

Kuchengeta Mombe Dzenyama neVarimi veNzvimbo Diki muZimbabwe



We Effect was created by the Swedish cooperative movement in 1958. It is an international NGO with its HQ in Stockholm Sweden. Its development cooperation is founded on the principle on the principle of help for self help and thrives towards the vision of a world free from poverty and injustice. We Effect works with partners of mostly member based organizations to ensure members empower themselves with knowledge and skills to alleviate poverty and injustice. We Effect works in various countries globally with Regional offices in Southern Africa, East Africa, Latin America and Eastern Africa and works in the sectors of sustainable rural development, habitat and rural finance.



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Kukodza Mombe Dzenyama neVarimi veNzvimbo Diki muZimbabwe

First Edition

Kuwedzera ruzivo rwekukodza mombe dzenyama

@WE EFFECT, 2015

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Nzwisisa kuti:

Zvakanyorwa mubhuku rino ipfungwa dzevanyori kwete mifungo nemitemo ye UKAid kana We Effect.

@We Effect Regional Office For Southern Africa 2015

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RUTENDO

Gwaro iri riri pamusoro pekuchengetwa kwemombe dzenyama muZimbabwe rakagadzirwa neveWe Effect sechidimbu chechirongwa chekusimudzira zvirimwa uye zvipfuyo zvichiitwa pasi pebazi reLivelihoods and Foods Security Programme iro rinwana rutsigiro rwemari kubva kuUKAid. Chinyorwa ichi chinobata zvese zvinechekuita nekurima mombe dzenyama uye rinobata machengeterwo emombe dzenyama uye matengeserwo adzo. Varimi vanoshandisa chinyorwa ichi mukudzidza kwavo seboka remushandirapamwe vari mumapoka evakuru nevehidiki evanhu vanomwe kana gumi nevashanu. Chinyorwa ichi chakaubwa nepfungwa netsvakurudzo dzevanhu vanotora rupande mukudzidza umu maringe nezvavanoda paupenyu. Vanhu vanotora rupandi mukudzidza mumapoka vanoda kudzidza nzira dzavangashandisa kupedza matambudziko anovawira paupenyu hwavo.

Bazi reLivelihoods Food Security Programme (LFSP) rinoshanda nebazi reUK Department for International Development (DFID) munyika yeZimbabwe. Chirongwa ichi chinotarirwa neve Food and Agriculture Organisation (FAO) riri pasi pebazi remubatanidzwa wenyika reUnited Nations. Chinangwa charo ndechekuderedza urombo kuburikidza nekuwanisa mari, zvekudya zvakakwana zvine utano mumatunhu (districts) anosvika masere mumaguta (provinces) matatu muZimbabwe. Guta rimwe nerimwe rinotora mubatanidzwa wemaguta maviri kana matatu anova anobatsira kufambiswa kweurongwa hwemishandirapamwe iyi.

EXTRA Consortium:

Bazi reExtension Training for Rural Agriculture (EXTRA) riri kiushanda nebazi re LFSP mumatunhu matatu kumaguta matatu eMidlands Province mubatanidzwa webazi mashanu 5 NGOs anoti (WE EFFECT, Welthungerhilfe, Heifer International, ICRISAT, and CTDO). Chinangwa chebazi reEXTRA **kusimudzira zvekudya zvine utano kuburikidza nenzira dziri nani dzekurima**. Izvi zvinogoneka kuburikidza nekupa varimi rutsigiro rwekuvapa mukana kuti vawaniswe ruzivo uye unyanzvi hwekurima. Gwaro iri riripo kuwedzera varimi kuita mapoka kuti vakwanise kusvikira nzira dzekurima nadzo, ruzivo rwemamiriro epamisika vachitora rupande / ruzivo kubva munyaya dzese idzi mugwaro iri.

Munyori anopa kutenda, kukuru kubazi reUKAid iro rakapa rutsigiro rwemari kuti chinyorwa ichi chitsikiswe nekupepetwa.

MASHANDISIRWO ECHINYORWA CHINO

Chinyorwa ichi chakagadzirwa kubatsira varimi vanoda kupinda mumapoka anodzidza zvekusimudzira nyaya dzekurima nyama dzemombe. Bhuku rino rinogona kuverengwa nevanhu vari boka kana kuverengwa nemunhu ari ega zvichienderana nechinangwa kana chido chake chaanenge achida kuzadzikisa. Munhu kana achiverenga bhuku iri anoriverenga kuti awane ruzivo rwakadzama pamusoro *pemastudy circle* group asati apinda muboka iri. Zvinokurudzirwa kuti vose vanoda kupinda muboka iri havafaniri kutanga vambotanga vaumba mapoka vasati vadzidziswa sezvo vachizokwanisa kukanganisa kuenderera mberi kwemapokaaya. Mapoka ose anoubwa kana anoitwa vanhu vasati vawana zvidzidzo zvakakwana anoita dambudziko rekukurumidza kuparara munguva pfupi. Kutu muwane zvakakwana kubva muchinyorwa ichi, vanhu vanokurudzirwa kukurukura mumapoka izvo zvinopa mukana wekunzwa pfungwa dzakasiyana siyana kubva kunhengo dzinenge dzichitora rupandi.

Mapoka (*study circle*) ose anoitwa anofanira kuitwa pasina kumanikidza uye zvichienderana nechido uye kuda kudzidza kwemunhu. Zvakakosha kuziva kuti kusarudzwa muboka rekutanga hazvipi munhu chivimbo uye simba rekuti ava nhengo izere ichasarudzwa zvekare muboka rinodzidza zvemushandirapamwe.

Zvakakosha kuti boka rimwe nerimwe riubwe nevanhu vanosvika vashanu kana gumi nevashanu. Boka rimwe nerimwe rinofanira kusarudza mutungamiri waro zvakare mutungamiri uyu haasi mudzidzisi asi anoshanda semutungamiri kubatsira muzvidzidzo zvinenge zvichiitwa. Haafaniri kuva anoratidza kuva neruzivo rwakanyanya kudzama sezvo ruzivo runenge ruripo rwakanyorwa pagwaronyana (*booklet*). Nerumwe rutivi zvakanakawo kuti mutungamiri akurudzire nhengo dzinotora rupandi mumapoka aya. Nhengo dzeboka iri dzinofanira kutendererana padzingasangana uye nguva nenzvimbo dzekusanganira. Pfungwa huru iripo yakakosha ndeyekuti gwaro iri rinofanira kuverengwa richitevedzwa manyorerwo arakaitwa uye vadzidzi vanofanira kuenda pane chimwe chidzidzo kana vachinge vabata nekunzwisisa zvidzidzo zvekutanga.

Bhuku iri rakaiswa muzvikamu. Chikamu chega chega chine mibvunzo inofanira kupindurwa kuita kubatsira kunzwisisa kwenhengo zvinenge zvadzidzwa. Nhengo imwe neimwe inotora rupandi inofanira kuva nechinyoreso uye pekunyorera kuitira kunyora dzimwe pfungwa dzinenge dzichiburitswa nekupiwa. Izvi zvinobatsira pakuzovhura mukana wekubvunza.

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Nhanganyaya Yenzira Yekudzidza Seboka



Donzvo rechidzidzo

- Chii chinonzi boka revadzidzi (*study circle*).
- Vakuru vanodzidzirei uye sei.
- Kushandiswa kweongororo nezvinyorwa zvekudzidza seboka munyaya dzekupfuya mombe dzenyama muzimbabwe.
- Zvakakoshera kusarudza mutungamiri weboka iri .
- Rupandi rungatorwa nevatungamiri veboka iri uye zvavangaita kana vachitora rupandi munyaya iyi.



Hurukuro

- Kupfuya mombe dzenyama kuri kuitwa here munharaunda mako, kana zviri kuitwa ndivanaani vari kuzviita?
- Zvii zvakakoshera kupfuya mombe dzenyama?
- Nyama inoshandiswa chii?

1.1 Chii chinonzi kudzidza seboka (*Study Circle*)?

Mushandirapamwe/ boka revadzidzi (*study circle*) iboka revanhu vane donzvo rimwe chete rekudzidza pamwechete vachikowerana uye kupana mazano nepfungwa dzinobatsira pakusimudzira upenyu hwavo munharaunda mavanogara. Vanoungana kupana pfungwa nemazano kuti vadzidze zvitsva uye kurodzana pfungwa kuti vave neunyanzvi pakurima. Boka iri rinosangana nguva dzose uye vanhu vanoita izvi nekuda kwekusundwa nechido chavo pasina kumanikidzwa. Bokairi rinoita misangano yakawanda vachidzidza zvavangada uye nekupanana mazano.

Zvinotarisirwa muboka rekudzidza ndezvinotevera:

- Chido chevanhu chekudzidza uye chishuvo chekuda kudzidza zvakawanda zvinobatsira kusimudzira upenyu hwavo.
- Gutsaruzhinji rine chiremerera kumunhu wese.
- Kufambiswa kwemashoko zvakanaka nekuti vanhu vanotora rupandi mukudzidza uku vanenge vakagara vakaita dendenderedzwa vakatarisana chiso nechiso.
- Hurukuro dzinoitwa vanhu vachichesana nekuongorora zvakadzama zvinenge zvichibva kune mumwe nemumwe kuburikidza nezvaakaasangana nazvo paupenyu.
- Magwaro anopa ruzivo rwakadzama rune zvarunobatsira kumumwe nemumwe anenge ari muboka.
- Kusanganiswa kwenhengo dzese mukuronga pamwe nekuzofambisa basa muboka rekudzidza iri.

Bishi/Zvokuita

- a) Bvunza mumwe nemumwe kuti sei akada kuva nhengo yeboka iri? Ipa mukana wekuti mumwe nemumwe ape pfungwa dzake
- b) Zvakare kurukurai kuti mumwe nemumwe ari muboka iri achabudirira sei pane zvaanotarisa pakudzidza uku

Mufananidzo unotevera unoratidza boka rakaita denderedzwa magariro anoita vanhu vachidzidza seboka



1.2 Vakuru vangadzidza sei?

- Vakuru vakasiyana nevadiki pakuti vanoda kudzidza vane chinangwa chekuti vari kudzidzirei uye donzvo ravo pakudzidza nderei. Muenzaniso ndewekuti pamwe vanenge vachida kudzidza nzira itsva dzekuti vangasimudzira goho ravo sei kuburikidza nenzira itsva dzeunyanzvi hwemichina mitsva zvinoita kuti zvekudya zvevepo. Pane dzimwe nguva vanogona kusangana mukati meboka rekudzidza iri kuti vaite hurukuro dzemadambudziko avanosanganawanawo uye kuti angapedzwa sei munhararunda dzakasiyana siyana dzavanogara.

Pfungwa Huru: Vakuru vanofarira kudzidza zvidzidzo zvine chekuita navo uye zvinobata chikamu chepenyu hwavanorarama

Mukudzidza uku vakuru:

- Vanotarisa kuremekedzwa uye kugashirwa sezvavari uye nezvavanoziva.

- Vanodawo kudzidza zvinoenderana nekubata kwavo, panguva dzakafanira uye nzvimbo yakakodzera.
- Vanofarira kudzidza zvakanaka kana vakapiwa mukana wekusarudza zvavanoda kudzidza, pekudzidzira uye kuti vangadakudzidza musipi.
- Vakuru zvakare havadi kuratidzwa kuti vanoshorwa papfungwa nemaonero avo.
- Vanodzidzawo zvakanaka kana vakapiwa mukana wokupawo ruzivo rwavanenge vanarwo uye zvavakasangananzvo muupenyu.

Tichitarisa mukudzidza uku tinoona kuti vanhu kana vachidzidza neshamwari dzemazera avo kana vabiya vavo, kudzidza uku kunotoro rupandi rwakanyanya mukusimudzira nharaunda sezvo vachikwanisa kupanana pfungwa namazano zvinogamuchirika nekukurumidza.

Bishi

- a) Kubva mumwedzi mitanhatu yapfuura wakambotsvaka here mazano kubva kumuvakidzani, shamwari kana hama?
- b) Kana wakatsvaka mazano aya akakubatsira here?

1.3 Kusarudzwa kwemutungamiri weboka rekudzidza (Study Circle Leader)

Mutungamiri weboka iri anosarudzwa nenhengo dzeboka iri. Mutungamiri uyu anofanira kuva anenge akavimbika nguva dzese uye anofanira kuva nezvimiso zvinotarisiwa kumutungamiri wechokwadi. Mutungamiri uyu anofanira kuva akadzidziswa nenzira chaiyo inoshandiswa mukudzidza neboka iri uye anofanira kuwana rutsigiro pakuita basa iri.

Mutungamiri uyu anotarisiwa kuva nezvinotevera:

- Kuva anogadzira kana kuronga zvinangwa
- Kuita kuti vamwe vave vanokwanisa kubudirira muzvinangwa zvavo
- Kuva neunyanzvi hwekubatanidza vanhu pakuita mabasa
- Kugona kuronga nekuunza vanhu pamwechete kuti vaite basa

Zvokuita

- a) Taura zvimwe zvezvinhu zvinotarisiwa kana muchisarudza mutungamiri weboka iri

Zvinotevera ndizvo zvimwe zvemienzaniso yezviga/zvimiso zvinoonekwa pamutungamiriwakanaka:

- Kukwanisa kushanda nenhengo dzakasiyana siyana
- Kuvimbika pakubatsira nhengo idzi
- Kusazvirova dundundu kuti une ruzivo rwakadzama kudarika vamwe vaunenge uchidza navo

- Kukwanisa kuzvidzora
- Kukwanisa kuramba uine ushamwari nenhengo dzese dzeboka chero pachinge paita mhirizhonga kana kugumburwa nevanhu
- Kukurudzira nhengo dzese uye kupawo mukana wehurukuro kumunhu wese
- Kuvawo munhu anokwanisa kutora pfungwa kubva kunhengo
- Kuvawo neunyanzvi hwekuteerera
- Kukwanisa kugadzirira chidzidzo uye kufanotsvakawo umbowo hwezvechidzidzo chichakaitwa
- Kukwanisa kupawo nhaurwa muchidimbu nepfungwa huru dzechidzidzo
- Anofanirawo kuvawo munhu anokwanisa kusvikirika nevanhu uye anodawo kushanda nevanhu
- Haafaniri kuva ane humbimbindoga

1.4 Zvinoitwa nezvinotarisirwa kuti mutungamiri weboka ange achiita

Zvinotarisirwa kumutungamitri uyu ndezvizvi:

- Kugadzira nekuvaka kudzidza kunomutsa nekukurudzira nhengo kuti dzive nechido kana havi yekutsvaka ruzivo.
- Kuva muboka rezvekudzidza iri uye kushanda nevese vanenge vari muboka. Mutungamiri haafaniri kuva nehumbimbindoga.
- Kuisa vadzidzi padonzvo nekubvunza mibvunzo yakakodzera. Anofanira kupa hwaro hwekutaurirana pakati penhengo uye kuvakurudzira kuti vawane zvinopedza matambudziko uye kubvunzawo mibvunzo.
- Kuumba mweya wehumwechete pakati penhengo kuti dzinzwewo dzakadziirwa kana kudzivirirwa.
- Kuita zvinhu zvinoita kuti nhengo dzive nekuzvivimba uye kunzwa dziine rupandi rwadziri kutora.
- Kutenderawo kuti vese vadzidzi vapewo pfungwa dzavo uye kuti vangazvishandisa\ sei mukurarama kwavo zuva roga roga.
- Kupawo sarudzo zvakajeka uye kumira sechiga chinotungamira.
- Kukurudzirawo kubatana.
- Kuvawo munhu ane zvekushandisa mukuronga zvidzidzo zvisingarevi kuti ndiwe mazvikokota munyaya inenge ichidzidzwa.
- Kutungamira nhengo mukukurukura mibvunzo uyewo kuti mhinduro dzinopiwa dzanyorwa pasi.

Zvokuita

- a) Mushure menhaurwa yezviga, zvinoitwa nezvinotarisirwa kumutungamiri weboka, shandisa umbowo kana ruzivo urwu kusarudza mutungamiri weboka rekudzidza renyu.

1.5 Basa revadzidzi

Zvokuita

Ndezvipi zvaunotarisirwa kuita mukudzidza seboka?

Vanhu vanotora rupandi mukati mekudzidza seboka vanobatsira vamwe vavo kutsvaka ruzivo uye kugadzirisa matambudziko. Nhengo dzose idzi dzinofanira kunzwisisa uye kugashira basa ravo rekushandisa ruzivo rwezvavakasangana nazvo kuti vamwe vavo vabatsirikane. Kana nhengo inotora rupandi mukati mekudzidza seboka ikapa pfungwa yayo pfungwa iyi inobva yava yeboka rose. Izvi zvinobatsira kusimudzira ruzivo rweboka rose uye kuti nhengo imwe neimwe itore rupandi. Mapoka ose ekudzidza anofanira kukurudzira kubatana kwete kuunza makakatanwa kana makwikwi. Nhengo dzinotora rupandi dzinofanira kubatsirana kutakurirana mutoro mukubudirira kana kusabudirira kweboka.

Basa mukudzidza seboka rinoubwa nezvinotevera.

- Mabhuku ezvinyorwa (study circle materials)
- Unyanzvi hwemutungamiri webooka rekudzidza
- Ruzivo uye zvakasanganiwa nazvo nenhengo dzeboka

1.6 Kuronga zvikamu zvekudzidza

Pasati paitwa chidzidzo kana ongororo, zvinotevera zvinofanira kubvumiranwa nenhengo:

- Musoro wenyaya uye urongwa hwechidzidzo - Tichadzidza nezvei?
- Nzvimbo yekuitira - Kuti tosangana kupi?
- Rupandi runotorwa - Ndiani anoita ichi nechichi?
- Mubatsiri wekunze (External Facilitator) - Ndiani angakubatsirai nekutungamira kana zvidzidzo zvoita sezvorema?
- Ongororo - Tiri kusvika here padonzvo nechinangwa chedu?
- Mabhuku ekudzidza - Ndekupi kwatingawana ruzivo pamusoro panyaya iri kudzidzwa?

