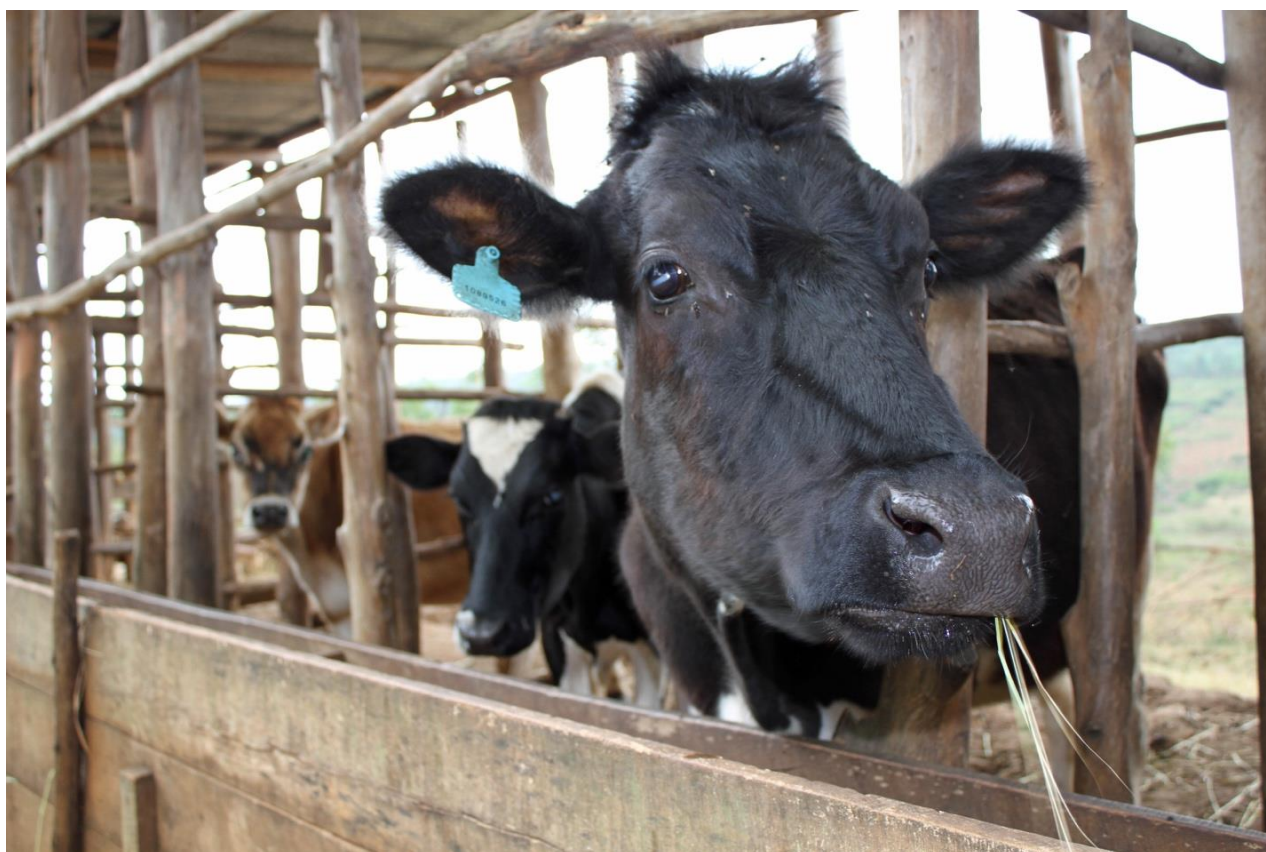


Dairy cow reproduction and pregnancy management/ Imyororokere y'inika zitanga umukamo n'imicungire y'izihaka

Pascal Nyabinwa, Maximillian Manzi, Elyse Amahoro, Diane Uwumukiza, Marie Claire Ingabire, and Felicien Shumbusho
Rwanda Agriculture and Animal Resources Development Board (RAB)



December 2025

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Suggested citation: Pascal Nyabinwa, P., Manzi, M., Amahoro, E., Uwumukiza, D., Ingabire, M.C. and Shumbusho, F. 2025. *Dairy cow reproduction and pregnancy management/Imyorokere y'inka zitanga umukamo n'imicungire y'izihaka*. Nairobi, Kenya: International Livestock Research Institute (ILRI).

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Disclaimers: This publication has been prepared as an output of the Africa Asia Dairy Genetic Gains (AADGG) project implemented in Rwanda. The information contained in this dissemination material is only for training or educational purposes. Any views and opinions expressed in this publication are those of the author(s) and are not necessarily representative of or endorsed by ILRI.

Acknowledgements: This work is part of the ILRI AADGG project activities being implemented by ILRI. We would like to thank the Gates Foundation for supporting this research through their investment through the CGIAR Trust Fund. Gebregziabher Gebreyohanes from the ILRI AADGG project supported the team in translating, editing and formatting the manual. CGIAR is a global research partnership for a food-secure future dedicated to transforming food, land, and water systems in a climate crisis.

About AADGG: the AADGG project is a multi-country project aimed at improving smallholder farmers access to improved genetics through establishing a sustainable breeding program that employs digital and genomic technologies. The AADGG focus countries are Rwanda, Kenya, Ethiopia, Tanzania and Uganda.

