for the farmer to help the cow with the birthing. First determine that the calf is in the proper position



Calf in normal birth position

proper pull rope position on legs

One rope on each leg

Assisting the birth can be done by breaking the sac if it is not already broken to drain the fluid and slipping a rope around each of the legs and start pulling to help the calf along. **Only pull when the cow is pushing and keep the tension up between contractions.** 

After the head is completely out continues pulling can be applied till the calf is completely out.

When the calf is on the ground, lift it up by the rear legs and hold it upside down for a minute or two to drain the birth fluid from the lungs. If the calf is too heavy to lift the farmer can also pull it over the back of the cow, if she is still lying down, with the head of the calf downwards.

Make sure breathing of the calf start immediately by clearing the nostrils and massaging the chest. It is also possible to tickle the calf with a piece of hay inside the nostril to make it sneeze.

When the calf start breathing, pull it in front of the cow so she can clean it off. The licking of the calf by the mother is also a great massage to stimulate the calf's breathing.

Make sure that you, after the calf is on the ground, disinfect the navel or umbilical cord with a 2% lodine or a Dettol solution.

## The first milk

The first milk , also called colostrum, from the mother is absolutely necessary for the calve to survive. **The first colostrum feeding needs to take place within 2 hours of birth. The earlier the better.** Some calves will be able to drink after 10 or 15 minutes after birth! A calf will not survive without the first milk from her mother. It is full of antibodies to prevent diseases in the new borne baby calf. If the calf is not nursing right away, the farmer should milk the colostrum from the cow and feed the calf from a bowl or small bucket.

A calf can easily be trained to drink from a bucket. Simply back the calf in a corner, stand beside or astride its neck and place to moistened [with milk] fingers into its mouth. As the calf starts to suck, gently lower its mouth into a bucket of warm milk making sure that its nostrils stay clear of the milk. This may have to be repeated several times before the calf will drink without help.

# The calf should never stay longer with the mother than 24 hours

After 24 hours the calf should be separated from the mother in its own dry and clean stall. The cow should now be milked completely empty 2 or 3 times a day and enough milk should be separated from the total milk production to feed the calf [ from a bucket] **A healthy calf will need at least 4 liters of mothers milk every day [**and additional water after one week!]

The first 3 days of milking after calving cannot be taken to the MBG. [but it can be used by the family and it is very rich and healthy] simply heat it up to about 60 degrees C with continues stirring and it will turn to a creamy porridge. Take it of the fire, add some sugar and you have a delicious pap.

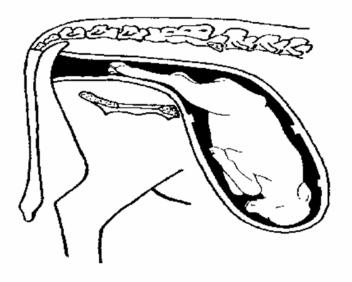
Many farmers in Malawi use other methods of feeding the calf such as leaving one teat not milked. This is a very dangerous method as it can cause the cow to develop mastitis. Leaving the calf with the mother longer than 24 hours has the same problem. Often the calf cannot drink the cow empty because there is too much milk. This can also cause mastitis but it will also cause the cow to loose milk producing cells and **lower the production dramatically.** Milking the cow from day one after the birth stimulates the cow to produce more milk all through her lactation and will provide you with more income from your business

# **Calving difficulties**

Although most cows have a normal delivery, sometimes there are complications. The most common ones are when only one leg comes out and the other is folded back. In this case a person will have to go in the birth canal to push the calf back from the birth canal and bring the leg up first before the birth can proceed. Similar if both legs are folded back and only the head is visible .In such cases it is best to get help from an experienced vet officer [without delay] or get help from a more experienced farmer i.e farmers that have been to the Katete Training school and have witnessed more calving's

Sometimes a calf comes backwards. That means the rear legs come first. This is visible as the hooves come upside down. In this case the birth can proceed with pull help, but need to done fast as the calf otherwise could drown in the birth fluid inside the cow

.What is important that you get help fast in these case as you could lose the calf and the cow



#### CALF IN BACKWARDS POSITION

#### Further care of the calf

Clean water should be made available to the calf after one week. Between one and 2 weeks this could be added to the milk in the bucket and fed mixed. After 2 weeks the calf needs a regular supply of water all day. This is also the time that the first solid feed should be made available to the calf. This could be hay, madea mixed with some soya bean meal or pigeon peas meal and fresh grass.