CHIKAMU 2

Mhando dzeMombe dzeNyama Dzinochengetwa muZimbabwe



Donzvo rechidzidzo

- Kugashira zvakakoshera kupfuya mhando dzakafanira dzemombe dzenyama.
- Kunzwisisa kukosha kwekupfuya mombe dzenyama.
- Kukwanisa kuziva mhando dzakajairika dzemombe dzenyama dzinochengetwa.
- Kugona kuronga kuti ndeipi mhando yemombe dzingachengetwa nevanhu vakasiyana siyana.



Hurukuro mumapoka

- Ndezvipi zvakakoshera kupfuya mombe dzenyama kwauri uye kumhuri yako?
- Sei uchiona sekuti kupfuya mombe dzenyama ipfungwa yekuchengeta upfumi yakanaka?
- Ndezvipi zvaunoono nazvo kana kuti zviri pamhando dzemombe dzenyama dzaunochengeta?
- Varimi vazhinji vechidiki vanopinda mukupfuya mombe dzenyama senzira yekuchengetedza mari yavo pane kuchengetera mumabhanga. Kune vamwewo inzira yakabva kumadzitateguru avo iyo ichiri kurarama kubva kune rumwe rudzi ichienda kune rumwe. Kune vamwe zvakare zvekupfuya mombe dzenyama izvi zvinoita kuti vave nechiremera munharaunda mavanogara. Kupfuya mombe dzenyama kunobatsira zvakanyanya kusimudzira upfumi hwenyika yedu yeZimbabwe. Varimi vemombe vanorima padiki ndivo vazhinji vevamwe vanochochengeta mombe dzenyama vanobata chikamu makumi manomwe neshanu kusvika kumakumi masere kubva mu zana (75%-80%) chemombe dzenyama dzinochengetwa muZimbabwe.

2.1 Zvakakosherei kukodza mombe dzenyama

Pane zvikonzero zvakasiyana siyana zvekuchengeta mombe dzenyama. Zvimwe zvezvikonzero izvi ndezvinotevera:

- Zvinopawo munhu chiremerera nerukudzo;
- Mombe dzinopa mari uye dzinoita sedura rekuchengeta pfuma naro;
- Dzinoshandiswa zvakare pakurima uye senzira yekufambisa nayo;
- Tinowanawo kudya kunovaka muviri kuburikidza nenyama nemukaka;
- Dzinogonawo kushanda senhaka;
- Mombe dzinogona kushandiswa kubhadhara roora;
- Dzinoshandiswawo zvakare pamitambo yechivanhu yakaita semabira, michato kana jakwara nebikiro uye kuripawo ngozi.

2.2 Mhando dzemombe dzenyama dzakajairika dzinochengetwa muZimbabwe

2.2.1. Mashona



Mufananidzo wemhou nehandira yerudzi rwemashona

Nhoroondo yemombe yeMashona

Mhando yemombe iyi inonyanyo zivikanwa nemazita ekuti Makalanga, Kalanga, Makaranga, Ngombedza Vakaranga, Shona Mashuk, Mashukulumbwe. Mhando yakatanga kuvapo yemombe dzerudzi rweMakaranga yevaShona muZimbabwe yaiva yerudzi rweSanga yakangofananawo nedzerudzi rwemaTonga emuZimbabwe. Mhando dzese idzi dzakaparadzwa nechirwere chakauya mugore ra1896-98 uye fivhiri inonzi iyo East Coast Fever yakauya mugore ra1900-06. Mashoko awa akatorwa muongororo yakaitwa naVaDagris muna 2005. Nekuda kwaizvozvi, mombe zhinji dzerudzi rwechiAngoni rwakabva rwauya izvo zvakaunza kusimudzirwa kwemhando dzemombe. Mhando iyi ndiyo yakazotumidzwa kunzi Mashona. Mhando iyi yakapararira kumabvazuva nepakati penyika yeZimbabwe zvichidzika nekumadokero zvichibata matunhu eMidlands neMatebeleland North zvinosanganisira Gokwe, Tsholostho neLupane nekumabvazuva kuno ganhurana Zimbabwe neMozambique.

Chimiro chemombe dzerudzi rweMashona

Mombe iyi idoko, ine mapfupa akanaka, nemuviri wakaenzanirana, dzakasimba, ipfupi, dzakarurama, mvere dzacho ipfupi dzinotsvedzerera dzakavhengana tsvuku uye tema. Dzimwe dzine ruvara runosanganisira pfumbu, chena, tema zvakavhengana. Vanhu vanopfuya mombe idzi vanonyanyoda dzine rudzi rumwe chete kunyanya rutema. Uremu hwemombe yerudzi urwu inenge yakura hunosvika makg anoita mazana maviri nemakumi manomwe neshanu kana mazana matatu nemakumi mashanu (275-350kg).

Hurukuro mumapoka

- Tine mhando dzerudzi rwemombe dzemashona here mumombe dzedu dzatinopfuya?
- Kana tinadzo ndedzipi nzvimbo dzadzinofanira kunge dzichichengetwa maringe nemanairi anoita mvura munzvimbo dzatiri?

Zvimiso/zviga zvinonongedza rudzi rwemombe yeMashona

- Haikanganiswi nekupisa kwakakanyanya kwenzvimbo uye zvikwekwe nemhesvi.
- Inokwanisa kuramba ichibereka kunyange mune dzimwe nzvimbo dzisina mvura yakakwana mumatunhu eAfrica.
- Mhou dzacho dzinoburitsa mhuru dzakasimba pamwe nenyama nemukaka zvakawanda.
- Hainetsi kupfuya zvakare inogona kufamba munzvimbo dzakawanda.
- Dzinogonawo kudya miti pamwe nehushwa.
- Mombe iyi inokurumidza kukura .
- Dzinoda chikafu chishoma kuti dziburitse nyama yakawanda tichienzanisawo nedzimwe mhando dzakaita seTuli, Afrikander uye Brahamani.

2.2.2 Tuli



Mufananidzo wemhou nehandira yerudzi rweTuli

Nhoroondo yemombe yeTuli

Mombe dzerudzi rweTuli dzakabva kurudzi rweSanga dzakauyiswa kumaodzanyemba kweAfrica nevanhu vaifamba kumakore akaita saana 2000. Mombe yeTuli yakabva munharaunda uye kujairira kugara munzvimbo dzisinganyatsonaya mvura kumavirazuva kweZimbabwe. Zita rekuti Tuli rakabva mushoko rekuti “utuli”zvichireva huruva. Mombe iyi yakapararira munyika dzemAfrica kunyanya Botswana neSouth Africa.

Chimiro chemombe yeTuli

Tuli imombe iri pakati nepakati yerudzi rweSanga. Ine mapfupa akasimba nenyanga huru nemakumbo uye ine muviri wakaurungana. Inobereka mhuru dzakasimba, yakasimba uye inoburitsa nyama yakanaka. Ruvara rwayo rutsvuku, neruchena uye rupfumbu. Mombe yerudzi urwu inenge yabva zera iri jongosi inogona kurema makirogiramano anosvika mazana manomwe nemakumi mashanu kana churu (750 -1000kgs) hadzi inogona kusvika mazana mana nemakumi mashanu kana mazana mashanu nemakumi mashanu (450kg -550kg).

Hurukuro mumapoka

- Tine mhando dzerudzi rwemombe dzemashona here mumombe dzedu dzatinochengeta?
- Kana tinadzo ndedzipi nzvimbo dzadzinofanira kunge dzichichengetwa maringe nemanairo anoita mvura munzvimbo dzatiri?

Zvimiso/ zviga zvinonongedza rudzi rwemombe yeTuli

- Inobereka vana vakanaka,
- Haiurayi mhuru uye inogona kurera mhuru zvakanaka,
- Inogona kurarama munzvimbo ine zvirwere,
- Inogona kurarama munzvimbo dzine mvura shoma,
- Inoburitsa nyama yakanaka.

2.2.3. Nkone (Manguni)

Mhando yemombe iyi yakabva kurudzi rweAfrican Sanga iyo inonzi yakabva kuchamhembe kweAfrica mumakore zvuru zvisere apfuura. Mombe idzi dzinonzi dzakauya nevanhu vakayambuka rwizi Zambezi kubva mumakore ari pakati pe590-700AD. MuZimbabwe mombe yerudzi urwu iri kunzi ndiyo yasara yakawanda kumombe dzinodaidzwa kunzi “Matebele”. Varimi vose vanorima pakuru nepadiki vanochengeta mhando yemombe iyi kumaodzanyemba kwenyika yeZimbabwe.



Chimiro chemombe yerudzi rweNkone (Manguni)

Mombe iyi iri pakati nepakati ine mavara akasiyana siyana. Kunyange zvazvo ruvara rwacho ruchisiyana, ruvara runonyanyozivikanwa imvere chena netema, pfumbu uye *brown*. Mvere dzine ruvara dzinowanikwa pamaziso munzeve nemavara mavara kumuswe. Mombe idzi dzine misoro yakati kure dzine nyanga dzakakombama kunyanya kumajongosi acho. Nzeve dzacho ipfupi uye dzakamira mudenga uye nyundwa yadzo haina kukura. Kana dzichinge dzakura mombe idzi handira dzacho dzinorema uremu huri pakati pemazana matanhatu kana mazana masere (600-800kg), mhau dzacho dzinorema uremu huri pakati pemazana matatu nemakumi mashanu kana mazana mashanu (350-500kgs).

Zvimiso/ zviga zvinonongedza mombe yerudzi rweNkone (Manguni)

- Inobereka uye kuburitsa mukaka nenyama yakawanda chero munzvimbo dzisinganyatsonaya mvura zvakanaka
- Matsiru acho anokurumidza kubatira zamu uye anokurumidza kukura nekubereka
- Inogona kufamba zvakanaka uye kufura zvakanaka
- Haikurumidzi kubatira zvikwekwe uye kubatwa nezvirwere zvinounzwa nezvikwekwe

- Inogona kuwirirana uye kurarama munzvimbo dzinopisa zvakanyanya
- Inogona kukudza uye kuraramisa mhuru dzayo zvakana
- Yakareba
- Inoburitsa mukaka nenyama zvemhando yepamusoro
- Matehwe anobva mumombe dzerudzi urwu ndeemhando yepamusoro

Hurukuro mumapoka

- Tine mhando dzerudzi rwemombe dzemashona here mumombe dzedu dzatinochengeta?
- Kana tinadzo ndedzipi nzvimbo dzinofanira kunge dzichichengetwa maringe nemanairo anoita mvura munzvimbo dzatinogara?

2.2.4 Arikander

Nhoroondo yemombe yeAfrikander



Mifananidzo iri pazasi inoratidza mombe dzerudzi rweAfrikander

Mhando yemombe iyi inonzi yakabva nekuSouth Africa. Mombe dzerudzi rweAfrikander rwakasvitswa munyika yeZimbabwe munguva yevapambepfumi nevarimi vechichena vaifamba munzvimbo dzakasiyana siyana. Mhando yemombe dzeAfrikander inofungidzirwa kuti yaichengetwa nevanhu verudzi rwemaHottentots ava vaisanganisa/kuuchika mombe dzerudzi rwechi Portuguese/ Putukezi nerweAlenteja urwo rwakatanga kudunhu reCape Coast nemaPutukezi (Portuguese) vaifamba nzvimbo nenzvimbo.

Chimiro chemombe yerudzi rweAfrikander

Mombe iyi inoratidzika kuva nenyama yakanaka uye vazhinji vanoitora semombe yekuchengetera zvenyama. Mhou inenge yakura kana kubva zera inorema uremu hungangosvika mazana matanhatu nemakumimatatu **630kg** uye handira yacho inorema uremu hunosvika mazana mapfumbamwe **900kgs**. Ruvira runonyanyoonekwa pamombe iyi rutsvuku uye rupfumbu. Nyanga dzacho dzinokura dzakatevedza musoro dzakaita sedzakatarisa mberi dzozonosimuka dzava mberi dzakaita sekumonyoroka. Nyundwa yacho yakati kurei kumajongosi erudzi urwu.

Zvimiso zvinonongedza mombe yerudzi rweAfrikander

Zvinotevera ndizvo zvimiso zvinoratidza mombe yerudzi rweAfrikander:

- Mhou dzacho hadziburitsi mukaka wakawanda kunyange zvadzo dzichiburitsa mukaka unokwana mhuru dzadzo
- Mhou dzacho hadzikurumidzi dzabata mazamu
- Dzine nyama yakawanda

Nzvimbo dzakanaka kupfuya mombe dzerudzi rweAfrikander

Mombe idzi kubva makore ekare dzakawirirana nenzvimbo zhinji dziri kumaodzanyemba kweAfrica (**Southern Africa**). MuZimbabwe mhando iyi inochengetwa nevarimi vanorima pakuru uye panzvimbo huru.

Uremu nezera (Averages)	Jongosi (Male)	Hadzi (Female)
Mature Weight	745kg	525kg
Birth Weight	33kg	30kg
Weaning Weight	270kg	255kg
Age at First calving	24-	36 months
Inter-calving period	445 days (14½ months)	

Hurukuro mumapoka

- Imhando ngani dzemombe dzenyama pane dziri pamusoro idzo dzamunoziva?
- Ndedzipi mhando dzakanyanyo wanda kana kujairika munharaunda maunogara?
- Doma mhando dzaunadzo dzawakamboita mukuru wevatariri kana kuona nezvadzo?
- Mhando dzakapiwa pamusoro apo dzinosiyana papi nedzako dzawadoma?

Mifananidzo iri pazasi inoratidza mombe dzerudzi rwe Herifodhi kuruboshwe neBrahamani kurudyi



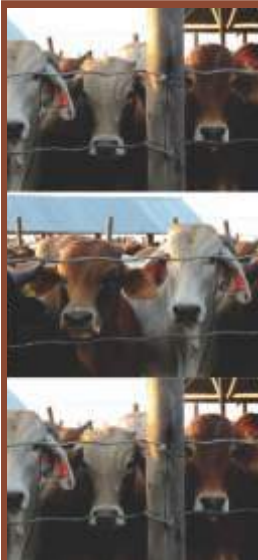
CHIKAMU 3

Kuchengeta neKusimudzira Mhando dzeMombe dzeNyama



Donzvo rechidzidzo

- Kugashira kukosha kwekusimudzira neutariri mumombe dzenyama;
- Kunzwisisa matanho kana zvinodiwa pakusarudza handira nemhou dzekupfuya;
- Kunzwisisa zvinodiwa pakuchengeta mombe dzenyama;
- Kushandisa kana kutambira pfungwa dzakanaka pakuchengeta mombe dzenyama uye panguva dzakakodzera



Hurukuro

- Kutaurirana pamusoro penzira dzakajairika dzekusimudzira mhando dzemombe dzenyama:
- Nyora nekudoma nzira dzingashandiswa nevarimi kusimudzira mhando dzemombe dzenyama.
- Handira dzingasarudzwa sei?
- Ungasarudza mhou dzako sei?
- Ndezvipi zvinotariswa kana munhu achisarudza mhou kana handira dzekuuraya?
- Enzanisa mhinduro dzako dzawapa nedzevamwe vako vari muboka ramunodzidza naro.
- Unganidzai mhinduro dzapiwa motora dzakanaka moenzanisa nezvakurukurwa pazasi apo.

3.1 Nzira dzekuvanduzwa/kusimudzira nadzo mombe dzenyama muZimbabwe

Varimi vanoda kuchengeta handira nemhou dzemhando yepamusoro senzira yekupfimbika kana kuchengetedza mombe dzenyama dzekuzoshandisa mune ramangwana. Izvi zvinoratidza kuti vane maitiro avanoita pakusarudza mombe dzemhando yepamusoro iyi kubva mune rimwe boka rezvipfuyo kana mombe. Zvakanakirawo kuti varimi vavewo nenzira yavanotevedza pakubvisawo dziya dzisiri kuburitsa goho rakanaka kana dzisiri kupa pundutso nematuso akanaka kumurimi.

Masarudzirwo ehandira nemhou

Kusarudzwa kwehandira kana mhou kunoitwa nevarimi kuti vakwanise kutora mhou nehandira dzemhando yepamusoro kubva muchikamu chemombe dzinenge dziripo. Kana vachiita izvi varimi zvinhu zvinoteera zvinotariswa:

- Mubatanidzwa wemaitiro kana kufanana kunoratidza kusimba kana kusasimba kwetsiru kana mhou asi zvichisvikawo pane zvinotariswa pamisika inotegeswa mombe dzenyama;

- Kukura kumoita mhuru yebhuru yazvarwa zvichienderana nehuremu hunotariswa mhuru isati yarumurwa;
- Kutevedzwa kwerudzi kana ruvara rwakafanana rwemombe rurambe ruripo kubva kune dzinenge dziripo uye dzichazvarwa;
- Dzinofanira kuva dzinoburitsa nyama inokwanisa kubata chikero pane zvinotarisirwa pamusika unotengeserwa mombe dzenyama;
- Handira dzacho hadzifaniri kuva dzinoitisa mhou mhuru dzakakurisa dzinozonetsa pakuzvarwa;
- Zvakare dzinofanira kuva dzine utano dzinokwanisa kuva dzino berekesa nekubereka mhuru dzakasimba, uye dzine nyama zvakare dzisina nyanga.