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Acknowledgements

The authors would like to gratefully acknowledge the financial support provided by ILRI through the Africa Asia Dairy Genetic Gains (AADGG) project to the Rwanda Agriculture and Animal Resources Development Board (RAB). The development of this training extension material has been informed by various training manuals, for which we sincerely express our gratitude for the provision of the guidelines. This material is intended solely for training and other non-commercial purposes.

Gushimira

Itsinda ry'abanditsi b'iyi mfasha nyigisho, barashimira byimazeyo inkunga ILRI yateye ikigo gishinzwe iterambere ry'ubuhinzi n'ubworozi RAB binyuze mu mushinga AADGG. Gutegura iyi mfashanyigisho hifashishijwe izindi nyishi, tukaba dushima umurongo zatanze. Iyi mfasha nyigisho igamije gukoreshwa mu gutanga amahugurwa gusa

Dairy cow reproduction and pregnancy management	Imyororokere y'inka zitanga umukamo n'imicungire y'izihaka
<p>Introduction</p> <p>In Rwanda, dairy farming plays a central role in rural livelihoods and national nutrition security. National efforts to promote dairy farming alongside investments in milk collection centers (MCCs) are contributing to the fast growth of the dairy industry. However, productivity per cow remains relatively low, often due to poor reproductive efficiency and inadequate pregnancy management. Effective reproduction and pregnancy management are crucial for ensuring that cows calve regularly, produce milk consistently, and maintain good health. This includes timely heat detection, proper breeding, good nutrition before and during pregnancy, and careful management around calving. Strengthening these practices in Rwanda's dairy herds can reduce infertility, minimize calving difficulties, and improve both milk yield and farmer income.</p>	<p>Intangiriro</p> <p>Mu Rwanda, ubworozi bw'inka zitanga umukamo bufite uruhare rukomeye mu mibereho myiza y'abaturage no mu gutanga ibiribwa.</p> <p>Gahunda z'igihugu mu guteza imbere ubworozi bw'inka zitanga umukamo hamwe no gushora imari mu makusanyirizo y'amata birimo gutuma urwego rw'inka zitanga umukamo rutera imbere vuba.</p> <p>Ariko, umukamo inka itanga uracyari muke, kenshi biterwa n'imyororokere y'inka itari myiza ndetse n'imicungire idahagije y'inka zihaka.</p> <p>Ibi bikorwa byose ni ingenzi kugirango inka zibyarire ku gihe, zitange amata ahagije buri gihe, kandi zibashe kugira ubuzima bwiza.</p> <p>Ibi birimo kumenya ibimenyetso by'inka yarinze, guteza intanga inka ku buryo bukwiriye, kugaburira neza inka mbere no mugihe ihaka, hamwe no kwita ku nka ziri hafi yo kubyara.</p> <p>Kongera imbaraga muri ibi bikorwa mu nka zitanga umukamo zo mu Rwanda bishobora kugabanya umubare w'inka zidafata (zimagura), ibibazo inka ishobora kugira mu gihe cyo kubyara, ndetse no kongera umukamo n'inyungu zikomoka ku bworozi.</p>
<p>Dairy cattle breed</p> <p>Friesian</p>  <p>It has a black and white color patches sometimes red and white</p> <ul style="list-style-type: none"> Friesian is well-known for producing more milk than other dairy breeds, and it also provides good-quality beef. 	<p>Ubwoko bw'inka zitanga umukamo</p> <p>Furizone</p>  <p>Igira ibara ry'ikibamba (igitare n'umukara) cyangwa se ibara ry'umusengo</p> <ul style="list-style-type: none"> Firizoni izwi cyane ku mukamo utubutse kurusha izindi nka zitanga umukamo kandi ikagira n'inyama nziza.

- The milk is considered good quality because it contains a relatively low fat content (3.2% fat)
- It can be culled from the herd after giving birth to at least 8 calves.
- They are known for quickly adapting to new climates in the areas where they are taken for farming.
- They are highly susceptible to diseases if not well managed, and hot climates also affect them greatly.
- Origin: The Netherlands (Europe).
- Average milk yield: 4000 liters per year

- Amata yayo ni meza kuko abamo amavuta ku kigero gito (3.2% by'amavuta)
- Ishobora kuvanwa mu bworozi imaze kubyara byibura imbyaro 8
- Zizwiho ku kumenyera vuba ikirere gishya cy'aho zijyanywe kororerwa
- Yibasirwa cyane n'uburwayi igihe idafashwe neza ndetse n'ikirere gishyuha cyane kirayibasira.
- Aho ikomoka: Mu gihugu cy'ubuhorandi (i burayi)
- Ikigereranyo cy'amata ikamwa mu umwaka ni litro 4000



- It originates from the island of Jersey, located in the United Kingdom.
- It is a small cow, gentle in nature, with a light brown or fawn coat, large eyes, black nostrils, and a grayish muzzle.
- Its milk is rich in protein, minerals, and has a high fat content (5.26%).
- Jersey cows live longer compared to other dairy breeds and are more tolerant to diseases.
- The average annual milk yield is 3,000 liters



- Ikomoka mu kirwa cya Jerise, gihereye mu bw'Ubwongereza.
- Ni inka ntoya, yitonda, igira ibara ry'igaju cyangwa se ibihogo, igira amaso manini, n'amazuru yirabura n'umunwa w'igitare.
- Igira amata akungahaye kuri poroteyini, imyunyungugu n'amavuta menshi (5.26%by'amavuta).
- Jerise zibaho igihe kirekire ugereranyije n'izindi nka zumukamo kandi zikihanganira indwara.
- Ikigereranyo cy'amata ikamwa mu mwaka ni litiro 3,000

Brown Swiss



- It is a cattle breed originating from Switzerland.
- It has a dark grayish-brown coat, a gray muzzle, blue eyes, and large ears.