After 3 month the milk supplied to the calf can be gradually diminished and replaced by solid feed for further development of the heifer.

# The development of a new borne calf is the future of your dairy business .Do not take shortcuts on that and keep your business growing!!!

#### **Repair of Kholas**

Upon inspection of kholas in more than 10 MBGs in CREMPA and MDFA, it was sad to see the poor state of kholas. Many kholas are not thatched and the house structures are simply a skeleton of what was once a good khola. This is a discouragement to MMPA and the donor community who have a keen interest to assist the dairy farmers increase milk production and maximise on profits. The good khola demonstrates the quality of a good farmer, people will always measure you by how you keep your animals in a khola.

Farmers are again reminded to thatch their kholas before the start of the rainy seaon, especially now when thatching grass is still available, and that you can afford to buy a plastic sheeting to waterproof the roof of the kholas

#### Repayment of loans to regional association

Non repayment of loans to your regional associations is affecting the operations of the regional associations and in turn affecting the revolving fund of MMPA. By selling affordable semen, veterinarian drugs and inputs the idea was that we would generate more funds and create a revolving fund to help run the regional associations and MMPA. Unfortunately the dream is slowly being crippled by some MBGs who do not repay their loans to regional associations and the regional association fail to repay the funds to MMPA. We want to encourage the MBGs to repay their loans so the regional in order to rekindle the dream of self sustained regional milk associations and MMPA by 2016.

## **Milk Prices**

We all know, the current price of milk is K100.00 per liter being offered by the milk processor. We are still talking with the processors to increase the price as this current price is far below the cost of 1 litre of milk at farm gate. The high cost of feed and vet drugs is eroding the effort a farmer is making to make dairy farming a profitable business

## **Honest Numbers**

MMPA gets often asked by Government, Donors or NGO's that want to set up projects and programs for the Dairy Industry, to give numbers and figures that determine what kind of Programs are needed. MMPA itself too, needs that information to set up new activities for you, the members.

Up to Date numbers are hard to find in Malawi and yet they are so important. We have been in embarrassing situations as we were given numbers about the numbers of cows in MBG's, or about how many liters of milk were produced daily, how many calves were born the last year, as very often they were not correct. An MBG applying for a cooling tank would give us daily production figures that were much higher than the actual production in that group. This would than lead disappointed Processors, much longer repayment periods for the cost of the tank or, in some cases, total inability of making payments at all. " My cow can give 25 liters per day, so I can easily pay for a cow loan of MK 200.000" But we all know that our cows in Malawi don't give 25 liters per day **all year round**. The average production per cow in our MBG's is 6- 8 liters per day. So payments from this example will fall far short of reality.

NGO's sometimes also report higher production to prove to their supporters they are doing a good job. Even some Governments Departments are given the wrong numbers by their report writers. This all together makes it very difficult which numbers to believe, or to use in a Proposal or to set up a new program. MMPA is collecting their own numbers from credible sources,[ for instance from payment records of the Processors] where ever we can, but we also have to rely on the Farmers to keep honest daily milk production figures before milk is taken to a cooling tank at the MBG or sold to milk vendor.

In order to know what goes on in our Industry, we all have to have the numbers. Let's all make sure we keep farm records all year round and ensure they are HONEST NUMBERS.

## **Katete Practical Training Center**

Since the start of the school in July, 2010, the training center with funding from FICA has so far trained 368 new farmers, on a 2 week hands on course at the farm. 47 female farmers and 22 male farmers were trained in 2010, 80 female farmers and 53 males farmers were trained in 2011, 58 female farmers and 48 male farmers were trained in 2012. From February, 2013 to end of July 2013, 60 new farmers have gone through the training at Katete Pratical Training Centre.

We are still targeting the new farmers that are getting a pass on animal in the near future. This so far evenly divided between CREMPA and MDFA and also evenly divided in men and women. The feedback from the student is good and we have been encouraged by care to detail and hard work the graduates from Katete Practical Training Centre are demonstrating in their home environment.

# Start preparing your land for pasture and repair your kholas now!