Murimi anofanira kuenzanisa pakati pezvinotariswa pakusarudza zvakanorwa pamusoro apo kuitira asazopfurikidza mwero mukusarudza uku sezvo zvichigona kuzokanganisa zvimwe zvezvimiso zvinenge zvichida kuti zvirambe zviripo pamombe dzenyama

Matanho anotorwa pakubvisa mombe dzisina chadziri kuunza kumurimi (*culling*)

Dambudziko resarudzo dzemombe rinonyanyowira varimi vadoko vanochengeta mombe dzenyama sezvo vachisangana nedambudziko rekushomeka kwemombe dzinoburitsa nekubereka mombe dzinoburitsa nyama inotarisirwa pamusika. Varimi ava zvakare vanoshushikana nekushaya kuti voita sei. Varimi vazhinji vanochengeta mhou dzinobereka mhuru mushure memakore matatu kana mana uye vanochengetawo handira dzavasina ruzivo neumboo pamusoro pekuti dzinoita vana vemhando inotarisirwa here nekuda kwemafuro ari munzvimbo dzavanogara. Kuderedza uwandu hwemombe panzvimbo (*culling*)kunoitwa nechinangwa chengetedza mafuro. Zvakare *culling* inoitwa nekuda kwekuti vanhu vanenge vachida mari yekushandisa kana kuita mitambo yechivanhu yakaita semabira, jakwara, mukwerera, pandufu kana kubhadharira vana dzimari dzezvikoro.

Mombe dzinobviswa idzi dzinofanira kunge dzakaita sei?

- Mombe dzose dzine nhorondo yekutsvodza dzinofanira kubviswa;
- Handira dzose dzisingagoni kuberekesa mhou dzinofanira kubvisa sezvo dzichizongopedza chikafu dzisina chadzinenge dzichiunza kumurimi zvino zokonzera kusabudirira uye kuderera kwemari ingawanikwa nemurimi kana atengesesa;
- Zvakare kune matsiru anenge azvarwa ari mapatya kana manyambiri nehandira anogona kukura zvakanaka nechikama makumi mapfumbamwe kubva muzana 90%;
- Mhou dzese dzinobereka vana vakanaka asi dzisina mazino mumuromo kunyangwe dzichibereka gore rimwe nerimwe dzinofanira kubviswa. Chikonzero ndechekuti dzinogona kuzozvara mhuru dzisina uremu pakuzvarwa dzinozotadza kusvika panotarisirwa;
- Matsiru kana mhou dzisingagoni kurera vana vadzo kana dzisina kupingudzika zvakanaka dzinofanira kubviswa sezvo dzichizopa dambudziko kuvafudzi;
- Zvakare mhou dzinenge dzine zvirwere dzinofanira kubviswa kuti dzisaparadzira zvirwere izvi kune dzimwe.

3.2. Zvingaitwa senzira yekusanganisa (*breeding*) pakupfuya mombe uye nguva yazvingaitwa

Hurukuro Mumapoka

- Ndedzipi dzimwe dzenzira dzekupfuya nadzo mombe dziri kushandiswa munharaunda maunogara, doma pachena kunaka nekuipa kwenzira idzi?

Nhanganyaya

Varimi vanokundikana kuti vape sarudzo dzakanaka dzenzira dzingaitwa kuchengeta mombe dzenyama uye nguva yakakodzera kuchengeta mombe idzi. Varimi vanongoshandisa nzira yekuti mhuru, matsiru nehandira zvinongofura pamwechete kusvika gore rese rapera vasina kumbotsaura handira kubva kumhuru nematsiru.

Kunyangwe zvakanaka hazvo asi murimi wese anofanira kushandisa nzira yaanoona inoita kuti akwanise kuzadzisa zvivo nechinangwa chake uye zvisingamudyiri mari yakawanda. Donzvo kana kuti chinangwa chemurimi wese wemombe dzenyama chinofanira kuva chekupfuya mombe dzinogutsa vatengi venyama. Semurimi mudiki wemombe dzenyama, chinangwa chinofanira kuva chekuburitsa mombe dzine nyama yemhando yepamusoro zvichienderana nenzvimbo mauri kuitira zvekupfuya mombe idzi. Zvinotevera izvo ndedzimwe dzenzira dzekusanganisa (*breeding*) dzekupfuya nadzo mombe:

Kuuchika (*Crossbreeding*)

Iyi inzira yekusanganisa mombe dzenyama dzerudzi rwakasiyana semuenzaniso kusanganisa handira yerudzi rwebhuramani nemhuru yerudzi rweManguni/ Nkone. Izvi zvinoita kusimudzira uye kuchengeta mhando yevana vachazvarwa kuburikidza nemubatanidzwa wemombe dzataurwa idzi.

Kusanganisa mombe dzerudzi rumwerwo (*Inbreeding*)

Iyi inzira yekusanganisa mombe dzakada kufanana parudzi rwadzo zvakaite sekutora handira kuti iberekese mwana wayo kana kuti handira netsiru zvakaiberekwa namai vamwe chete zvinogona kusanganiswa kuti zviberekesane mhuru. Nzira iyi haidi kuti murimi atenge imwe handira sezvo handira inenge iripo iyi ichikwanisa kuberekesa amai vayo izvi zvinoita kuti rudzi rwemombe dzinenge dziri muboka iri rurambe ruripo runenge ruchidiwa nemurimi uyu. Nzira yeinbreeding haiwanzokurudzirwa kuvarimi vadiki munyika yedu yeZimbabwe sezvo zvirizvo zvinokonzerwa mombe kusakura uye dzisina nyama inotarisirwa nevatengi. Inbreeding zvakanaka inoita kuti mombe dzive dzino kurumidza kubatwa nezvirwere uye dzinoita kuti pabudewo kana kuzvarwa mombe dzinenge dzine zvimiso zvinenge zvisingadiwi zvakaite semombe dzisingabereki, dzinobereka vana vakaremara kana mhuru dzisina kunyatsosvika.

Kusangasisa mombe dzisina rudzi rumwero (*Outbreeding*)

Iyi inzira yekubatanidza mombe dzenyama dzisiri dzerudzi rumwechete zvakaita sekutora mombe hadzi nejongosi dzisiri dzedzinza rimwechete asi dziri dzerudzi rumwechete. Izvi zvakakosha sezvo zvichiita kuti unaku hunodiwa hunenge huri mumombe idzi hrambe huripo. Unaku uhu hunosanganisira ruvara rweganda runenge ruchidiwa kuti rurame ruripo mumombe idzi.

Mhando dzeunyanzvi hungashandiswa kurera /kupfuya mombe (*Natural breeding*)

Iyi imhando inosanganisira kutora mhou inenge yoratidza kuti yava kuda kusangana nehandira kuti dziburitse mhuru. Iyi nzira ndiyo yedzimwe dzenzira dzekare dzaitwa muno muZimbabwe. Nzira iyi ndiyo inoshandiswa nevarimi vazhinji vadiki muZimbabwe. Nzira iyi inoda kuti tsiru kana mhou nehandira zvinenge zvichisangana zvose zvinofanira kuva zvakasimba pakuberekesana. Izvi zvinogoneka kana kana mombe idzi dzine kudya kwakakwana uye unyanzvi neungwaru pakusarudza mhou nematsiru papurazi. Handira zvakare inofanira kuva inogona kuva inopiwa mukana wekusvikira mhou kana matsiru ose anenge achiratidza kuti ava kuda handira.

Kushandisa mabhuru emugaba (*Artificial Insemination*)

Mbeu yehandira kana mhou yabve zera inotorwa namazvikokota vakaita zve mombe voenda nayo mumuzinda wezvesaenzi (*laboratory*) voichengeta voiisa mumajekiseni yobva yaiswa muchibereko chemhou inenge yava kuda kusangana nehandira. Nzira iyi inoda kuitwa nana mazvikokota vane unyanzvi hwekuita izvi vanenge vachiziva mashandiro anoita nhengo dzemuviri yemombe. Kunyange nzira iyi ine zvakawanda zvayakanakira, yakaomera varimi vadiki. Asiwo zvinokurudzirwa kuti kana wavawo murimi mukuru unofanira kushandisa unyanzvi uhu kuitira kuwedzera mombe dzingangozvara. Kutu ushandise unyanzvi uu zvinodawo kuva neumhare pakuziva kudziya kunodiwa uye tumvura (*liquid nitrogen*) tunodiwa kuchengetedza mbeu yehandira mumudziyo/ chigaba mumadhirizi angangoita zana nemakumi mapfumbamwe nenhanhatu -196C. Panodiwawo zvakare zvombo zvakakwana zvinozoshandiswa namazvikokota munyaya iyi.

3.3 Mwaka yakakodzera ingaitwa zvekuuchika (*breeding*)

Iyi inguva inoiswa parutivi nemurimi gore roga roga kuti mhou / matsiru kana handira kuti dzisangane kuti dzibereke mhuru. Mhou / tsiru inopfumvudza/ kuda handira mushure memazuva makumi maviri nerimwe (21 days) inenge yazvigadzira kuti isangane nehandira. Panguva iyi mhou kana tsiru ine zvainoita kuratidza kutiyava kuda kusangana nehandira. Murimi kana aona zvese izvi anofanira kuchisarudza kuti mhou / tsiru rake roita zamu panenge pakakodzera. Izvi zvinogona kuva munguva yechando yekukohwa nechirimo masutso kana munakamwe chero mwaka wegore.

Hurukuro Mumapoka

- Zvisina kunakira uye zvakanakira kuberekesa/kupfuya mombe kwegore rese?

Kuberekesa/ kupfuya mombe kwegore rese (All year breeding)

Izvi zvinoitwa kazhinji nevarimi vose vadiki muZimbabwe sezvo zvichipa mukana wekuti waitewo mamwe mabasa ekurima mumapurazi. Zvino wanzoitwa kusiya handira ichifura nemhou nematsiru kwegore rese. Matsiru anofanira kuzoiswa kuhandira kana ava kuratidza kuti oda handira. Mhou dzinoregerwa dziine handira kwegore rese dzine mukana mukuru wekuita mhuru chero mwaka wegore. Nzira iyi ine zvayakaipira zvakanakira kudarika zvakanaka zviri pairi sezvo mhuru dzichingozvarwa chero mwaka mukati megore. Mhuru dzinoberekwa munguva yakunenge kusanganayi dzinodawo chikafu chekutenga sezvo kunenge kusina uswa hunyoro hunovaka muviri.

Zvazvakanakira

- Kana murimi achida mukaka kwegore rese zvakanakira kusanganisa mombe kupfuya *breeding* gore rese;
- Handira inoramba iri muboka remombe zvinoita kuti kurwa kana kutungana kwehandira kuve kushoma. Kurwa kwehandira kunoita kuti fenzi kana waya idambuke uye kuparadzwa kwemidziyo inodyira nekunwira mombe;
- Nekuda kwekuti mhou shoma dzinenge dzichida kusangana, handira shoma dzinenge dzichidikamwa kusangana nemhou idzi;
- Mhou dzinowanawo mukanawo wekunatsa chibereko mushure mekubata zamu;
- Kutengeswa kwemombe kunogona kuitwa mukati megore rese;
- Matsiru anosangana nehandira kana achinge asvika zera rekubara.

Zvazvakaipira

- Chikafu chakanakira uye chakanakira chinodikanwa zvikuru munguva apo kunenge kusanganayi;
- Mabasa akawanda ehutariri kana humaneja anodiwa kusanganisira kufirita, kubaya mombe, uye kupisa nyanga zvinofanira kuitwa kusvika gore rese rapera.

Summer breeding /Kupfuya nguva yechirimo**Hurukuro Mumapoka**

- Zvisina kunakira uye zvakanakira kuberekesa/kupfuya nguva yechirimo?

Uyu ndiwo mwaka unokurudzirwa sezvo une mwedzi mina kutanga muna Mbudzi kusvika muna Kukadzi (*November –February*):

- Mumwaka umu ndimo munenge makawanda mafuro anodiwa nemombe dzenyama. Izvi zvinoreva kuti handira nemhou dzinenge dziine simba uye dzakasimba kuti dzikwanise kubereka mhuru dzine hutano;

- Mwaka uyu wakanakaira kuti mombe dzinobereka mhuru dzakawanda;
- Nguva iyi inopa mhuru nematsiru mukana inogona kuita mazuva anoita makumi mapfumbamwe kusvika mazuva zana nemakumi maviri (90-120 days) zvichipawo matsiru nemhou mukana wekuda handira kano kwana kuita kana. Matsiru nemhou dzinenge dzisina kuwana mukana pakutanga wekusangana nehandira dzinenge dzine mimwe mikana mitatu yekusangana zvakare nehandira;
- Handira dzabve zera dzinogona kusanganiswa (*breeding*) nemhou kana matsiru anokwana kuita makumi maviri neshanu kana makumi matatu (25-30) mumwedzi mina kana mitatu yemwaka uyu;
- Boka remombe idzi riri nyore kuoongorora uye kuona nguva dzose mumwaka uyu. Izvi zvinobatsira murimi kuti aone kana handira dziri kuita basa zvinoita kuti kana pane handira isiri kutora rupandi ibviswe poiswa imwe;
- Mwaka uyu unoita kuti mhurru dzisangozvarwa chero mwaka wegore zvikuru munguva inenge isina uswa hune utano. Izvi zvinopa murimi mukana wekuti aronge zvinoitwa kumaneja mombe idzi zvino sanganisira kucheka handira, kubvisa nyanga, kuisa muchiso kana munembo, kunyora magwaro(*records*) uye kurumura.

Nguva inotorwa nemhou kana yakazvitakura mazuva mazana maviri nemakumi masere nenhanhatu kana mazana maviri nemakumi mapfumbamwe(286-290 days) izvi zvinoreva kuti kana mombe ikabata zamu muna Zvita mhuru zhinji dzinenge dzobrekwa muna Gumiguru kana Gunyana.

Mhuru dzinozvarwa mumwaka uyu dzine zvinotevera zvakanaka (*advantages*):

- Mamiriro ekunze anenge akanaka zvinoita kuti dzisafa nechirwere chekutonhorwa zvakanyanaya (*pneumonia*);
- Tupukanana tunokonzera zvirwerere (*parasites*) tunenge turi tushoma sezvo mamiriro ekunze anenge akanaka;
- Mhuru dzinoyamwiswa nemadzimai adzo kwemwedzi mitatu yekutanga kuitira padzinozotanga kufura dzega uswa hunenge hwakawanda hunopa utano. Pedzisa chikamu ichi nekukurukura mibvunzo inotevera:

Hurukuro mumapoka

- Wadzidzei muchikamu ichi?
- Kubva pazvinhu zvawadzidza ungazvishandisa sei papurazi pako?

CHIKAMU 4

Kuchengeta neHutariri Mukurera Mhuru



Donzo rechidzidzo

Mukupera kwechikamu chino nhengo dzinotarisiwa kuziva zvinotevera:

- Kunzwisisa nezve kuchengeta mhuru;
- Kunzwisisa kukosha kwekupa mhuru mukaka wekutanga (colostrum) kumhuru dzichangozvarwa;
- Kuziva matanho akakodzera anotorwa pakurera nechengetwa kwemhuru kubva padzinozvarwa kusvika dzichizorumurwa.



Hurukuro mumapoka

Usati waenderera mberi kurukurai pfungwa dzinotevera:

- Ndedzipi nzira dzinowanikwa pakuchengeta nekurera mhuru dzinoitwa papurazi penyu. Doma uchinyora pasi nourongwa hwemakoshero adzo nzira idzi.

4.1 Nhanganyaya

Kufa kwemhuru ndiko kunokonzerwa kurasikirwa nemombe dzakawanda mukupfuya momba dzenyama. Kurera mhuru kunogona kutorwa kana kudaidzwa sebasa rakafundirwa uye setsika iri muropa. Kurera mhuru kunosanganisira ruzivo, unyanzvi, kushanda nesimba, kuisa mari yakawanda uyewo neidi rose kuitawo mhanza diki. Kuziva wekunanga kana kudaidza kana usina rizivo pane zvinenge zvanetsa ndezvimwe zvakakosha mukurera mhuru. Kurera mhuru nekudzitarisira, kunobva muutariri hwakakwana nesarudzo dzakanaka mhuru dzisati dzavepo, sarudzo dzakanaka mukusarudza mhando/ rudzi rwemombe dzekupfuya kusanganisira mhuru nehandira nematsiru.

Hwaro hwemari mukuchengeta momba dzenyama hunobva mukutengeswa kwemomba. Nokudaro varimi vanofanira kuva nemomba dzakawanda dzekutengeswa pagore rega rega.

Zvikonzero zvinowanikwa mukurasikirwa nemhuru mukupfuya momba dzenyama zvingoramba zviru zviru zvimwe chetezvo zvinoti kusagona kugashira nekurera uye utaririr hwakakwana kumhuru. Sarudzo dzose dzatingaita kusvika tava nemhuru hadzina pundutso kana matuso kana kugadzirira kwakakwana kusina kuitwa panguva yatinarisira kuva nemhuru idzi.

Kutanga kugadzirira nguva ichiripo zvinobatsira kuti murimi asarasikirwa nemhuru uye kuti dzisabatwa nezvirwere.

Zvirangaridze iwe pachako kuti mwaka wako wekuuchika/kupfuya (*breeding*) unotanga papi uye paunotarisiwa kuva nemhuru uyewo ziva kuti dzimwe mhuru dzinogona kuzvarwa nekukurumidza nevhiki imwechete. Gadzirira pekudyira uye mafuro akakwana usati wava nemhuru idzi uye wona kuti pakachena uye pane mvura, zvekudya pekurara pakakwana.