Burawuni Suwisi



- Ni inka ikomoka mu Busuwisi
- Igira ibara ry'isine ryijimye, igira umunwa w'igitare, ikagira amaso y'ubururu n'amatwi manini

- It is reared for both milk and meat production.
- Its milk is of good quality, rich in protein and fat (3.7%).
- The milk is well-suited for cheese production due to its protein and fat content.
- It has good disease resistance.
- The average annual milk yield is 2,270 liters.

Sahiwal



- This breed originated from the hot region of Punjab, located on the border between India and Pakistan.
- It has strong legs and can stand for longer periods compared to other breeds.
- It produces many calves and can remain productive for up to 20 years.
- The average daily milk yield is 10 liters.
- It produces a high volume of milk with a high butterfat content.
- The average annual milk yield is 2000 liters
- It is tolerant to diseases and highly resistant to hot climates.

- Yororwa hagamijwe kubona umusaruro w'amata ndetse n'inyama
- Igira amata meza akungahaye kuri poroteyine n'amavuta (3,7%)
- Amata yayo aberewe gukorwamo foromaje kubera ingano ya poroteyine n'amavuta birimo.
- Yihanganira indwara
- Ikigereranyo cy'amata ikamwa mu mwaka ni litiro 2,270.

Sahiwale



- Iyi nka yakomotse mu karere gashyuha ka Punjab kari ku mupaka w'ubuhinde na Pakisitani
- Ifite amaguru akomeye kandi ishobora guhagarara umwanyamuremure kuruta izindi
- Ibyara inyana nyinshi ku buryo ishobora kumara imyaka 20
-
- Impuzandengo y'umukamo ku munsu ni litiro 10
- Igira amata menshi afite amavuta menshi
- Ikigereranyo cy'amata ikamwa mu mwaka ni litiro 2000.
- Yihanganira indwara hamwe n'ahantu hashyuha cyane

Ankole/indigenous cattle breed



Inyankole/ inka y'in yarwanda



- These cattle are found in Rwanda, Uganda, the Democratic Republic of Congo (DRC), Burundi, and parts of Tanzania.
- They originated from North Africa.
- They have a long head, a short neck, and drooping dwelap.
- They are reared for both milk and meat production.
- Their daily milk yield ranges from 1 to 6 liters, and they generally dry earlier compared to other dairy breeds.
- They can be crossbred with other breeds such as Friesian, Jersey, and others.
- They reach first calving late (up to 5 years) and calves remain dependent on their mothers for an extended suckling period, which delays the resumption of reproduction.

- Izi nka ziboneka mu Rwanda, Uganda, Kongo (DRC), Burundi n'ibice bya Tanzaniya.
- Izi nka zakomotse mu majyaruguru ya Afurika
- Zigira umutwe muremure, ijosi rigufi hamwe n'urwakanakana rutendera
- Yororwa hagamijwe amata n'inyama
- Ikamwa litiro 1 kugeza kuri 6 ku muni kandi igateka kare ugereranyije n'andi moko y'inka zitanga umukamo .
- Ishobora kubangurirwa ku bundi bwoko nka firizoni, jeresi, n'izindi
- Ibyara bwa mbere itinze (kugeza ku myaka 5) kandi inyana imarana na nyina amezi menshi yonka bigatuma itinda kongera kwima

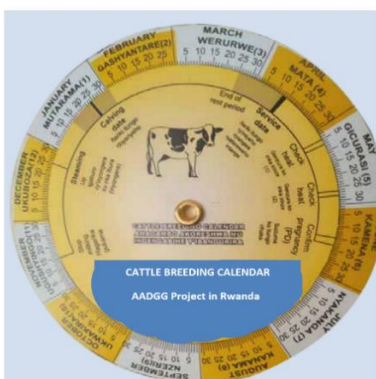
Cow reproduction activity

Cow Reproduction Activity	Time
Age at first breeding	18 months
Gestation period	9 months
Lactation period	10 months
Interval before returning to heat if not pregnant	18 – 24 days
Recommended time to breed after calving	2 – 3 months
Calving interval	12 months
Calf weaning age	3 – 6 months
Recommended culling age (replacement)	After 10 calvings
Age for castrating a bull calf	2 months old

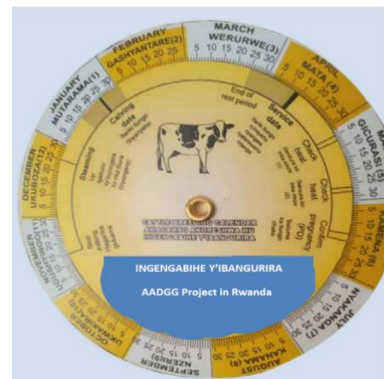
Imyororokere y'inka

Igikorwa cy'imyororokere y'inka	Igihe
Igihe iba ishobora kwima bwa mbere	Amezi 18
Igihe ihaka	Amezi 9
Igihe ikamwa	Amezi 10
Igihe yakongera kurinda igihe itafashe	Iminsi: 18–24
Igihe yabangurirwa nyuma yokubiyara	Amezi: 2–3
Intera hagati y'imbyaro ebyiri	Amezi: 12
Igihe ishobora konsa (gucutsa)	Amezi: 3–6
Igihe wayivana mu bworozi ishaje (Kuvugurura)	Imyaro: 10
Igihe cyo gukona ikimasa	Amezi abiri kavutse

Cattle breeding calendar



Ingengabihe y'ibangurira



Signs of estrus in cattle

Estrus (heat) is the period when a cow or heifer shows signs of being ready to be inseminated or mounted by a bull.