4.2 Tingabatsira sei mombe pakubereka mhuru

Hurukuro mumapoka

- Ndedzipi nzira dzamunoshandisa munharaunda mauri dzekuchengeta nekurera mhuru nadzo?
- Ndedzipi gadziriro dzaungaita kumhou dzine matambudziko pakubereka mhuru?

Kunzwisisa dano rekuzvarwa kwemhuru chinhu chakakosha zvakanyanya usati waona kuti mhuru kana tsiru zvingada rubatsiro pakubereka mhuru. Kunyange zvazvo pane musiyano yakawanda pamhou pakuita kwadzo kana dzoda kubereka mhuru uye nguva yadzinotora, pane zviratidzo zvino zivikanwa zviri pachena kana mombe yava kuda kubereka. Zviratidzo zvinotevera zvinonekwa mumasvondo matanhatu mombe yava kuda kubereka:

- Sikarudzi yemombe inoremba,
- Zamu rinowedzera kukura,
- Nzvimbo iri pakati pemuswe paunotangira nemapfupa ari pedyo nemuswe anowira, mukati kana kuregedza,
- Kusikarudzi kunonekwa madziwa machena.

Kuberekwa kwemhuru chinhu chinogona kunetsa kana kusanzwisika. Zvinhu zvakawanda zvinogona kukanganisa danho iri. Kuberekwa kwemhuru zvakanaka idanho rinoramba richienderera mberi, asi danho iri rinoiswa muzvikamu zvitatu sezvinotevera.

- Danho rekutanga: *Mhou inotsvaka pakavanda uye pakanyarara*. Mvura inowedzera kubuda zvakanyanya kusikarudzi yemhou uye mhuru inotanga kupa zviratidzo zvekurwadziwa.
- Danho rechipiri, kana chibereko chawedzera kukura uye shupa yotanga kubuda pasikarudzi. Padanho iri mhuru inotanga kufamba zvichikonzera kuti chibereko chidzvanzviye nekuvhurika zvichisunda mhuru kuti ibude nekusikarudzi.
- Danho rechitatu: *is completed* kana rukuvhute rwabva mushure mamaawa anoita masere kana gumi nemaviri mhuru yazvarwa chikamu chekuzvarwa kwemhuru chinenege chapera.

Kana danho rekuzvarwa kwemhuru risiri kuitika zvakanaka mibvunzo inotevera inogona kuuya kana kubvunzwa:

- Ndingatora rupandi here kubatsira mhuru iyi pakubereka?
- Mhuru ingazvarwa here kuburikidza nekuikweva/ kudhonzwa?
- Ndingaidza here mazvikokota wemombe weVertinary kana umwewo munhu ane ruzivo rwekubatsira mombe pakubereka?

Kana ukabatsira mhuru pakubereka ona kuti zvinhu zvinotevera zviripo:

- Tambo dzinobatsira pakuberekesa mombe;
- Hanzu dzemumaoko (*gloves*) nesipo inotsvedzerera;
- Tsono dzakakwana uye majekiseni (zvichida dhokotera kana mazvikokota wemombe anogona kuda kuzovishandisa kubaya mombe iyi mushonga).

- Mishonga inobatsira pakuberekesa mombe iyo inotenderwa uye yakanyorwa nana chiremba vemombe;
- Mukaka wakakwana uye wakakodzera unopiwa mhuru kana ichangozvarwa (colostrum);
- Nhamba dzerunhare dzachiremba wemombe kuti azopa rubatsiro parunenge rwakakodzera.

Kana ukaona zvinhu zvisina kujairika zvausati wamboona kana mombe ichibereka unofanira kukasika kudana chiremba wemombe wemombe (**Veterinary Assistant /Livestock Extension Officer**). Rangarira kuti mhuru mhenyu uye mhuru ine utano ndizvo zvinhu zvikuru zvinokubatsira kuti mhuru iberekwe zvakanaka.

Hurukuro mumapoka

- Ndeapi matambudziko awakasangana nawo mukutarira uye kurera mhuru kubva pakuzvarwa kusvika pakurumurwa?
- Ndeapi matambudziko ane chekuita neutano anosanganiwa nawo pakurera mhuru kubva pakuzvarwa kusvika pakurumurwa?
- Itai hurukuro kuti nemhaka yei mhuru dzichida kupiwa kudywa mushure mekuzvarwa?

4.3 Kurerwa kwemhuru kubva pakuzvarwa kusvika pakurumurwa

Danho rekutanga : Mhuru yava pedyo nekuzvarwa

Iyi nguva apo tsiru kana mhuru inenge yoda kubereka mhuru kazhinji mwedzi miviri tsiru kana mhuru yotarisirwa kubereka. Kumhou iyi inguva apo mhuru dzinenge dzisiri kukamwa kuitira kuti mhuru yagadzirira kuva nemukaka. Kupa mombe kudywa kwakakwana uye utariri hwakanaka zvakanakosha zvakananyanya muutano nemaramiro emhuru ichangozvarwa. Izvi zvinoita kuti mukaka uwedzerwe panguva yekuumba mukaka zvichitungamira zvakanare zvoderedza matambudziko angangouya mushure mekuberekwa kwemhuru.

Kudywa kunovaka muviri kwemhuru isingabudi mukaka kushoma tichienzanisa nekwemhuru inobuda mukaka zvakananyanya. Zvinodiwa nemhuru iyi zvinosanganisira kudywa kwakakwana kunovaka muviri. Kana mombe iyi isingachabudi mukaka/isati yabereka muviri wayo unofanira kuva uyo murimi anozoda painobereka. Mazuva mashoma mombe isati yabereka mhuru isingabudi mukaka inofanirwa kuiswa munharaunda yakachena. Nzvimbo iyi inogona kuva yakasanangurwa kuti ive yekuberekerwa mombe kana yemafuro kuitira kuti murimi akwanise kuona zvinenege zvichitora nzvimbo. Murimi anofanira kucherekedza zvakananyanya mombe kana nguva yekuti dzibereke ichinge yava kusvika. Rubatsiro pakubereka kwemombe runodzivirira matambudziko.

Danho rechipiri: Kubva pakuzvarwa kusvika pakurumurwa

Iyi inguva kubva mhuru ichizvarwa kusvika painozorumurwa. Mushure memhuru ichinge yabereka mhuru, mhuru inonzva mhuru kwechinguva chidiki. Izvi zvinobatsira mhuru kuti

pachipfuva kana pahuro nemumhino pavhurike. Kana pahuro nemumhino dzemhuru pasina kuvhurika murimi anogona kupavhura nemaoko achishandisa zvimunwe zvake. Mombe dzenyama kazhinji dzinowanzo berekera musango saka vafudzi vanofanira kuona kuti mhuru yapiwa nguva yekuva nehushamwari pakati pemhuru yayo kuburikidza nekuirega ichinanzva mhuru yayo.



Mufananidzo wemombe yapedza kunanzva mhuru mushure mekubereka

Kupa mhuru Mukaka wekutanga

Pakuzvarwa kwadzo mhuru dzinenge dzisina mauto emumuviri (antibiotics). Mukaka wekutanga uyu unonzi colostrum ndiwo wega unogona kudzidzivirira kubva kuzvirwere kusvikira muviri wadzo wega wava nemasoja anodzivirira nekurwisa zvirwere.

Mauto akawanda emumviri anowanikwa mumukaka wekutanga uyu akakwana kuti mhuru ikwanise kuzvidzivirira kubva kuzvirwere. Mune zvakajairika mumukaka wekutanga wemhando yepamusoro, wakati korei zvisoma, wakaita seuchi uye une rudzi rwemondo.

Colostrum inodarika zviri mukaka kana wakaitarisa. Colostrum yakada kufanana neropa kudarika mukaka pakuti mune masoja akawanda emumuviri awo anodzivirira kubva kuzvirwere. Masoja anowanikwa mumukaka wekutanga anogara kwemwedzi mishoma mumuviri wemhuru, asi akakosha kuti mhuru irarame iine utano painozvarwa. Nguva apo mhuru inowana mukaka wekutanga uyu yakakosha pakuchengeta mombe dzenyama. Kutorwa kwemukaka uyu nemhuru ndizvo zvinoitawo kuti mhuru ivevewo nemasoja emumuviri akakwana. Murimi anofanirwa kuva neidi rekuti mhuru yawana mukaka wekutanga uyu mushure memaminiti angangoita gumi nemashanu ekuberekwa.

Izvi zvakanosha nekuda kwekudzikira kwesimba remhuru kuti dzikwanise kutora mukaka uyu uyo une masoja anodzivirira kuzvirwere anowanikwa mumukaka. Mushure memaawa gumi nemaviri mhuru yazvarwa simba remhuru kuti ikwanise kutora masoja emumuviri rine chidimbu pane isati yazvarwa.

Utariri nekuchengetedza utano hwemhuru

Zvinotevera ndizvo zvezvimwe zvakanosha pautano wemhuru mushure mekuzvarwa:

- Kubaya nekudzivirira zvirwere zvinobata mombe munharaunda maunogara uchiwana rubatsiro kubva kuvana chiremba vemombe;

- Kupa mombe mushonga we **brucellosis** kana mhuru dzine mwedzi mitatu kana mina;
- Kupa mushonga wechirwere chemapandauko (blackleg) mushure memwedzi mitatu kana mitanhatu.

Manyoka

Mhuru dzine mukana wakakura wekubatwa nemanjoka (scours) kana dzichiri diki. Manyoka ndiwo anokonjera urwere uye kufa kwemhuru zvakanyanya. Pane zvinhu zvakawanda zvinokonjera urwerere hwemhuru. Manyoka anogona kukonzerwa nekuda kwekuti mhuru yamwa mukaka zvakapfurikidza mwero. Manyoka anogona kukonzerwa nekushaikwa kwemukaka wekutanga colostrum zvozokonjera kusava nemasoja emumuviri anobatsira kurwisa zvirwere. Kana muchida rumwe ruzivo neumbo hwakakwana munogona kutora bhuku rakanzi *Beef Cattle Health Management for Small Scale Farmers Book 2, Session 3 subsection 3.6.*

Marapirwe nekudzivirira chirwere chemanyoka

Tevera matanho anotevera pakudzivirira nekurapa chiwere chemanyoka mumhuru:

- Ona kuti mhuru haisi kumwa mukaka wekutanga zvakapfurikidza mwero. Tanga kupa mishonga inopa masoja emumuviri mushure mekuona chirwere chemanyoka kuitira kuchidzivirira chisapararire kune dzimwe mhuru;
- Dzivirira zvese zvinoshungurudza mhuru;
- Chaira runhare kunana mazvikokota vemombe kana usina idi rekuti woita sei.

Utariri hwakakwana hwemhuru zvinhu zvinofanirwa kuitwa nemurimi wemombe dzenyama kuti ave anoita mhuru dzine utano.

Tevera matanho anotevera kuti uve unowana mhuru dzakanaka dzenyama:

- Ona nekusarudza mhuru pakuzvarwa kwadzo. Unogona kushandisa madhikazi epanzeve kana umwewo mucherechedzo wekuti ukwanise kuziva mhuru dzaunenge watsaura;
- Ipa mvura yakachena uye ichangocherwa;
- Ona nekuongorora mhuru zvirwere kubva kuzvinhu zvinokonjera zvirwere uye kusagadzikana mumhuru;
- Cheka mhuru hono dzisati dzasvika zera remazuva makumi matatu;
- Bvisa nyanga uye mahwanda anenge akaita masakatire dzisati dzasvitsa mwedzi mitatu;
- Ipa mhuru mushonga kudzivirira zviwere zvinowanikwa munharaunda mako uchibatsirwa nachiremba wemombe.

Hurukuro mumapoka

Mukupendera chikamu chino kurukurai mibvunzo inotevera:

- Chikonzero ndechei kupa mhuru mukaka wekutanga wakakwana padzinenge dzichangozvarwa mushure meawa imwechete?
- Chii chinokonjera manyoka kumhuru diki?
- Zvii zvaunofanira kuita kuitira kuti mhuru dzisawirwa nezvirwere zve manyoka?

Tingachengete Sei Zvipfuyo Zvedu



Donzvo rechidzidzo

- Kunzwisisa utariri hunodiwa pakuchengeta mombe dzenyama;
- Kunzwisisa zvakadzama zvakakoshera kubvisa mombe dzenyama nyanga;
- Kunzwisisa zvakakoshera kuendesa mombe kudhibhi uye kushandiswa kwemishonga yechirungu yemudhibhi pamombe;
- Kuzivawo zvinhu zvinokonzera zvirwre zvakaita senyongororo mumombe uye marapirwe nekudzvivirirwa kwazvo;
- Kukowerana pamusoro pehutariri hunoitwa hwemombe dzenyama.

5.1 Nhanganyaya

Zvekuita mumapoka

- Usati waendereramberi iva nekuzeya kana kukurukura nezvehutariri hwaunoita mombe dziri papurazi pako.
- Nyora pasi hutariri hunoitwa mukuchengeta mombe dzenyama uchidoma kutanga nechikuru kusvika kuchidoko.

Hutariri hwezuya nezuya papurazi hwemombe dzenyama zvinoreva zvinhu zvinofanira kugaroitwa nemurimi kusimudzira mombe dzake dzive dzemhando yepamusoro. Utariri uhu hunoburitsawo pachena huchisanganisira makore emombe yacho uye mumhu nepazera rainenge yava tichitarisa zvinodiwa mukuchengeta mombe dzenyama. Zvinogaroitwa muutariri uhu zvinosanganisira kuchekwa kwehandira kudziira nzombe, kubvisa nyanga, kurumura, kudzibaya uye kupa mushonga uye kudzipa chikafu nekubvisa idzo dzisingadiwi muboka.

Mune zvawadoma pamusoro zvienzanise nezvinotevera zvinoti:

Kuchekwa kwehandira kuiita nzombe, kubvisa nyanga, kurumura, kudzibaya uye kupa mushonga uye kupa chikafu nekubvisa idzo dzisingadiwi muboka.

5.2 Kucheka handira/ mukono

Hurukuro mumapoka

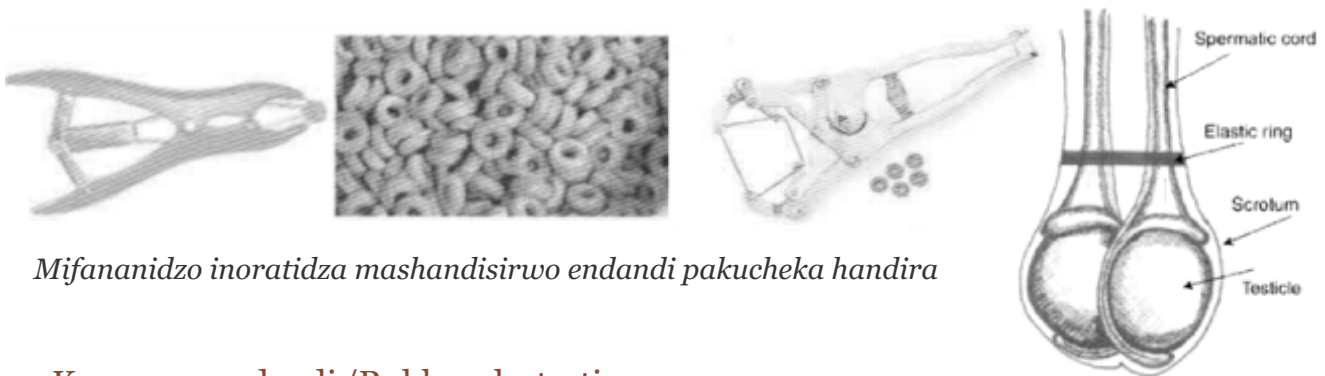
- Chii chinonzi kucheka handira kuti dziite nzombe?
- Ndepapi pakakodzera kucheka handira kana mhuru dzako hono?
- Ndedzipi nzira dzaunoziva uye dzawakamboita kucheka handira?
- Zvakakosherei kucheka mhuru hono?

Kucheka handira zvinoreva kubvisa mhodzi (testicles) pahandira. Izvi zvinofanira kuitwa kuhandira dzese dzingashandiswa pabasa rekuberekesa (**breeding**) mhau. Mhuru dzese hono dzinofanira kuchekwa kuitira kupedza dambudziko rekuti handira dzisingangana

njee(**mating**) uye kuberekesana zvenhando. Kuti murimi asatemeseka musoro nedambudziko iri anofanira kutora danho rekucheka handira iri mhuru uye mhuru idzi dzisati dzatanga kudzinga.