This occurs every 21 days (or between 18 and 24 days).

Failure to detect heat properly leads to unsuccessful insemination, and the cow may not conceive. Therefore, it is very important to detect heat accurately

The signs that a cow is in heat include the following:

- Frequent bellowing, restlessness, and inability to stay calm, as if it is lacking something (such as feed, water, etc.).



- Frequent urination



- Mucus discharge from the vulva



- Attempting to mount other animals & Standing to be mounted



- Red and swollen vulva

Ibimenyetso by'inka yarinze

Kurinda ni igihe imbyeyi cyangwa inyana iba igaragaza ko ishaka guterwa intanga cyangwa kwimywa n'ikimasa.

Ibyo biba buri minsi 21 (cyangwa hagati ya 18 na 24).

Kutamenya ko inka yarinze neza bituma gutera intanga bitagenda neza ndetse inka ntifate. Bityo rero, ni ngombwa kumenya ko inka yarinze neza.

Ibimenyetso by'inka yarinze ni ibi bikurikira:

- Kwabira cyane bijyanye no kubura amahoro cyangwa amahwemo, ntihamwe hamwe nkaho hari icyo yabuze (nk'ubwatsi, amazi.....).



- Kuganga kenshi kandi ubusabusa.





- Kugira ururenda rwereruka rushongonoka ku nda y'amaganga (guta izimwe/umurindo)/



- Inka cyangwa inyana yurira izindi; ibyo ariko si buri gihe cyangwa ntiwabigenderaho keretse iyo ihagaze ikurirwa n'izindi.



 <ul style="list-style-type: none"> Decreased Feed Intake and Milk Yield 	<ul style="list-style-type: none"> Inda y'amaganga iratukura ndetse ikabyimba  <ul style="list-style-type: none"> Kwanga kurya no kugabanya umukamo (iyo usanzwe wandika uko ikamwa, uhita ubibona) 																								
<p>Time for Artificial Insemination</p> <ul style="list-style-type: none"> A cow that shows signs of heat early in the morning should be inseminated in the afternoon. A cow that comes on heat in the evening should be inseminated the following morning. This should be done between 6 and 12 hours after first time of showing signs of heat. 	<p>Igihe inka yarinze itererwa intanga</p> <ul style="list-style-type: none"> Inka yarinze mu gitondo kare iterwa intanga nyuma ya saa sita. Inka yatangiye kurinda nimugoroba iterwa intanga mu gitondo Ibi bikorwa hagati y'amasaha 6 na 12 nyuma yo kubona ibimenyetso bya mbere byo kurinda 																								
<p>Age at first breeding</p> <table border="1" data-bbox="164 949 770 1111"> <thead> <tr> <th>Cattle Breeds</th> <th>Age (Month)</th> <th>Body weight (Kg)</th> </tr> </thead> <tbody> <tr> <td>Local</td> <td>36</td> <td>200-250</td> </tr> <tr> <td>Crossbred</td> <td>22-24</td> <td>250-300</td> </tr> <tr> <td>Pure exotic</td> <td>18-24</td> <td>300-400</td> </tr> </tbody> </table>	Cattle Breeds	Age (Month)	Body weight (Kg)	Local	36	200-250	Crossbred	22-24	250-300	Pure exotic	18-24	300-400	<p>Igihe inka ibangurirwa bwa mbere</p> <table border="1" data-bbox="815 949 1430 1140"> <thead> <tr> <th>Ubwoko bw'inka</th> <th>Igihe (amezi)</th> <th>Ibiro (Kg)</th> </tr> </thead> <tbody> <tr> <td>Inyarwanda</td> <td>36</td> <td>200-250</td> </tr> <tr> <td>Icyimanyi</td> <td>22-24</td> <td>250-300</td> </tr> <tr> <td>Inzungu</td> <td>18-24</td> <td>300-400</td> </tr> </tbody> </table>	Ubwoko bw'inka	Igihe (amezi)	Ibiro (Kg)	Inyarwanda	36	200-250	Icyimanyi	22-24	250-300	Inzungu	18-24	300-400
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<p>Pregnancy diagnostic testing</p> <ul style="list-style-type: none"> If a cow does not show any signs of heat within 18–24 days after artificial insemination, the farmer must closely monitor to confirm the absence of heat signs. When a cow is pregnant, it will not show any heat signs. After three (3) months of suspected pregnancy, the farmer should request a veterinarian to examine the cow to confirm pregnancy. This will help the farmer to manage it properly as a pregnant cow, or, if it is not pregnant, rebreed it without delay. 	<p>Gusuzuma ko inka yafashe nyuma yo guterwa intanga</p> <ul style="list-style-type: none"> Iyo inka itongeye kugaragaza ibimenyetso byo kurinda mu minsi 18-24 nyuma yo guterwa intanga. Kuva ku muni wa 18-24, umworozi agomba gukurikirana neza akareba ko inka ye itagaragaza ibimenyetso byo kurinda. Iyo inka ihaka, nta kimenyetso na kimwe cyo kurinda izagaragaza. Nyuma y'amezi 3 inka yimye, umworozi agomba gusaba Veterineri akamusuzumira ko inka ye yaba yarafashe, kugirango ayifate neza nk'inka ihaka cyangwa yongere kuyibanguriza bidatinze. 																								

<p>Management Practices to Improve Breeding Efficiency</p> <ol style="list-style-type: none"> 1. Keep accurate breeding records of dates of heat, service and parturition. 2. Use records in predicting the dates of heat 3. cow with abnormal discharges should be examined and treated by veterinarian. 4. Call a veterinarian to examine cow not settled after three services. 5. Buy replacements breeds only from healthy herds and diagnose them before putting them in your herd. 6. a cow should give birth in isolation, preferably in a safe calving box ,clean up and disinfect the area once calving is over. 7. Follow a program of disease prevention, diagnosis and vaccination for diseases affecting reproduction like brucellosis. 8. Supply adequate nutrition. 9. Provide suitable shelter management. 	<p>Ibikorwa bigamije kongera ubushobozi bwo kororoka kw'inka</p> <ol style="list-style-type: none"> 1. Bika neza inyandiko zigaragaza'igihe inka yarindiye, igihe yaterewe intanga, n'igihe yabyariye. 2. Koresha izo nyandiko mu kubara igihe inka izongera kurindira 3. Inka zigaragaza ururenda rudasanzwe mu nda y'amaganga zigomba kuvurwa n'umuganga w'amatungo. 4. Hamagara umuganga w'amatungo asuzume inka zidafata nyuma yo guterwa intanga inshuro eshatu. 5. Shakira icyororo cy'inka mu mashyo atagararamo indwara kandi zigomba gusuzumwambere yo kuzishyira mu ishyamba ryawe. 6. Inka igomba kugenerwa ahantu hahariye ho kubyarira kandi hakaba hafite isuku. Na nyuma yo kubyara, aho hantu hagomba gukorerwa isuku 7. Kurikiza gahunda yo kurwanya no gukumira indwara, harimo gusuzuma no gukingira indwara zifata imyorokere, cyane cyane amakore. 8. Kugabura indyo yuzuye. 9. Inka zigomba kuba zororewe mu kiraro cyujuje ibisabwa.
<p>Management of pregnant cows</p> <ul style="list-style-type: none"> • During this period, a pregnant cow requires special attention to ensure successful calving and produces the expected milk yield. • It is important to be careful when providing a balanced diet and medications to a pregnant cow, and to avoid giving drugs that may cause reproductive problems. • Some of these drugs include corticosteroids and certain deworming medications. • It is recommended to consult a veterinarian before administering any medication to pregnant cows 	<p>Kwita ku nka ihaka</p> <ul style="list-style-type: none"> • Muri iki gihe, inka ihaka iba ikeneye kwitabwaho by'umwihariko itegurwa kuzabyara neza no gutanga umukamo ukwiriye • Ni ngombwa kwitwararika mu gihe itungo rihaka rihabwa indyo yuzuye n'umuti, hirindwa gutanga imiti ishobora kuramburuzwa. • Imwe muri icyo miti ni icyo mu bwoko bwa Koritikoyide (corticoide) ndetse n'indi miti imwe nimwe mu yica inzoka zo mu nda. • Ni byiza kubaza umuganga w'amatungo mbere yo gukoresha imiti ku nka zihaka.
<p>Role of farmers during calving</p> <ul style="list-style-type: none"> • Ensure the cow is in a clean, dry, and well-bedded area to reduce the risk of infection during and after birth 	<p>Uruhare rw'umworozi kugira ngo inka ibyare neza</p> <ul style="list-style-type: none"> • Inka igomba kuba ifite isuku, iri ahantu humutse kandi iri mu kiraro kirimo isaso ihagije kugirango hirindwe kwandura indwara mbere na nyuma yo kubyara