Nzira dzekucheka handira nadzo

Pane nzira dzakawanda dzinoshandiswa kucheka handira dzichiri doko dzinogona kushandiswa nemurimi mudoko wemombe dzenyama. Nzira idzi dzinosanganisira kusunga nendandi (**rubber elastration**) uye kushandisa muchina webhadhizo (**burdizzo**)



Mifananidzo inoratidza mashandisirwo endandi pakucheka handira

Kusunga nendandi /Rubber elastration

Izvi zvinosanganisira kusunga zvombo (*scrotum testicles*) nendandi zvakasimba kusvika zvadonha. Ndandi iyi inoiswa nechakaita sechigero. Ndandi iyi inofanira kubata zvakasimba yakaiswa nechepanotangira kurembera kweganda remhodzi dzehandira. Ndandi iyi inofanira kusunga zvakasimba inenge ichipinda munyama uye inomisa kufambiswa kweropa kusvika mhodzi idzi dzadonha dzese mushure memasvondo matatu. Izvi zvinofanira kuitwa kumhuru hono dzine mwedzi mumwe chete dzazvarwa

Kushandisa mushini webhadzhizo/ burdizzo



Burdizzo



Iyi nzira haina ropa rinobuda pakucheka handira doko. Iyi nzira inonyanyoshandiswa nevarimi vakawanda vadiki muZimbabwe. Izvi zvinoitwa kana handira yakarara pasi

yakasungwa makumbo muswe wayo wakasimudzwa uri kumusana kwayo. Mhodzi dzehandira dzinorembredzwa dzoiswa kurutivi rumwe. Mhare inenge yakabata mushini uyu inodzvanya yakasiya masendimita angangoita mashanu 5cm kubva pamhodzi idzi. Burdizzo iyi rinobva radzvanyiwa kweminute imwe chete kuitira kudimbura tsinga inofambisa mbeu yehandira nechemukati. Izvi zvinoitwa mativi ese emhodzi dzehandira. Mushini uyu haufaniri kudzvanya mhodzi yese nepamusoro nekuti izvi hazvishandi uye hazvibatsiri. Kutsimbirirwa kwetsinga inofambisa mbeu kunoita kuti ropa risafamba zvino zokonzera kuti mhodzi dzehandira dzitadze kushanda. Kuchenjerera uye kungwarira kwakanyanya kunodiwa kuitira kuti pasazova nekukanganisa pakucheka handira zvinogona kukonzera kurasikirwa nemombe. Kana tsinga idzi dzisina kudambuka munogona kudzokorora zvakare danho iri. Kuti zvinyatsobudirira mushini weburdizzo unofanira kunge uchishanda zvakanaka. Kana mushini uyu uchiratidza kuti wasakara haugoni kuita basa iri nemazvo uye zviri nyore.

5.3 Kubvisa nyanga (Dehorning)

Iyi inzira yekubvisa nyanga kana mabukira enyanga pamombe. Kubva pamwedzi muviri yekuberekwa kwemhuru nyanga dzinenge dzava kutobatira nemusoro saka zvinofanira kuitwa mhuru iine mwedzi muviri yazvarwa. Danho rekubvisa nyanga iri rinofanira kuitwa mumwedzi inosanganisira Chivabvu kana Chikumi munguva yekutonhora/ kana panguva yekurumurwa. Izvi zvakanakira kuti maronda ekubviswa kwenyanga uku haazobatiri zvirwere uye anokurumidza kupora.

Hurukuro

- Ndezvipi zvikonzero zvekubvisa mombe nyanga?
- Ndedzipi nzira dzaunoshandisa kubvisa mombe nyanga?

Zvikonzero zvekubvisa mombe nyanga

Zvinotevera ndizvo zvimwe zvezvikonzero zvekubvisa mombe nyanga:

- Zvinoderedza njodzi yekukuvadza nekupa maronda kune dzimwe mombe
- Zvinodzivirira kurasikirwa nemari pakurapa mombe dzinenge dzatungwa padzinenge dziri kufambiswa kubva kunzvimbo dzakasiyana siyana
- Mombe dzisina nyanga dzinotora nzvimbo diki padzinenge dzichipiwa chikafu uye padzinotakurwa nechifambiso.
- Zvinoderedza njodzi yekukuvadza kwevashandi papurazi

Zera rekubvisa mombe nyanga

Zvinokurudzirwa kuti murimi abvise mombe nyanga dziine masvondo masere dzazvarwa nekuda kwekuti kubvisa nyanga mombe dzichiri diki zvinoderedza njodzi kana kushungurudzika kumhuru uye kumurimi.

Nguva yakakodzera kubvisa nyanga

Kubvisa nyanga zvinofanirwa kuitwa muna Chivabvu kana Chikumi munguva yekutonhora /nguva yekurumura nechikonzero chekuti kunenge kusina zvinokonzera zvirwere uye kunyenga pamaronda zvinoita mhuru dzikasike kupora marwadzo nemaronda.

Nzira dzekubvisa nyanga nadzo

Njodzi dzinowira mhuru uye nemubvisi wenyanga dzinosiyana zvichienderana nenzira uye umhizha hwashandiswa. Varimi vazhinji vemombe vanofarira kubvisa mombe nyanga dzichiri mhuru doko nokuti izvi zviru nyore kune anozviita, hazvishungurudzi pfungwa nemoyo kwemhuru uye mararamiro emombe. Nzira dzinotevera ndidzo dzakajairika pakubvisa nyanga dzemombe.

Nzira dzekubvisa nadzo mombe nyanga

Kushandisa mishonga yechirungu (*Chemical dehorning*)

Mishonga yakaita se **Caustic chemicals** inodzivirira kukura kwenyanga pamhuru dzichangoberekwa kubva pakuberekwa kusvika pamasvondo matatu. Mushonga uyu unouraya zvese zvinoita kuti nyanga dzikure. Mishonga iyi inogona kuwanikwa yakati korere uye sezvitanda (sticks or pastes). Kuzvidzivirira kuti usawirwe netsaona kana uchishandisa mishonga iyi unofanira kupfeka zvinodzivirira maoko.

Mucherechedzo/ muedzaniso pakushandisa mishonga wekubvisa nyanga

Kudzivirira mhuru murimi anofanira kungwarira zvakananyanya kuti asaisa mishonga uyu pedyo nemaziso emombe. Verenga zvinodiwa uye mashandisirwo emushonga uyu usati waushandisa.



Mufanidzo wemushonga wekubvisa nyanga pamombe

Zvakanakira kushandisa mishonga pakubvisa nyanga

Zvakanakira kushandisa mishonga ndezvekuti unoshandiswa mhuru dzichiri diki zvinokonzera kushungurudzika kushoma kumhuru tichienzanisa nedzimwewo nzira

dzekubvisa nyanga nadzo. Kushandisa mushonga kwakanakira kuti mushonga hauburitsi ropa.

Zvakaipira kushandisa mushonga

Zvinotevera ndizvo zvakaipira kushandisa mushonga pakubvisa nyanga:

- Mushonga unogona kukuvadza vanhu kana ukabatwa nekudaro munhu anoushandisa anofanira kupfeka zvinodzivirira zvanza.
- Unorwadza saka zvinoda zvinopodza uye kudzimura marwadzo
- Nyanga kana mavanga anogona kuzounza kushata kana kukanganisa chimiro chemombe.

Kushandisa simbi inopisa/Hot iron dehorning

Kushandisa simbi inopisa inzira inoshandiswa nevarimi vadiki vanoita zvekupfuya mombe dzenyama. Musoro wesimbi iyi une buri kumberi iro rinopinda nyanga. Kushandiswa kwesimbi iyi zvakanaka kunouraya kukura kwenyanga ichibva paganda. Nzira iyi inonyanyoshanda zvakanaka kana mhuru dziine masvondo gumi nemaviri ekuberekwa.



Simbi yakagadzirwa zvakanaka inotenderwa ndeinenge ichigona kuti murimi anoishandisa akwanise kupisa denderedzwa kubva panotangira nyanga. Denderedzwa riri pazasi penzeve rinoratidza panotangira bukira renyanga mumhuru kana dziri diki. Panotangira bukira renyanga panoonekwa kana uchinge wabvisa kana kusairira mambava kumashure.

Maitirwo azvo/Technique

Pakubvisa nyanga nesimbi tevedza zvinotevera

- Pisa simbi kusvika yatsvuka nokuti simbi iyi inonyanyoshanda kana ichinge yakatsvuka.
- Pfeka zvinodzivirira maoko
- Unofanira kubata nzeve yemhuru kuti isatsva wobva waisa simbi panyanga waisa simba shoma. Kana mambava ari panyanga otanga kutsva achiburitsa utsi tenderedza simbi iyi zvishoma.

- Ramba uchiita izvi kusvika kwekanguva kanoita maseconds gumi kana gumi nemashanu. Usaramba wakaisa simbi iyi kwenguva yakareba panyanga. Kupisa kwesimbi iyi kunogona kupinda nemumapfupa matete asati asimba zvogona kukanganisa kana kuuraya uruzvi/uropi hwemombe.
- Danho iri tinoti rapera kana pane nyanga pava kubuda denderedzwa reruvara rwecopper. Bukira renyanga rinogona kuzobva kana kusazonekwa mushure memasvondo mana kana matanhatu.

Zvakanakira nekuipira kushandisa simbi pakubvisa nyanga

Chakanakira nzira iyi ndechekuti haiburitsi ropa uye inogona kushandiswa chero nguva yemwaka wegore kumhuru dzine masvondo gumi nemaviri dzazvarwa. Zvakaipira nzira iyi ndezvekuti haisi nzira yekunyanyovimba nayo kana ikasaitwa nemazvo, uye inokonzera kumera kwetunyanga tudiki uye nzira iyi inoda nyanzvi pakudzivirira marwadzo.

Zvingaitwa mushure mekupisa mombe nyanga

Mhuru dzinoda kutariswa mushure mekupiswa nyanga. Murimi anofanira kutarisa kana pasiri kubuda ropa mushure memaminutes anoita makumi matatu kana makumi matanhatu. Kana mhuru iri kubuda ropa unogona kumisa ropa iri kuburikidza nesimbi inopisa. Kazhinji kacho maronda anopora kana pasina kushandiswa mishonga saka hapadi kurapa nemushonga. Mushonga unodzinga nhunzi unonyanyo kurudzirwa kushandiswa. Mushure memazuva gumi kana gumi nemana nyanga dzapiswa tarisa kana pasina zvinoratidza kuti zvakananganisika zvakaite sezvirwere worapa kana zvakakodzera kurapiwa. Unogona kutsvaka rubatsiro kana paine mhuru dzine kurwadziwa kana kukuvara zvakanyanaya.

Hurukuro

Doma zvakanakira nezvakaipira nzira dzakasiyana siyana dzekubvisa nyanga npamombe dzenyama

Zvakakosha kuziva kuti mhuru dzingarumurwa riini uye nenzira ipi tichitarisa machengerwo anoitwa mombe dzenyama. Chikonzero chinoitirwa izvi ndizvo zvinoburitsa uremu hwemhuru painorumurwa uye kuti amai vacho vanoyamwisa vanenge vakaita sei.

5.4 Kurumura (Weaning)

Hurukuro mumapoka

- Ndezvipi zvaunotarisa usati warumura kana kuronga kurumura mhuru uye ndedzipi\ nzira dzaunoshandisa pakutora danho iri?
- Ndedzipi nzira dzekurumura mhuru dzaunoshandisa papurazi pako?

Nguva yekurumura (Timing of weaning)

Chinangwa chikuru mukurima mombe dzenyama kupfuya nekuva nemhuru dzakawanda kana zvichibvira. Donzo guru rekurumura nderekuti mhuru dziite mhuru gore rimwe

nerimwe nekupa mhou idzi nguva yekusimba muviri kana ichinge yarumura. Mhuru dzinowanza kurumurwa kana dzasvika mwedzi inoita minomwe kana misere 7-8mths. Usati watora danho rekurumura iri unofanira kutarisa chimiro chemhou kuti haizoshushikani ikazotadza kuiitazve vana mugore rinenge richiteevera. Munguva yakunenge kuine nzara kusina kudya kwemombe kwakakwana, mhuru dzinofanirwa kurumurwa nekukasika dziine mwedzi mitanhatu yekuzvarwa 6 months kupa mukana kuti mhou isimbe mwaka wokuti ibereke usati wasvika. Zvakakosha kuti mhou isimbe uye nyama dzezamu dzinofanira kuva dzinenge dzasimba uye kudzokedzana imwe mhuru isati yazvarwa. Munzvimbo zhinji mhuru dzinozvarwa mumwedzi waGunyana kusvika muna Gumiguru dzinorumurwa muna Chivabvu dzava nemwedzi minomwe kana misere 7-8 moths. Dzinovurwa muna Mbudzi –Zvita dzinogona kuzorumurwa muna Chikumi kana muna Chikunguru June or July. Danho rekurumura mhuru rinogona kuita mazuva manomwe 7days.

Nzira dzekurumura mhuru nadzo

Mamiriro ezvinhu papurazi ndiwo anoita mhuru dzirumurwe nemurimi wemombe dzenyama. Nzira dzinotevera dzinogona kushandiswa:

- Imwe yenzira idzi inosanganisira kuchengeta mhuru mudanga kana mufenzi yakagadzirwa zvakasimba wotsaura mhou wodziisa muwaya kana muzinda uri nechekure zvikuru sei uko kwadzisingagoni kunzwickwa nemhuru kukuma;
- Munogona kubvisa mhou kwechinguva chidoko kubva mumuzinda kana dzabva wovhura mhuru dzoendeswa kune imwe fenzi. Mhou dzinowananzotsvaka mhuru munzvimbo dzadzinenge dzapedzisira kuonana nemhuru dzadzo iyi nzira inodzivirira mhou kuti dzisapaza;
- Imwe nzira ndeye kuchinjanisa mhuru nemapoka maviri emombe. Mhuru dzinobva dzapinda mumhou asi panogona kuita dambudziko kuti mhuru dzinogona kumwa pamadzimai asiri adzo;
- Murimi anogona kupatsananura mhou nemhuru dzadzo nefenzi kana waya dziri pedyo napedyo kuitira kuti mhou nemhuru dzisashungurudzika nekurumura kana kurumurwa;
- Dzimwe mhou dzisingayamwise dzinogona kupiwa kumhuru dzinoyamwa kuitira kuti mhou idzi dzigone kunyaradza nekupomhodza mhuru dziri kurumurwa idzi;
- Murimi anokwanisa kupa zvekudya zvakakwana, zvinozeyeka, zvinovaka muviri nemvura yakakwana kumhuru dzinenge dzarumurwa.

Kubaya kana kupa mombe mishonga

Kupa mombe mushonga uye kubaya zvinoitwa kumombe diki nehombe kudzivirira kuzvirwere nezvinokuvadza mombe. Zvirongwa zvekubaya mombe nekupa mombe mushonga zvinofanira kuitwa vanhu vakabatana nevanhu vezveutano hwemombe *ve veterinary* munharaunda. Zvakakoshera chirongwa ichi uye muripo unodiwa kuita zvirongwa izvi, nguva yazvingaitwa ndezvimwe zvezvinhu zvinofanira kuva zvinotariswa mukuita danho rekubaya nekupa mombe mishonga.

5.5 Kudhibhisa/ kutiva(Dipping)

Kudhibhisa mombe dzenyama ndechimwe chezvinhu zvinoda kuva neunyanzvi mukurima mombe dzenyama. Chinangwa chekudhibhisa mombe kudzivirira mombe kubva kuzvikwekwe uye zvirwere zvinounzwa nezvikwekwe uye zvinhu zvakaita semhesvi (**tsetsefly**), makonye (**worms**) zvinokonzera zvirwere kumombe.

Nzira dzekudhibhisa mombe/ kana kuisa mushonga wezvikekwe nadzo

Kufirita (*Spraying*)

Iyi inzira inoitwa nevarimi vadiki muZimbabwe vane mombe shoma dzinogona kuita gumi. Zvino sanganisira kushandisa chigubhu (**knap sack sprayer**) chekufiritisa kupomba mushonga uchienda paganda remombe. Pombi ine simba kana kuti inomwaya mushonga zvine simba yakanakira kuti mushonga unokwanisa kupinda wose muganda apo panenge pakabatira zvikekwe. Kufirita hakugoni kuti mushonga usvikire kunhengo dzese dzemuviri wemombe dzakwahwanda saka dzimwe nzira dzakaita sekushandisa mafuta ezvikwekwe (**tick grease**) muzasi menzvimbo dzisingasvikirwi nemushonga wekufirita dzakaita sepazasi pedumbu, muzvidya, muhapwa kana pazasi pemuswe.

Mushonga wekudira pamusana (*Pour-ons*)

Kushandiswa kwemapour-ons inzira yekushandisa mushonga wechirungu uyu unenge wakatogadzirwa nana mazvikokota vemishonga. Mishonga iyi inobva yakagadzirwa nana mazvikokota zvekuti murimi anongoisa pamusana wemombe mushonga wopararira wega nemuviri wese. Nzira iyi inoda kuti murimi ave anenge achiziva uye ane umhizha hwekushandisa mushonga uyu kuitira kuti asazoisa mushonga wakawandisa kana kuisa mushoma.

5.6 Kushandisa madhibhi (Dip-tank)

Iyi nzira ndiyo yakakodzera kana mushonga uchiiswa kumombe dzakawanda uye inzira inokurumidza. Izvi zvinoita kana varimi vakabatana vobva vavakisa dhibhi munharaunda yavo. Kushandisa dhibhi inzira yakanaka zvokuru se kudzivirira zvinhu zvakaita sezvikwekwe nemhesvi sezvo mombe dzichinyura zvakaperera mumvura inenge iine mushonga. Kunobuda nemombe idzi mushure medhibhi kunogona kuitwa zvinhu zvakaita sekudzipa mumwe mushonga, kuona dzinenge dzava nemazamhu uye kudziira uremu hwadzo. Kudhibhisa kunoita mombe dzinyure zvakaperera mushonga uchinyatsopinda mumuviri wemombe wese.



Zvinofanira kuitwa nekutevedzwa pakudhibhisa mombe

Zvinotevera zvinofanira kutariswa kana murimi achidhibhisa mombe dzake:

- Murimi haafaniri kudhibhisa mombe dzake akasanganisa huru nediki sezvo huru dzichigona kuzotsikirira diki kuti dzinyure mudhibhi;
- Ona kuti kana kuchipisa mombe dzinemvura yakakwana yekumwa sezvo mombe kana dziine nyota dzinogona kumwa mvura ine mushonga;
- Haufaniri kudhibhisa mombe kana kuchitonhora kana kuchida kunaya;
- Haufaniri kurega mombe dzichienda mushure mekubuda, mombe hadzifaniri kubuda mushonga usati waoma sezvo mushonga uyu uchizogona kubatira pabundo kumafuro zvinokonzera kuti mombe dzife;
- Mombe dzinofanirwa kudhibha dzichiita imwe imwe dzichitevedza mutsetse;
- Mombe dzava padyo nekubereka hadzifaniri kudhibhiswa unofanira kudzifirita;
- Ona zvakare kuti pane danda rekubatsira mombe kana dzava kunyura mudhibhi.