<ul style="list-style-type: none"> • To keep drying period (left 60 days for milking before making birth), to provide good health for calf and to prepare good milk production for next milking • During dry period the cow should be treated some disease like mastitis, etc • Assisting During Calving: Its necessary to train the cowboys on how can help cows during calving and labor's signs in order to minimize the death of calves 	<ul style="list-style-type: none"> • Gutekesha inka iminsi 60 mbere yuko ibyara kugirango ibyare umutavu ufite ubuzima bwiza inategure umukamo uhagije nyuma yo kubyara • Mu gihe inka itetse, igomba kuvurwa indwara cyane cyane ifumbi y'amabere • Ni ngombwa kwigisha abashumba uko bafata inka neza ikigaragaza ibimenyetso no mugihe cyo kubyara hagamijwe kugabanya imfu zinyana zivuka.
<p>Parturition stage</p> <p>Parturition is typically divided into three stages, each with specific signs and events. Understanding these stages is crucial for providing the necessary assistance to ensure a smooth and successful delivery. Actually the cow takes 8 hours for calving</p> <p>Stage 1: Preparation of calving: The amniotic sac, often referred to as the "water bag," may appear at the vulva. This indicates that the cervix is fully dilated and the calf is moving into the birth canal</p> <div data-bbox="162 983 707 1131"> </div> <p>Duration: 6 hours</p> <p>Key Events:</p> <p>Uterine Contractions Begin: Mild, unnoticeable contractions start to prepare the uterus for delivery. These contractions help to position the calf correctly.</p> <p>Restlessness: The cow may become restless, frequently getting up and lying down. She may separate herself from the herd and appear uncomfortable.</p> <p>Frequent Urination and Defecation: As the cow's body prepares for birth, she may urinate and defecate more frequently.</p> <p>Swelling of the Vulva: The vulva swells, and a clear, stringy mucus discharge may be observed as the cervix begins to dilate.</p> <p>Water Bag Appears: The amniotic sac, often referred to as the "water bag," may appear at the vulva. This indicates that the cervix is fully dilated and the calf is moving into the birth canal.</p>	<p>Ibyiciro by'ibyara ku nka</p> <p>Igikorwa cyo kubyara kunka kigabanijwemo ibyiciro 3 kandi buri cyiciro gifite ibimenyetso byihariye.</p> <p>Gusobanukirwa neza ibi byiciro ni Ingenzi inka ihabwe ubufasha kandi ibyare neza. Ubusanzwe igikorwa cyo kubyara kunka kimara amasaha umunani</p> <p>Icyiciro 1: Kwitegura kubya: Isuha imeze nk'agafuka kamazi ishobora kugaragara kunda y'amaganga</p> <p>Ibi byerekana ko inkondo y'umura yafungutse neza kandi ko inyana yageze mucyerekezo cyiza cyo kuvuka kandi ikarambura neza inkoni zayo</p> <div data-bbox="810 1061 1351 1209"> </div> <p>Igihe icyo cyiciro kimara ni amasaha 6</p> <p>Ibihe by'ingenzi mu ibyara ry'inka</p> <p>Intangira ry'ibise: Ibise bitagaragara bitangira gutegura umura kubyara, ibyo bise bifasha umutavu kujya mucyerekezo cyiza cyo kuvuka</p> <p>Kubura amahwemo : Inka itangira kubura amahwemo, ikababara mu nda, ikagendagenda, ikaryama ikongera ikabyuka. Iyo yororewe mu ishyo, yitarura izindi.</p> <p>Kuganga no guta amase: Uko umubiri w'inka witegura kubyara, itangira kuganga no guta amase kuri kanya.</p> <p>Kubyimba kw'inda y'amagana: Inda y'amaganga irabyimba, izimyi ishobora kugaragara bitewe nuko inkondo y'umura igenda yaguka</p>

Decrease feed intake: The cow starts to decrease the quantity of feed and water to consume or avoid them.

End of Stage 1: This stage ends when the cervix is fully dilated, and the water bag either breaks or appears externally

Stage 2: Delivery of the Calf



Duration: 30 minutes to 2 hours

Key events:

Strong contractions: The cow experiences more intense and frequent contractions as the calf moves through the birth canal.

Appearance of calf's front legs and head: In a normal presentation, the calf's front legs will appear first, followed by the head. This is known as the anterior presentation.

Active straining: The cow will visibly strain and push to help move the calf out. This is the most intense and physically demanding part of the calving process for the cow.

Birth of the calf: The calf is born, usually headfirst, with the rest of the body following quickly after the shoulders have passed through the birth canal.

End of stage 2: This stage ends when the entire calf is delivered

Stage 3: Expulsion of the placenta



Duration: After birth, the uterus continues contraction up to 48 hours and return into normal form.

Kugaragara kw'isuha: Isuha ishobora kugaragara kunda y'amaganga byerekana ko inkondo y'umura yafungutse bihagije kandi ko umutavu ugeze munzira y'ivuka

Kugabanya kurya: Inka itangira kugabanya ingano y'ibyoyirya nibyo inywa cyangwa ikabyihorera

Impera y'icyiciro 1: iki cyiciro kirangizwa nuko inkondo y'umura ifungutse, isuha ikameneka cyangwa ikagaragara inyuma.

Icyiciro cya 2: kuvuka kw'umutavu



Kuvuka kumutavu ni icyiciro kimara iminota 30 kugeza ku masaha 2

Ibihe by'ingenzi mu kuvuka kw'inyana

Ibise byinshi: Inka igira ibise bikabije biza buri kanya ninako umutavu werekeza aho uvukira

Kugaragara kw'inkoni n'umutwe by'umutavu: mu kubyara neza kw'inka, umutavu ubanza inkoni ugakurikizaho umutwe.

Gusunika: Inka isunika umutavu uri munda kuburyo buraragarabikawufasha gusohoka mu matako

Kuvuka kumutavu: iyo umutavu uvutse, habanza gusohoka umutwe, ibindi bice by'umubiri biza nyuma y'intugu

Impera z'icyiciro cya 2: Iki cyiciro kirangira umutavu ugeze imusozi



Icyiciro cya 3: Guta umuziha



Nyuma yo kubyara, nyababyeyi ikomeza kwiyegeranya mugihe cy'amasaha 48

<p>The expulsion of the placenta takes between 8 and 12 hours after calving. If it fails to expulse placenta in 24 hours, Veterinarian needed to help the cow to remove physically the placenta</p> <p>NB: Usually, its not good to give early help to cow during calving because it is enable to do it easily but some times the cows need help during calving by monitor the process every 30 minutes.</p>	<p>Umuziha utakara hagati y'amasaha 8-12 nyuma yo kubyara, iyo urengeje amasaha 24 uhamagara umuganga w'amatungo akawukuramo akosheje amaboko.</p> <p>Icyitonderwa: sibyiza kwihutira gufasha inka kubyara kubera ko ubusanzwe iribyaza, ariko rimwe na rimwe ishobora gukenera ubufasha igihe ibyara kandi ugomba kugenzura igikorwa cy'ibyara buri minota 30</p>
<p>When the cow need the help during parturition? The symptoms of cows need to be assisted during calving: Prolonged Labor: If the cow remains in early labor (Stage 1) for more than 6 hours without progressing to Stage 2 (active labor), it could indicate a problem such as uterine inertia (failure of the uterus to contract effectively). Active labor (Stage 2) should not last more than 2 hours in cows or 3 hours in heifers. If the cow is actively straining for this period without the appearance of the calf's legs or head, assistance may be required It's advisable to call in an experienced veterinary to assist, as it's a delicate operation The owner of the animal is responsible for taking all necessary precautions relating to hygiene and sanitation.</p> <p>Dystocia in cow Difficult or abnormal position of the calf, which can lead to complications for both the cow and the calf if not managed properly (duration: between 2 and 3 hours) Dystocia in cows can be caused by several factors, which are generally classified into maternal and fetal causes:</p> <p>Maternal causes: Pelvic Inadequacy: If the cow's pelvis is too small relative to the size of the calf, it can lead to difficulties during delivery. Uterine inertia: This occurs when the cow's uterus fails to contract strongly enough to expel the calf. It can be primary (a failure to initiate effective contractions) or secondary (a result of exhaustion after prolonged labor). Cervical incompetence: In some cases, the cervix does not dilate sufficiently to allow the calf to pass through. Uterine torsion: The uterus twists, blocking the birth canal and preventing the calf from being delivered. This is a</p>	<p>Ni ryari inka ikenera ubufasha igihe ibyara? Dore ibimenyetso bikwerekera ko inka ibyara ikeneye ubufasha Iyo ibise bimaze igihe kirekire: Iyo inka igize ibise bya mbere ikamara amasaha 6 itatangira gusunika (Kwerera) bigaragaza ko yagize ibise bike Iyo inka yatangiye gusunika umutavu munda ikamara amasaha 2-3 inkoni cyangwa umutwe bitarasohoka iyo nka igomba gufashwa kubyara. Ni byiza guhamagara umuganga w'amatungo ubizobereyemo agafasha inka kubyara (Gukikura), umworozi agomba kwitwararika isuku n'isukura mugihe cyo gufasha inka ibyara</p> <p>Kunanirwa kubyara Ni igihe umutavu wananiwe kuvuka mu buryo busanzwe bigakenera ubufasha budasanzwe. Kunanirwa kubyara ku nka biterwa n'ibi bikurikira:</p> <p>Imiterere y'inka ibyara: Kutaguka kw'amatako: iyo amatako y'inka ibyara ari mato ugeranije n'ubunini bw'umutavu uvuka inka inanirwa kubyara neza. Kubura ibise: kutagira ibise kwa nyababyeyi inka ikananirwa gusunika umutavu. Kunanirwa kw'inkondo y'umura: kutaguka kw'inkondo y'umura bituma umutavu utavuka. Kwihindukiza kwa nyababyeyi: iyo nyababyeyi yihindukije bifunga inzira ibyara bigatuma umutavu udasohoka. Imiterere y'umutavu Ubunini bw'umutavu: iyo umutavu ari munini ushobora kunanirwa kuvuka neza cyane cyane ku nyana zibyaye bwa mbere cyangwa inka zabanguriwe n'ibimasa binini. Gukika kw'umutavu: ni igihe umutavu witambitse, wabanje umurizo, wabanje akaguru k'inyuma ,umutwe</p>