Machengetero nemabatirwo emishonga

Murimi anofanira kungwarira zvakanyanya kana achishandisa mishonga pakudhibhisa mombe. Anotarisirwa kuverenga uye kutevedza zvakanyorwa nezvinodiwa achitarisa zvinotevera senzira yekuzvidzivirira.

Usadhibhisa mombe dzinorwara

- Murimi haafaniri kushandisa mushonga wakawandisa kudarika unotenderwa kushandiswa uye haafaniri kuvhenganisa kana kushandisa mishonga yakasiyana panguva imwechete
- Nokuda kwekuti imwe mishonga inogona kuchengetwa mumukaka kana mumuviri wemombe mumafuta, zvakakosha kuti murimi achenjere uye kuzivawo nguva inotenderwa kutengesa kana kuuraya mombe mushure mekuipa mushonga.
- Usashandisa mishonga nenzira dzaunofungawo iwe kunze kwekuti dzakataurwa kana kunyorwa pamushonga wacho.
- Usashandisa mushonga usina kutenderwa mudhibhi kunze kokuti zvakatenderwa kana kunyorwa

- Kana uchishandisa mishonga yekuvhenganisa ine mafuta *emulsifiable* unofanira kuona kuti zvavhengana zvakanaka nemvura kana pakaita mafuta akanuna pamusoro pemvura yawaisa haufaniri kushandisa mishonga uyu.
- Kana uchishandisa mishonga kumombe pamatanga adzo haufaniri kusvibisa chikafu kana mvura yadzinomwa uye haufaniri kuti mishonga uyu uyerere uchienda muhova dzemvura.

5.7 De-worming(Kubvisa makonye emudumbu)

Iri idanho rekudzivirira makonye anokonzera nyongororo mumombe dzenyama nekuda kwekuti mombe dzinenge dzichifura kumafuro kunova ndiko kunobva zvese zvinounza zvirwere. Huwandu hwezvinokonzerwa nyongoro mumombe hauenzani mumafuro ese. Mafuro ane huswa hwakawanda ndiwo anogona kuita huhwandu hwezvinhu zvinokonzerwa nyongororo. Mombe dzinogara munzvimbo dzisina mvura yakawanda kashoma kuti dziwirwe nedambudziko renyongororo tichienzanisa nenzvimbo dzinonaya mvura dzine mafuro akawanda. Nzira dzose dzinoitwa kudzivirira zvinokonzera zvirwere kumombe dzinofanira kuva dzinenge dzichiendereranawo nemamiriro enzvimbo inenge ichichengeterwa mombe idzi. Nzira yekubvisa makonye anokonzera nyongororo mumombe inofanira kutanga nekuziva zvakadzama upenyu nekamuraramiro kegonye rinokonzerwa nyongororo. Zvakare zvinodawo kuva neruzivo kuti gonye iri rinorarama sei kana mwaka ichisanduka uye kuti nzira ingatorwa kumisa makonye awa zvine unguwaru.

Kusiyana kwehuwandu hwezvipembenene zve mombe (*Seasonal parasite pressure*)

Kuwanda kwezvinokonzerwa zvirwere mumombe kunosiyana siyana uye nehutariri hunenge huchishandiswa kuparadza zvinokonzerwa zvirwere. Dambudziko rezvinhu zvinokonzerwa zvirwere mumombe rinowanda mumwaka wekunaya kwemvura asi zvinoita zvisoma munguva yakunenge kusinganayi. Munguva yekusanaya kwemvura muna Nyamavhuvhu naGumiguru mombe dzinenge dzine makonye anokonzera nyongororo mashoma. Uwandu hwezvinokonzerwa zvirwere mumombe hunodzika kana paine matanho eutarriri ari kutorwa nevarimi. Utariri hwakanaka hwekumangeta mombe hunosanganisira kupa mombe chikafu chine utano uye zvirongwa zveuhatano hwemombe. Kubviswa kwemakonye mumhuru kunoda kuitwa nekukasika uye mumombe huru zvinofanirwa kuitwa kaviri kana katatu pagore kana mwaka wekunaya kwemvura woda kusvika, wava pakati kana kuti woda kupera (Mbuzi, Ndira, Kukadzi, Kurume/ Bandwe).

Zvingaitwa mafuro kuderedza tumbuyu tunokonzerwa zvirwere

Utariri hwemafuro hwakakwana uye kubvisa makonye anokonzera nyongororo ndidzo nzira mbiri dzinoshandiswa kudzivirira tumbuyu utwu *internal parasites*. Utariri hwakakwana hunogona kuderedza zvinokonzerwa zvirwere mumombe. *Nzira* dzekuchengetedza mafuro zvakanaka dzinoderedza huwandu hwemalarva dzinosanganisira zvinotevera:

- Murimi anogona kuendeswa mombe diki kumafuro akachengeteka zvakanaka. Mafuro akachengeteka anosanganisira mafuro asina kumbodiwa nemombe kwegore.

- Nzvimbo dzinofurira mombe dzinogon kubviswa makonye dzisati dzaendeswa kumafuro akachengeteka sezvo mafuro awa achikwanisa kuzosvibiswa nemakonye awa.
- Unofanira kuisa mombe dzakura munzvimbo dzine mafuro anenge aswibiswa nemakonye anokonzera zvirwere mumombe. Mombe hadzifaniri kufura dzichipedza mafuro ese sezvo kupera kwemafuro awa kuchikonzera kuti dzizofura nemalarva.
- Kusandura nekuchinjanisa mafuro *Rotational grazing* hazvigoni zvega kudzima dambudziko rekusvibiswa kwemafuro nemakonye. Neumwe muono, kuchinjanisa mafuro uye urongwa hwekubvisa makonye kunogona kuti mafuro awande.
- Kana dambudziko ari makonye anokanganisa chiropa flukes, tsvaka nzira yekuti ungabvisa sei mvura mumafuro ako uye kukomberedza newaya nzvimbo dzinobata mvura yakakwanda.

Kudziviririra nekupedza tumbuyu tunokonzera zvirwere mumombe

De-wormers ndechimwe chombo chakanaka kudzora nekudzivirira maparasites. Kushandisa mishonga inobvisa makonye anobvisa zvirwere mumombe de-wormers hakufaniri kuva kuine chinangwa chekurapa mombe dzine zviratidzo zvekuva nemaparasites kana tumbuyu. Donzvo rekushandisa mishonga iyi rinofanira kuva riri rimwe redanho uye reutariri munguva dzakakodzera kuderedza urwere hwemaparasites kuti husaitika. Kurapa kunofanira kuva nechinangwa chekudzimura nekudzivisa upenyu hunotevedzwa nemaparasites awa kuti mafuro asasvibiswa nezvinokonzera zvirwere. Pane kuti varimi vaise urongwa hwekubvisa makonye anokonzera nyongororo, varimi vazhinji vanozobvisa makonye aya kana mombe dzavo kurwara zvakanyanya.

Hurukuro mumapoka

- Ndechipi chakavanzika chiri pakudzora nekurwisa tumbuyu tunokonzera zvirwere mumombe dzenyama?
- Ndetupi tumbuyu twakakosha tunowanikwa muZimbabwe?

CHIKAMU 6

Kuchengetwa Kwakanaka kweMatsiru



Donzvo rechidzidzo

Panopera chikamu chino vadzidzi vanofanira:

- Kunzwisisa kukosha kwekuva neurongwa nenzira dzekutsiva (*replacement*) matsiru nemamwe pakupfuya mombe;
- Kunzwisisa zvakakoshera kuva nehurongwa hwekusarudza matsiru;
- Kunzwisisa zviga zvekuva neuwandu hwemombe hwakanaka;
- Kunzwisisa kuva neongororo yemafambiro nemaberekero emombe dzako semurimi.



Hurukuro mumapoka

- Usati waenderera mberi ivai nehurukuro pamusoro penzira dzakajairika dzekutsiva (*replacement*) matsiru pakuchengeta mombe dzenyama.
- Doma nekunyora pasi zvimwe zvezvinobata nyaya yeutariri hwekutsiviwa matsiru.
- Ronga pfungwa dzawapa pamusoro nekukosha kwadzo uchipa zvikonzero.
- Ndeapi matuso kana njodzi ingavepo pakuchengeta mombe dzenyama usingashandisi nzira yekutsiva matsiru (*replacement*)?

6.1 Nhanganyaya

Kuva nematsiru uye kupfuya matsiru emhando yepamusoro nekumatsiviwa ndechimwe chizvinhu zvakakosha senzira yekudyara nekuvandudza upfumi chinodiwa nekutariswa pakuchengeta mombe dzenyama. Kutsiva matsiru ndechimwe chechikamu chekuvandudza mhando dzemhou dzaungada kupfuya mune ramangwana. Murimi ane tariro yekuti tsiru rinenge ratsiva nekuvandudzwa rinozova mhou inobereka mhuru pagore rimwe nerimwe kwenguva yakareba. Matanho akawanda eutariri uye sarudzo anofanira kuitwa mukusarudza nekutsiva matsiru. Nokuda kwaizvozvi, kutsiva matsiru kunofanira kugwaza kuita kuti matsiru awa arambe ari muboka remombe. Kusarudza panguva yekurumura kusvika pakuvuchika/ kupfuya uye kusvika pakunobereka mhuru ndemamwe matanho anofanira kuitwa pakutarisa matsiru aya. Matsiru asingagoni kuti murimi abate donzo kana kugwaza anofanira kubviswa chero padanho raanenge ava mukuchengeta mombe dzenyama.

Donzvo nechinangwa mukuchengeta matsiru aya chinofanira kuva chekuva nematsiru ane zvinotevera:

- Anofanira kuva abva zera kubva pamwedzi gumi nemisere kana makore matatu;
- Anofanira kuva nechikamu chikuru kubva muzana chekukasika kubereka pamwaka wega wega wekupfuya mombe;
- Matsiru awa anofanira kuva ane muviri mukuru kuitira pakubereka mhuru pasava nematambudziko;
- Anofanira kuva anobereka zvakare nenguva yakakodzera;
- Anofanira kuva anokudza mhuru kubva pakuberekwa kusiya yarumurwa.

Kusarudza matsiru akakodzera, nekumakudza zvakanaka uye kuita kuti dzibate mazamu

nekubereka nekukasika mumwaka wekutanga wekupfuya mombe zvine pundutso nemari kumurimi yakakura

Zvimwe zvezvinotariswa pakurera nekutsiva matsiru zvinosanganisira zvinotevera:

- Mamiriro enharaunda yaunogara;
- Zvazvakanakira nezvazvakaipira kupfuya matsiru kana kutenga kune vamwe matsiru ekutsiva;
- Mamiriro akaita mitengo yematsiru ekutsiva nhasi nemagwana ;
- Kukura kwakaita boka remombe dzemurimi uye nzvimbo yekupfuwira mombe;
- Uvepo hwemafuro neutariri hwezvinodiwa pakuchengeta mombe papurazi;
- Uwandu nehvepo hwevashandi;
- Upfumi nekuvandudzwa kwaho pakuchengeta mombe idzi;
- Urongwa nekuchengetedza utano mumombe;
- Mamiriro mukubereka kwemhou pamwe nekuuchika;
- Chimiro chemhando yepamusoro kwemombe nhasi.

Kuti varimi vaburitse pachena nzira huru yakakosha papurazi rimwe nerimwe, varimi veminda vadiki ava vanopfuya mombe dzenyama vanofanira kuva neurongwa hwekuvandudza mari uye kuronga utariri panzira yavangasarudza yakakodzera.

Kukura kweboka remombe /Herd size

Chimwe chezvinhu zvinoda kutariswa mukutenga matsiru kana kutsiva, kukura kwemombe.Kuti murimi agone kuramba ane boka remombe rakanaka anofanira kuva nechikamu makumi matatu 30 % kubva muzana chematsiru. Izvi zvinoreva kuti kana murimi ane mombe makumi matatu mombe shanu dzinofanira kuva matsiru mashanu pagore rimwe nerimwe anofanira kusarudzwa ave muboka remombe. Zvakakoshera kumurima kuti achenengetedze matsiru mashanu kana kutenga mhou dzekutsiviwa. Kazhinji, varimi vadiki vemombe dzenyama vanoona kuti kupfuya matsiru ekutsiva zvine ungaru pakuderedza kudiyirwa mari sezvo zvine zvazvakanakira nepakuru. Nokuda kwechikonzero ichi kupfuya matsiru pachavo vasingatengi ndezvimwe zvinovandudza upfumi.

Mafuro, zviwanikwa nekutariswa kwazvo

Matsiru madiki ari kukura anoda utariri hwakakwana kudarika mhou dzabva zera.Simba neuwandu hwevanhu vanodiwa kurera matsiru aya rakawanda uye zvinofanira kutariswa pakuita, sarudzo inoda mari. Kuti murimi asvike padanho rinotarisirwa mukuchengeta matsiru aya, matsiru anofanirwa kutsaurwa muboka redzimwe mombe otariswa pawo ega. Utariri hwakanyanya hwematsiru hunotanga paanenge arumurwa. Mazuva ekutanga gumi nemana kusvika pamakumi maviri nerimwe mushure mekurumurwa anoda unyanzvi pakutarisa nekurera uye zvinoda nguva nekuzvipira nokuda kwenjodzi yezvirwere zvinowanikwa kana matsiru arumurwa.Matsiru zvakare anodawo kutariswa kuitira kuti murimi aone kana matsiru abve zera kuti auchike ava nemwedzi gumi nemisere kana mwedzi makumi maviri nemina.

Nokuda kwekuti kudya kunoda matsiru awa kunosiyana siyana, mafuro anodawo

kuwedzerwa kuti danho rekurumura riite zvakanaka pakuchengeta matsiru ekutsividza. Pekuchengetera matsiru pakakwana panodiwa kuti asafamba famba kure panguva yaanenge achangorumurwa uye kuti handira dzisasangana nawo nguva/ mwaka isati yakwana yekuvandudza. Kudimbudzira mukuchengeta matsiru nekurumura zvigona kukanganisa mhando yematsiru kweupenyu hwawo hwese. Kutenga matsiru ekutsiva zvinogona kusunungura mafuro/ uswa nechikamu gumi 10% kubva muzana. Murimi paanenge achiita ongororo iyi anofanira kuvawo nepfungwa yekuzowedzera mari neupfumi.

Chikonzero chekuva nematsiru akawanda

Chimwe chinofanira kutariswa nemurimi ndechekuti anofanira kurera matsiru akawanda kudarika aanogona kupfuya papurazi. Matsiru anotarisirwa kuchengetwa anobata chikamu makumi matanhatu nemashanu 65% kubva muzana. Varimi vazhinji vanokwanisa kuzobvisa makumi maviri kana makumi maviri neshanu kubva muzana 20%-25% nokuda kwekusabereka kwematsiru aya zvichibva pakusava neuremu uye kusava nechimiro chakanaka kwawo. Nokuda kwaizvozvi kupfuya matsiru ekutsiva zvinoda kuti murimi achengete mamwe matsiru nechikamu makumi mana neshanu kana makumi mashanu kubva muzana 45%-50% kudarika zvinotenderwa. Izvi zvinobata mari kwemwedzi inoita gumi nemiviri kana gumi nemisere matsiru asati abviswa kana kutengeswa. Murimi paanenge achitarisa kuti opfuya matsiru here kana kuita ekutenga anofanira kutarisa mari yaangada kushandisa pakupfuya matsiru aanenge aakachengeta kudarika anotarisirwa.

Kuita sarudzo kuti murimi pfuya kana kutenga matsiru

Sarudzo yekuti murimi atenge matsiru kana kupfuya pachake inosanganisira zvakanawanda. Izvi zvinosanganisira mari inodiwa pakudzichengeta, mari ichabereka, vashandi vanodiwa, midziyo yekushandisa mitero, mari dzekutsiva, handira dzinodiwa. Mari inodiwa pakupfuya matsiru aya kubva pakurumura inosiyana siyana zvichienderana nehuvepo hwezvinhu zvekushandisa. Sekutsanangurwa kwazvamboita kumashure murimi anofanira kuva neidi kuona makuriro emombe dzake, mafuro, utariri nemari dzinodiwa kupa mombe idzi zvinova chimwe chikamu chemari dzinodiwa kupfuya matsiru. Murimi wega wega anofanira kuva neurongwa hwemafambiro emari budget hunoburitsa hurongwa hwega hwega hwekuchengeta matsiru. Mukugadzira urongwa hwemari uhu murimi anofanira kuisawo mutengo unoenderana newepamusika wematsiru aya sezvimwe zvezvinhu zvaanenge asarudza kusiya. Anofanira kuisawo mari ichadiwa kuripa vashandi iyo inova inosiiwa nevarimi vazhinji mukuongorora mari dzinoshandiswa kupfuya matsiru. Kutu murimi aite sarudzo dzakangwara unogona kuwedzerawo imwe mari ingangodiwa zvichiendera nemamiriro ezvinhu papurazi.

Zvinofungidzirwa:

- Mutengo/ muripo wekudzoreredza matsiru unosiyanana siyana;
- Mari dzinoshandiswa dzinosiyana zvichienderana nemurimi kuti aite sarudzo dzine ungaru.

Ongororo netsvakurudzo zvinoratidza kuti pane zvakanakira murimi kupfuya pachake matsiru pane kuti atenge kune vamwe varimi zvikuru kuvarimi vadiki vanokwanisa kuderedza mari dzingadyirwa murimi pakuchengeta nekubhadhara vashandi.

Mucherechedzo wakaiswa pazasi uyo unogona kushandiswa semucherechedzo wekushandisa pakuronga mari inoshandiswa kuchengeta matsiru

Description	Unit Cost (K)/Kg	Weight (Kg)	Total Cost (K)
Value of Heifer at weaning	5,800	227	1, 3 1 6,000
Cost of weight gain from weaning to breeding	2,610	132	344,520
Cost of Bull Service (Hired)	Lump sum/season		290,000
Interest	Lump sum		1 74,000
Management cost	Lump sum		290,000
Grazing cost birth to calving	Lump sum		870,000
Veterinary costs	Lump sum		1 16,000
Cost adjusted for culls and or death	Lump sum		435,000
Total			3,836,120

Utano hwemombe

Chimwe chikonzero chinoita varimi vapfuye matsiru pachawo ekutsiva vasingatengi kunevamwe varimi ndechekuti vanenge vasingadi kuunza zvirwere mumombe dzavo. Kutenga mombe kubva kune vamwe varimi zvinogona kuunza zvirwere mumombe dzavo. Ichi chikonzero chinobatika kuvarimi vemombe nokuti zvirwere zvinogona kukanganisa uwandu hwemari inowanikwa nemurimi pakutengesa mombe. Mukupfuya mombe danho rekudzivirira zvirwere mumombe rinogona kuitwa kuburikidza nekuvharira mombe munzvimbo imwechete. Nokudaro kuunza mombe idzo murimi dzaasingazivi utano hwadzo zvinogona kuunza njodzi kana dambudziko.

Kuderedza dambudziko rekuunza zvirwere mumombe dzekutenga idzi murimi anogona kuita zvinotevera:

- Kutenga mombe dzine magwaro anoratidza utano hwemombe uye dzinobva kuvarimi vanoita zvakanaka. Murimi anogona kubatsirwa pakuona utano hwemombe idzi nachiremba wemombe hunotariswa kana murimi achitenga matsiru.
- Tsaurai mombe dzinenge dzichangotengwa kubva kuboka ragara riripo kwemazuva anogona kuita gumi kana makumi maviri nerimwe.
- Varimi vanofanirwa kuramba vachiita urongwa hwekupa mombe mishonga inodzivirira kubva kuzvirwere.

Kuvandudza mhou

Urongwa hwekuchengeta mombe dzenyama muZimbabwe hwakachinja zvakanyanya mumakore makumi maviri apfuura uye hucharamba huchinjinja kuitira kugutsa vanhu vazhinji vanotenga nyama yemombe. Kuti zvido zvevanhu zvizadziswe zvekuvapa nyama yenhando yepamusoro, vanopfuya mombe idzi vari kuda kushandisa nzira dzinosimudzira mhando yenyama yavanotengesa. Munyaya dzekupfuuya mombe dzenyama varimi vanofanira kuziva kuti mhando yenyama zvinobva kumhou dzinobereka mombe idzi. Mukutsvaka mhou kana kusarudza mhou dzekutsiva varimi vanofanira kuzivawo kuti zviri muropa remhou ndizvo zvinoita kuti murimi awane pundutso kwemakore gumi kana gumi nemashanu kana kudarika. Mukusarudza mhou dzekutsiva idzi varimi vanofanirwa kushandisa zviri muropa *genetics* kusarudza mhou pakuvandudza nekusimudzira mhando yenyama uye utariri pakudzipfuya.

Murimi anogona kutarisawo zviri muropa, maitiro kana ruvara pakusarudza matsiru. Chinhu chakanakira kupfuya mhou dzekutsiva idzi ndechekuti mukana wekusarudza matsiru paano zvarwa mushure memazuva makumi matanhatu pamwaka dzinenge dzakasimba pakurumurwa. Matsiru aya anenge ane uremu hunodiwa padzinenge dzasvika zera rekudzingwa. Matsiru aya kazhinji anobva kumhou dzinenge dzazvara kutanga kwemwaka.

Kupfuya nekurera matsiru ekutsiva awa zvinopa murimi mukana wekubvisa dziya dzisiri kumupa pundutso pakuchengeta. Izvi hazvirevi kuti kutenga matsiru kubva kune vamwe haisi sarudzo yakanaka pakutsaura nekusarudza matsiru ekutenga kana mutengesesi ane magwaro akakwana anopa umbowo hweutano hwematsiru acho. Panogona kuvawo nekumwe kunogona kubva matsiru nemhou zvekutsiva pachinyanyotariswa masarudziro nematsauriro kuti murimi abude nematsiru emhando yepamusoro.

6.2 Nzira dzekuuchika mukusimudzira mhou nematsiru

Kana mombe dzikauchikwa matuso anovapo ndeekuzvarwa kwemhuru dzakasimba uye dzinokurumidza kukura kudarika vabereki vacho. Danho rekuuchika iri rinopiwa zita rechirungu rekuti *hybrid vigour*. Matuso ekuuchika awa anowedzera uwandu hwekubereka kwemhou nezvikamu makumi maviri kana makumi maviri neshanu kubva muzana 20%-25% hwemombe dzinenge dzauchikwa nedze kune dzimwe nzvimbo uyewo nechikamu makumi mana kana mashanu kubva muzana 40%-50% mukuuchika mombe dzinenge dziri dzemunzvimbo imwechete hwemombe dzakaita seBafotse neHereford. Varimi vazhinji vakuru vanochengeta mombe dzenyama vanoshandisa nzira yekuuchika *crossbreeding* kutora mukana wehybrid vigour nekuvandudza mombe vachihenganisa mhando dzemombe dzakasiyana siyana. Chimwe chinangwa chevarimi ndechekusarudza mombe dzinogona kurarama zvakanaka munharaunda mavanogara. Asi nerumwe rutivi tinoona kuti varimi vadiki vekuZambia vakatora mukana wekuuchika uyu sezvo vari pedyo nemapurazi evamwe varimi vakuru. Murimi anofanira kutora mhou inogona kugara munharaunda

maanenge achigara osarudzawo handira inoenderana nemhou yake kuti pagozvarwa mhuru inokodzera kutengeswa pamusika unenge uripo.

Varimi vanoshingaira kuti vawane mombe dzinovapa zvinotarisirwa pamusika kana vachinge votengesa mombe dzavo. MuZimbabwe, varimi vadiki vemombe dzenyama vanofanira kusarudza mombe dzinokwanisa kurarama munzvimbo dzinopisa nekutonhora zvichisiyana nzvimbo nenzvimbo. Kuuchika mombe hadzi vachibatanidza Brahman nedzimwe mombe ndiho hwaro hwevarimi vazhinji munyika sezvo vachida kuvandudza huwandu hwenyama.

Imwe nzira kuramba muchishandisa kuuchika senzira yekusimudzira nyama uye mhuru dzakanaka dzinotengeseka nekutsiva idzo dzinenge dzakafanana nemadzimai adzo.

Mukupeta chikamu chino varimi vanofanira kunzwisisa kuti sarudzo dzekutsiva mhou dzinotora rupandi rwakakura mukusimudzira goho nemari yavanowana munguva inotevera saka zvinofanira kuitwa neunyanzvi. Varimi vanofanira kutarisawo kuvandudzwa kweupfumi uye utariri hwakanaka pakusarudza nekutenga mhou dzekutsivia. Murimi anofanira kuita sarudzo akazambira pamamimriro uye zvinangwa zvepapurazi pake.

Hurukuro mumapoka

Chikonzero ndechei kuva nenzira yekutsiva matsiru nemhou?

- Ndzevipi zvaunotarisa pakurera matsiru ekutsiva? Ipa zvikonzero.
- Ndeipi nzira yaunoona yakanaka yekuvandudza nekuuchika mombe kuvarimi vadiki munyika yeZimbabwe? Kurukurai muchipa zvikonzero?

CHIKAMU 7

Kupa Mombe dzeNyama Chikafu



Donzvo rechidzidzo

Mukupera kwechikamu chino vadzidzi vanofanirwa kuita zvinotevera:

- kunzwisisa mapirwo anoitwa mombe zvekudya;
- Kunzwisisa kudya kwakakwana kunodiwa nemombe dzenyama;
- Kukoerana ruzivo nezvavanoziva paupenyu pamapirwo anoitwa mombe kudya nevarimi vadiki;
- Kunzwisisa kukosha kwekuwedzera chikafu kumombe dzenyama;
- Kunzwisisa kudya kunovaka muviri kunogona kubatsira kana kukanganisa mombe pakukura;
- Goveranai ruzivo pamusoro pechikafu chiripo chekupa mombe dzenyama.



Zvokuita

Usati waenda mberi kurukura pamusoro penzira dzekupa mombe nadzo zvekudya uye kuti zvakakosherei kupa mombe idzi kudya kuti dziburitse goho rakanaka uye kuti mombe dzinoita sei kana dzichipiwa kudya uku. Doma zvezvimwe zvezvinhu zvinoitwa nemombe idzi.

- Zvii zvinodiwa pakupa mombe dzenyama chikafu
- Zvakakosherei uye ndeupi mutengo uye zvakanakira mombe dzine utano

7.1 Nhanganyaya

Chimwe chezvimbhingamupini pakusimudzira hutariri hwemombe dzenyama nekupfuya inyaya yekupa chikafu chakakwana zvikuru sei kuvarimi vadiki. Izvi zvinonyanyokonzerwa nemuripo wakakura uye mari yakawanda inodiwa pakutenga chikafu chemombe diki nehombe. Mutengo wepasi unopiwa varimi pakutengesa mombe dzavo zvinoisa varimi vazhinji panyanga dzamushore kuti voenderera mberi here kurima mombe dzenyama kana kurega.

Nerumwe rutivi, kushaikwa kweruzivo kuti mombe dzinodya sei chikafu uye kuti dzinoita sei kana dziri mumafuro uye mumatanga nderimwe redambudziko. Muchikamu chino vanhu vanatora rupandi mukudzidza vachawana mukana kuti vaone matambudziko anosangana nevarimi mukupfuya mombe dzenyama. Chikamu chino chinobatsira kuti tikwanise kuongorora nekugadzirisa zvimwe zvekudya kwakakwana kunoshaikwa muuswa kana mafuro emombe. Mafuro awa anofanirawo kuvawo neuswa hunenge hwakaoma hwakasimba senzira inowedzera utano kumombe.

7.2 Mapirwo anoitwa mombe chikafu

Mombe dzenyama dzinofura kazhinji. Izvi ndizvo zvinoita mombe zhinji mukufura. Mombe dzinodya uswa uye mashizha emiti akasiyana siyana munguva yakunenge kusina sora.

Mombe dzikapiwa mukana wekufura munharaunda yakakura dzinofura dzichisarudza uswa hwakanaka hunopa utano dzichisiya uswa husingadyiki. Mombe dzinoita izvi kubatsira makonye anobatsira pakuzeya. Mombe dzenyama dzinogona kufura kwenguva ingangoita maawa masere kana gumi nemaviri pazuva rimwechete dzisati dzazorora/ kuvata dzichizeya. Uswa hwadzinenge dzafura hwakaita mapundu makuru hunenge huri mudumbu (*rumen*) hunodzorwa mumuromo hozeewa huchiwedzerwa mate.

Uswa uhu hunotsengwa kusvika hwava udiki mombe yozomedza kuti makonye emudumbu azopedzisa kuzeya chikafu ichi. Danho rekuzeza iri rinoda simba rakawanda kumombe dzenyama uye makonye netumbuyu tunobatsira kuzeya. Mombe dzenyama zvinoda kuti dzive nesimba mukuzeya sora iri. Izvi ndizvo zvinosunda mombe kuti dzisarudze kudya kunopa simba kwakaita sechibage, uswa unyoro. Kupawo kana kuwedzera kudya mumombe kunosanganisira manyuchi kunova kudya kunopa simba zvikuru kana mombe dzichidya kana kufura munzvimbo dzine uswa ushoma zvikuru munguva yekusanaya kwemvura munyika yeZimbabwe. Munguva iyi uswa nemafuro anenge akaoma zvapiswa nezuva uye uswa uhu hunenge husina zvinovaka muviri zvakakwana.

7.3 Kudya kunodiwa nemombe

Kupa mombe chikafu nepadiki ibhizimusi rinodya mari yakawanda. Muripo wekupa mombe zvekudya mombe imwe chete hunodzikira apo huwandu hwemombe hunenge huchiwedzera. Nechikonzero chemuripo / mari yakawanda inodiwa kupa mombe zvekudya, zvinoremera varimi vazhinji vadiki saka varimi ava vanosarudza kuti mombe dzavo dziende kumafuro ekusango. Neumwe muono zvinodawo kuronga kwakakwana negadziriro kana murimi achida kubudirira. Varimi vadiki vanofanira kuona kwavangawane mhuru dzemombe dzenyama, chikafu chinodiwa kudzichengeta kuti dzikwanise kupinda pane zvinotariswa pamusika uye kuti dzinoda pekugara pakaita sei.

Nzira yekupa mombe idzi chikafu inofanirawo kuva inogona kusanduka. Kuvarimi vadiki kupa chikafu chemashanga zvinogonawo kuiswa muurongwa hwekupa mombe zvekudya. kushandisa chikafu chekutenga zvinoenderana nemitengo yechikafu ichi uye kugaya nekugadzirwa kwechikafu, zvinokurudzirwa kuti murimi ahandise chikafu chakaita semashanga kuti murimi aderedze mari ingashandiswa kutenga chikafu ichi.

7.4 Mapirwo emombe chikafu

Kuzadzisa kudya zvemombe dzako murimi zvinoreva kunzwisisa upenyu hwadzo padanho rega rega padzinenge dzichikura, kuti chimiro chadzo chinokanganisa sei maitiro adzo, uye urongwa hwekupa chikafu zvichienderana nemamiriro ezvinhu papurazi remurimi.

Kuti uzive hurongwa hwakakodzera hwekupa mombe chikafu unofanira kutarisa zvinotevera:

- Danho rekupfuya mhau
- Chimiro chemhou
- Kukwanisa kuberekesa kwebhuru
- Mhando yeuswa

Mushure mekutarisa zviri pamusoro apo kudya kwezuva nezuva kunogona kugadzirwa kuti ukwanise kusimudzira mhou dzako. Zvakakoshawo kupa mombe chikafu chine kudya kunovaka muviri kwakakwana. Makambani anogadzira zvekudya zvemombe vakagadzirawo zvimwe zvezvinovaka muviri yemombe izvo zvinenge zvisingawanikwi muuswa kana muvhu. Tsvaka ruzivo pamusoro woita sarudzo yekutsvaka chikafu chinovaka muviri wemombe dzako.

Table 8 : Zvibodzwa zvinoratidzwa pakupa mombe chikafu

	<p>Score 6: Mombe yakakoresa nemafuta Mombe inenge yakakora ine mafuta akawanda, uye kuzvidya kwayo kunenge kwakaenzana, uye muviri wayo unenge wakaurungana nokuda kwemafuta akawanda pairi. Mutsipa wayo unenge uri mupfupi uye wakasimba nekufara.</p>
	<p>Score 5: Mombe inemafuta Mombe inenge iine nyama yakanaka yepachipfuva iine munyepfu. Panotangira muswe wayo inenge iine mafuta, uye kuzvidya kwayo nekumusana kwakaurungana nekuda kwemafuta. Mbabvu dzayo dzinenge dzichitsvedzerera uye dziine utano.</p>
	<p>Score 4: Mombe yakanaka Mhou inenge ine ganda rinoonekera rinotsvedza muviri wese. Inenge iine mafuta pachipfuwa uye pazasi pemuswe uye mbabvu dzayo dzinenge dzisingaonekwi. Danho iri rakanakira mombe kuti ibereke mhuru uye kusanganiswa nehandira. Pane dzimwe nguva mombe iyi inogona yakati dzikirei muviri nekuda kwekushaya kudya kwakakwana kunovaka muviri.</p>
	<p>Score 3: Mombe iri pakati nepakati pakukora Mombe inenge ine muviri uri pamuenzaniso wechitatu inenge yakati wondei zvishoma. Mbabvu mbiri kana nhatu dzinenge dzichionekwa kubuda. Zvakare mombe iyi inenge ichiratidza kuva nemafuta mashoma kana kushaya pambabvu uye panotangira muswe. Mombe iyi inogona kuva nenyama yakawanda pamapfudzi uye pazvidya. Mombe dzinenge dziri padanho iri hadzibudi mukaka wakawanda uye mhuru dzacho dzinenge dzisinganyanyorema padzinorumurwa.</p>
	<p>Score 2: Mombe yakaonda Mhou inenge yakawonda mbabvu dzakabuda. Nyama uye mhasuru dzepamapendekete nepazvidya dzinenga dzakadarikwa nedziri pamuenziniso wechitatu. Mhou kana ine muviri wepa 3 kana 2 inenge ine mukaka mushoma wekupa mhuru, uye mombe iyi inenge ine mhuru diki kusvika pakurumurwa, uye kunonoka kubata zamu kana mwaka wekubereka wasvika.</p>
	<p>Score 1: Mombe yakaondesa Mhou inenge yakaonda isina mafuta uye mbabvu dzakabuda. Mhou inenge isina nyama dzakasimba dzinoonekwa uye muzongoza nemapfupa ekumusana anenge akabuda.</p>

Muenzaniso wekutanga: Mombe isati yabereka

Kana mhou yako isati yabereka ichiratidza zvibodzwa zviripamufananidzo wechina 4 Ideal uchiziva kuti mhou dzako zhinji dzinotanga kubereka mumazuva makumi matanhatu kusvika makumi mapfumbamwe 60-90 days, mafuro ako akakwana uye asvika pekuti achidyiwa. Rangarira kuti kudyakwakapamhidzirwa (supplementary) kushoma kunenge kuchidiwa pamombe yega yega nokuda kwezvinotevera:

- Uwandu hwesimba reuswa kana mafuro
- Kuwedzerwa kwenguva yekufura uye mamiriro akaita mafuro
- Kupamhidzirwa kwekudya kunovaka muviri nekuda kwekutorwa kwesora zvisvishoma asi richidyiwa rakawanda
- Kuwedzerwa kweuswa unyoro

Muenzaniso wechipiri: Mushure mekubereka

Mushure mekubereka, mhou imwecheteyo nekudya kumwechete nemuviri uri pamucherechedzo wechina 4. Zvekudya zvemombe iripamufananidzo wechitatu 3 zvinodiwa zvakanwanda kuti ikwanise kuwedzera uremu mushure mekubereka. Dombo remunyu rekuti dzinanzve rinofanira kugara riripo nguva dzose. Kana mhou dzine mucherechedzo wechipiri 2 dzakanwanda unofanira kudaidza mazvikokota wemomb kuti akubatsire pamapire aungaita mombe dzako chikafu chinovaka muviri chakakwana.