<p>serious condition that usually requires veterinary intervention.</p> <p>Fetal causes:</p> <p>Large calf (fetal macrosomia): Calves that are too large for the cow to deliver naturally are a common cause of dystocia, especially in heifers (first-calf cows) or cows bred to large bulls.</p> <p>Abnormal presentation: The calf should ideally be positioned head first with the front legs extended (anterior presentation). Breech (tail-first), transverse (sideways), or head-back presentations can cause dystocia.</p> <p>Fetal malformation: Birth defects or deformities in the calf, such as hydrocephalus (fluid accumulation in the brain), can make delivery difficult or impossible without intervention.</p> <p>Multiple fetuses (twins): Twin pregnancies can lead to malpresentation fetal pelvic disproportion, increasing the risk of dystocia.</p> <p>N.B: Dystocia is a significant concern in cattle production that requires prompt recognition and appropriate intervention. By understanding the causes, recognizing the signs, and knowing how to manage dystocia effectively, farmers can help ensure the health and safety of both the cow and the calf during the calving process.</p> <p>Retain placenta</p> <p>Normally, expulsion of placenta happen between 12 and 24 hours, if it fails to happen, start to putrefy, decrease feed intake and colostrum production</p> <p>The causes of retained placenta:</p> <p>Abortion, stillbirth, difficult in calving, twins, brucellosis disease, prolonged recumbency, old cow over 10 years of life, malnutrition.</p> <p>Prolapsed uterus</p> <p>The uterus is pushed out of the cow's body, typically after the calf has been delivered and can be caused by Malnutrition, more recumbency and weakness from prolonged labor.</p> <p>The cow shows signs of severe pain, restlessness, and no progress in labor. The cervix may not dilate properly Veterinary intervention is required to untwist the uterus, which may involve manual correction or surgical intervention</p>	<p>gusa, wazanye ibitugu ibi byose bituma umutavu unanirwa ku vuka.</p> <p>Ubumuga bw'ingingo: igihe umutavu wagize ubumuga umutwe ukaba munini cyane kubera amazi yagiye mu bwoko bituma umutavu unanirwa kuvuka.</p> <p>Impanga: guhaka impanga impanga bishobora gutuma inka inanirwa byubara neza.</p> <p>Icyitonderwa: kunanirwa kubyara ku nka ni ikibazo mu bworozi bw'inka z'umukamo, kumenya no gusobanukirwa ibitera kutabyara no kumenya icyo wakora mu gihe uhuye nabyo bifasha umworozi kubungabunga ubizma bw'inka n'ubw'umutavu mu gihe cyo kubyara.</p> <p>Kunanirwa guta umuziha</p> <p>ubusanzwe inka ita umuziha hagati y'amasaha 12 na 24 nyuma yo kubyara, iyo itawutaye utangira kubora bigatuma inanirwa kurya ndetse n'umuhondo ukagabanuka.</p> <p>Impavu zituma inka idata umuzika ku gihe: kuramburura, iyo umutavu wapfiriye mu nda, kubyara bigoranye, guhaka impanga, indwara y'amakore, kugandara igihe kinini, kuba inka ishaje irengeje imyaka 10 no kugira imirire mibi.</p> <p>Kumurika ku nka</p> <p>Ni igihe nyabayeyi yasohotse nyuma y'uko inka imaze kubyara.</p> <p>Ibi bishora gutwera no kugandara cyane, ibise byinshi kandi bitinda.</p> <p>Muri ibi bihe inka iba ifite ububare bwinshi n'umunaniro, iyo bimeze gutyo uhamagara umuganga w'amatungo kugirango asubize nyababyeyi mu mwanya wayo.</p> <p>Kubyimba kwa nyabyeyi</p> <p>Ubwandu bwa nyababyeyi buterwa na mikorobe zaturutse ku isuku nke mu gihe habayeho kudata umuziha, kunanirwa kubyara neza. Ibi birangwa n'ururenda runuka n'igi ryaboze, umuriro mwimshi, kunanirwa kurya no kugabanuka k'umukamo. Iyi nka ivurwa n'umuti wica mikorobe, umuti ugabanya ububabare ndetse na serumu.</p>
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<p>Metritis (uterine infection)</p> <p>Infection of the uterus, often due to retained placenta, difficult calving, or poor hygiene during calving. Foul-smelling discharge, fever, reduced appetite, and milk production, depression.</p> <p>Antibiotic treatment is required, along with supportive care such as anti-inflammatory drugs and fluids</p> <p>Ovarian cyst</p> <p>This disease causes infertility in cow, it has happen between 30 and 60 minutes after making birth</p> <p>A veterinarian can palpate the ovaries through the rectum to detect the presence of enlarged, fluid-filled structures that indicate cysts measured with 2.5 cm which restrict the heat of cow.</p>	<p>Ibityimba byo muri nyababyeyi</p> <p>Byikora nyuma y'isaha imwe inka ibyaye, biyitera ubugumba.</p> <p>Umuganga w'amatungo agomba gusuzumaibyo bityimba biba byuzuye amazi bipima nka cm 2,5 bituma inka idasubira mu murindo</p>
<p>Management of calving in cattle</p> <ul style="list-style-type: none"> When a cow is close to giving birth, it shows the following signs: swelling at the tail base, enlargement of the udder and vulva, and the appearance of a mucous discharge from the reproductive tract. If the cow is unable to calve on its own, the farmer, herders, or livestock health advisors should avoid forcing the birth without proper knowledge, as this can cause harm. Instead, they should consult a veterinarian, who has the right equipment and expertise to manage complications depending on their cause. 	<p>Kwita ku nka iyo ibyara</p> <ul style="list-style-type: none"> Iyo inka igejeje igihe cyo kubyara igaragaza ibimenyetso bikurikira: Kugira icyena aho umurizo utereye, Kubyimba kw'icebe n'inda y'amaganga, no kuzana ururenda munda y'amaganga. Iyo inka inaniwe kwibyaza ubwayo, umworozi n'abashumba cyangwa umujyanama w'ubuzima bw'amatungo birinda guhatiriza kuyibyaza bakurura uko babonye kandi badasobanukiwe ibyo kubyaza. Ahubwo bitabaza umuganga w'amatungo, we abafite ibikoreho bikwiriye kandi azi uburyo yakemura ibibazo bitewe n'aho cyaturutse. 
<p>Care of new born calf and post-partum cows</p> <ul style="list-style-type: none"> After giving birth, a cow needs close attention to ensure that any complications during calving are identified and treated promptly before they become severe. Some important care measures include: 	<p>Ibikorera inka ikimara kubyara n'inyana yayo</p> <ul style="list-style-type: none"> Iyo inka imaze kubyara, igomba kwitabwaho byumwihariko cyane ugirango niba hari ikibazo yagize mu gihe cyo kubyara gikurikiranwe vuba na bwangu kitarakomera. Bimwe mu bigomba kwitabwaho n'ibi bikurikira:

<ul style="list-style-type: none">- Checking that the cow is not losing excessive blood.- Ensuring that the placenta is expelled within eight hours after calving (if it is not expelled within this time, a veterinarian must manually remove it).	<ul style="list-style-type: none">- Kureba niba itava amaraso menshi;- Kureba ko itakaza umuziha mu masaha atarenze umunani nyuma yo kubyara (Iyo birenze icyo gihe, veterineri avanamo umuziha n'amaboko).
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