Danho rekupfuya kana kuva nemhou

Mhou ine zamu inogona kutakura mhuru mudumbu mayo kwemazuva anoita iwo mazana maviri nemakumi masere kusvika kumazana maviri nemakumi mapfumbamwe 280-290days. Nguva yakakosha mhou painenge yakazvitakura mazuva anoita makumi matanhatu kusvika makumi mapfumbamwe 60-90days isati yabereka uye mushure mekubereka, uye painotanga kuti chikafu chinofamba kubva kumhou chichienda kumhuru iri mudumbu kuti igone kuumbika nekukura pamwechete. Mumazuva makumi matanhatu kusvika makumi mapfumbamwe 60-90 days isati yabereka, kudyakunodiwa kunovaka muviri uye kunopa simba kunotanga kuwedzera kudiwa nemhou kana ichinge yabata zamu. Kune kukura kwakanyanya kunoita mhuru mudumbu remhou, sezvo chikamu makumi matanhatu neshanu kusvika makumi manomwe neshanu 65%-75% kubva muzana chiri icho chinomirira kukura kwemhuru mudumbu mumazuva anoita makumi matanhatu kusvika makumi mapfumbamwe mombe isati yabereka.

Mushure mekubereka, mhou dzinoda kudyakunovaka muviri kunopa simba nekudzivirira kuzvirwere kunoramba kuchiwedzera chikonzero zwichidaro ndechekuti mukaka unowedzera kubuda unoda kudyakunovaka muviri sezvinotevera protein by 70%, energy by 15% and phosphorus by 70%. Kana kudyakunodiwa kuti mukaka uwande kukasapiwa kumhou zvinoita kuti mhuru dzisakura dzichitora ruvara rwamadzimai adzo uye kushaya uremu. Nemamwe manzwi uremu hwemhuru painorumurwa hunenge hwakadzikira. Mhou inobva yatanga kugadzira muviri kuti izokwanisa kubereka zvakanwanda pamazuva makumi mana kusvika makumi masere nerimwe mushure mekubereka.

Mamiriro emuviri/Body condition

Utano nemamiriro emuviri zvine chekuita nemukaka unoburitswa nemombe, makuriro emhuru uye kuti mhohu izoda kusangana nehandira(heat). Mhohu ine utano nemuviri wakanaka inoburitsa mukaka wakawanda neuremu hunoita 1kg pazuva rega rega izvi zvinoita kuti mhuru iwedzere uremu neo,4kg pazuva rega rega kana kuwedzera uremu hunoita 37kg panozorurwa mhuru iyi.

Mhohu ine muviri wakasimba une utano inokasika kuda kusangana nehandirane mazuva anoita gumi nemasere kana makumi maviri nenomwe 18-27 days uye yokasika kubereka nechikamu gumi kana makumi maviri kubva muzana tichienzanisa nemhohu dzine muviri isina kuita zvakanaka.kuti murimi aone utano nemamiriro emuviri wemhohu yake anoshandisa inonzi *body appearance point scoring* pachirungu. Iyi inzira iri nyore uye yakanaka kuti aone kudya kunodiwa nemhohu uye kana kuri kupiwa zvakanakwana mushure mekunge yabereka.

Tinotarisa nhengo nhanhatu pamuviri wemhohu zvinotevera:

- Imbabvu ngani dziri kuonekwa?
- Pfupa rekumusana riri kuonekwa here?
- Hudyu yakabuda here?
- mhohu ine mafuta here panotangira muswe wayo?
- Pane munyepfu here unoratidza kusimba pazvidya nepapandauko?
- Mhohu iyi ine mafuta here pachipfuva?

Ongororo yakazara yemhohu inobata zvibodzwa zvitanhatu. Muviri wemhohu une zvibodzwa zvina ndiwo unokurudzirwa uye unodikamwa kuvarimi. Chimiro chemuviri chinopawo mukana kumirimi wekuti azadzise zvinangwa zvake zvekuwana mukaka wakakodzera uye kuti mhohu ikasike kuda handira.

Mhando yemafuro/ kudya kwemombe

Mafuro ndiro dura remurimi mudiki wemombe dzenyama. Mombe dzinogona kurarama nekudya zvimwe zvisiri uswa. Neimwewo pfungwa kusiyana kwechikafu ichi nekuda kwekusiyana kwemamiriro ekunze nekunaya kwemvura neivhu zvinokonzerwa kuti mafuro awa ashaye kudya kunovaka muviri. Donzvo guru remurimi kusimudzira mafuro aya kuti awanikwe papurazi pemurimi. Uswa kana mafuro ndiwo anoumba chikamu makumi masere kubva muzana kana chikamu zana 80-100% chechikafu chinodyiwa nemombe dzemurimi zvichienderana nemhando uye uwandu hwemafuro aya. Kunzwisisa zvakanakwana mafuro emombe dzako nemakuriro acho zvinobatsira kuti murimi azive kudya kunodiwa nemhohu dzisati dzabereka uye padzinobereka.

Kukura kweuswa nezvinovaka muviri muuswa

Uswa huchiri hudiki

Uswa hudiki hunenge hwakasvibira, hune mvura yakawanda mukati uye mashizha mazhinji. Uswa hunokura zvakanyanaya mumwaka wekunaya kwemvura uye panguva yaunenge hwachekwa zvienderana nekunaya kwemvura uye kudziya kwekunze. Uswa hudoko panguva iyi hunenge hwakazara mashizha, husina hunde uye huine kudya kwakakwana kunovaka muviri.

Danho rekushanduka kweuswa/Transitional grass

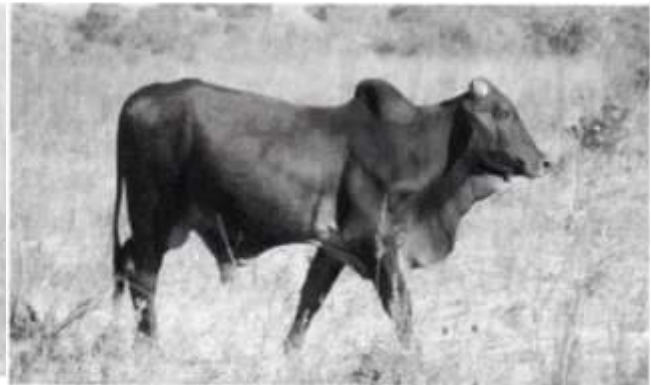
Apo uswa udiki hunoramba huchikura, hunopfura nepadanho rekusanduka (transitional) muchirungu. Uswa hunenge hwava padanho iri hunenge hwave nemashizha mashoma asi hunenge hwave nehunde nemhodzi dzisati dzasimba. Panguva iyi zvinhu zvinovaka muviri zvinosanganisira, *protein, energy, and mineral* zvinotanga kudzikira musora.

Uswa hwaibva/Mature grass

Uswa pahunoramba huchikura kusvika pazera rekuibva, hunobva hwava hwemhando yepasi nekuda kwekushaikwa kwekusvibira mashizha uye kuwanda kwemhodzi. Panguva iyi uswa hunenge hwawanda hunde mashizha apera uye mhodzi dzawanda uye hunobva hwasvava pamwe nekuoma.



Mufananidzo wemombe ichidya uswa huri padanho nreTransitional



Mufananidzo wemombe iri kufura uswa hwaibva huri padanho reamature grass

Hurukuro mumapoka

Mukupeta chikamu chino, kurukurai zvinotevera

- Zvinorevei kuti kudiwa kwechikafu mumombe dzenyama
- Unoona zvakakosha here kuwedzera chikafu chine zvinovaka muviri mumombe dzenyama?
- Nderipi zera remombe rinoda kuwedzera kudya uku uye sei zvichidaro?
- Ndeapi matambudziko anowanikwa pakuda kupa mombe idzi chikafu?

CHIKAMU 8

Chikafu Chinoshandiswa Kupiwa Mombe dzeNyama



Donzvo rechidzidzo

Mukupera kwechikamu chino vadzidzi vanofanirwa kugona kuita zvinotevera:

- Kunzwisisa ukama huri pakati petumbuyu tunobatsira mombe kuzeya chikafu mudumbu (*rumen organisms*) uye chikafu chacho *digestible feed*;
- Kuburitsa pachena kudya kwemombe kunopiwa mombe dzenyama;
- Kutsanangura zvakakoshera kupa mombe chikafu chakapamhidzirwa (supplementary feeding) kumombe dzenyama;
- Kunzwisisa zvinokonjera kushomeka uye kuderera kwehuwandu hwemombe dzinozvarwa uye zvinotadzisa kuti dziwande;
- Kuziva mucherechedzo unoonekwa nekuda kwekushaikwa kwekudya kwakakwana mumombe dzenyama;
- Kuziva makudziro aungaita mombe dzine utano papurazi kuburikidza nekudzipa kudya kunovaka muviri kunosanganisira mashizha.



Hurukuro mumapoka

Usati waenda mberi, yekukurukura pamusoro pematambudziko anounzwa nekusapa mombe kudya kwakakwana kunovaka muviri.

- Ndeapi matambudziko anounzwa nekuchengeta mombe dzenyama usina kudya kwakakwana kwekupa mombe idzi.
- Enzanisa mhinduro dzako nehurukuro iri pazasi.

8.1 Nhanganyaya

Mombe chipfuyo chakasiyana nezvimwe zvipfuwo pakuti dzinogona kutora uye kushandisa kudya kunobatsira pakuzeya kwakaita seroughages or fibre uko kunovaka muviri. Mombe dzine tumbuyu *microorganisms* tunogara mudumbu remombe rinonzi *rumen* muchirungu. Tumbuyu utwu tunobatsira pakuzeya uswa nemashanga kana zvadyiwa nemombe kuti zvikwanisike kushandiswa nemuviri. Nekudaro donzvo guru kupa mombe chikafu chinobatsira tumbuyu utwu kugaya chikafu kuti chive chinogadzirwa kuzoti muviri ukwanise kuchishandisa. Dumbu remombe rerumen netumbuyu utwu ndizvo zvinoita mombe dzisiyane nezvimwe zvipfuyo zvingachengetwa nemurimi.

Tumbuyu utwu tunopa mombe kudya kunovaka muviri kwemaproteins kunodaizwa kuti *microbial crude protein (MCP)*. Tumbuyu utwu tunogara mudumbu tunogaya kudya kunenge kwatorwa nemombe twoita kuti pabude kudya kunopa simba nekuvaka muviri zvoita kuti MCP yakawanda ivemo mumuviri wemombe. Tumbuyu utwu tunoda simba (energy) rinobva kuchikafu chinodyiwa nemombe. Kugaiwa kwechikafu mudumbu memombe pakunenge kuchierera mberi, tumbuyu utwu tunobuda mudumbu rekutanga remombe rerumen toenda mungadainzwa kunzi *lower gastrointestinal system*. MuMicrobes

ndimo munobva kudy a kunovaka muuviri nechikamu makumi maviri kusvika makumi matanhatu kubva muzana (20-60%) kumombe uye nekune kumwe kudy a kune zvakasiyana siyana zvingadiwa nemuviri.

Mombe dzenyama dzine mukana wakasiyana nedzimwe kunyange kudy a kunovaka muviri kukasawanikwa muchikafu. Tumbuyu twemudumbu tunogona kugadzira nekupa kudy a kunovaka muviri uku. Nitrogen inoramba ichipiwa nekuendeswa kubva muropa kuenda kudumbu rekutanga remombe rumen uko inoshandiswa netumbuyu kugadzira kana kupamhidzira MCP. Mombe dzinozeya dzinokwanisa kudzosa nekutenderedza nitrogen zvinoita kuti mombe dzirarame dzichidya chikafu chisina kudy a kunovaka muviri. Kupa mombe kudy a kwakakwana kunovaka muviri kunobatsira tumbuyu kugaya chikafu mudumbu zvoita kuti mombe iwane zvakakosha zvinodiwa nemuviri. Tumbuyu utwu tunoshandisa *dietary fibre, protein, and/or nitrogen* kugadzira zvekudy a zvinopa simba nekuvaka muviri kuti muviri ushandise. Kugadzira nekutevedza nharaunda yakanaka mukugaiwa kwechikafu mudumbu zvinobatsira kuti murimi azadzise zvinangwa zvake mukuchengeta mombe dzenyama. Tichitarisa ukama huripo pakati pemombe dzenyama netumbuyu utwu, mombe dzinokwanisa kushandisa roughage yemhando yepasi inowanikwa muvarimi vazhinji vadiki munyika yeZimbabwe kuti vakwanise kupfuya mombe dzinopa nyama yakanaka. Kudy a uku kunogona kuiswa mumipanda inotevera:

Roughages: Uku kudy a kunopa samba mumombe dzenyama kunosanganisira zvinotevera.

- Mashanga echibage
- Sora, mashanga enzungu, *stargrass, groundnut tops, ground maize cobs*, soya bean hulls kunogona kusanganiswa nemanyuchi.
- Mashanga echibage - izvi ndezvinosara mushure mekukohwa chibage murimi ozvinonga muminda opa mombe dzake.

Concentrates: Uku kudy a kunotengwa nemurimi kana kuvhenganiswa kuti zvive zvinovaka muviri wemombe. Izvi zvinosanganisira:

- Kudy a kwakavhenganiswa nehupfu hwechibage
- Kudy a kwakavhenganiswa nesoya beans dzakagaiwa
- Masunflower akagaiwa (sunflower cake)
- Mhodzi dzedonje dzakagaiwa

Masese (*Brewer's grains*): Uku kudy a kunowanikwa mushure mekubika doro uye varimi vanowana kudy a uku ndevane mukana wekuenda kumakambani anobika doro achishandisa chibage. Zvinenge zvasara pakubikwa doro izvi zvinovhenganiswa nekumwe kudy a kunovaka muviri papurazi.

8.2 Kupamhidzira kudy a kumombe

Urongwa hwekuvandudza mafuro emhou dzenyama

Kudy a kwakawedzerwa kwakakosha mumombe dzenyama. Neumwe muono kudy a uku kukawandisa hazvina kunaka uye zvinodya mari. Kusakura uye kusaratidzika kweuswa hunodyiwa nemombe kunopa chiratidzo chezvinodiwa kuti uswa uhu hukure. Uswa pahunenge hwaibva kudy a kunovaka muviri kuno dzikira mahuri.

Phosphorus ndechimwe chinodiwa kuiswa muivhu mumafuro emombe dzenyama chinodiwa pakugadzira urongwa hwekuvandudza mafuro emombe dzenyama. Kudiwa kwePhosphorus nemhou dzenyama kuno kanganiswa kana kubatwa nemabudiro emukaka uyemhando yeuswa hunopiwa mombe. Zvakare phosphorus iyi ndechimwe chezvinhu zvinodhura paorongwa hwekuvandudza nekusimudzira kudywa kwemombe. Kuwedzera kudywa uku mumwaka yekupfuya nekuvandudza breeding apo mhou dzinenge dzichifura uswa munguva yakunenge kusinganayi kunodiwa.

Kusanganisa kudywa kwakavandudzwa muchikafu chemombe

Kudywa kunovaka muviri hakufaniri kudarikirwa pakupfuya mombe dzenyama. Kudywa uku kwakakosha zvekuti kungango enzaniswa neuswa, mvura uye mhengo izvo zvinodiwa pakurarama kwemombe. Kudywa uku kwakavandudzwa kunoita rupandi rwakakura mumukura kwemombe uye zvinobatawo mapfupa emombe, kubuda kwemukaka, kugaya chikafu mumuviri uye mashandiro anoita muviri wemombe. Kudywa uku kukashaikwa kunozopa dambudziko kumurimi munguva inotevera saka murimi anofanira kungwarira. Wakambosangana nezvinotevera here mumombe dzako:

	P	Ca	NaCl	Mg	K	S	Fe	Cu	Co	I	Zn	Mn	Se
Lower conceptionate	-	-									-	-	
Decreasing calving rates	-			-	-		-		-				
Reduced milk production	-	-	-		-		-		-	-			
Lameness or stiffness		-		-		-		-				-	-
Slow \ weight gains	-		-			-		-	-		-		
Reduced weaning \ weights	-			-	-	-	-	-			-		
Smaller or \ weaker calves	-	-			-	-	-	-			-	-	
Poor overall herd health	-	-	-		-	-	-	-	-	-			-
Grass tetany (prolonged contraction of muscles)		-		-									
Retained placenta	-												
Milk fever		-											
Change in hair Coat								-					
More days to first heat	-							-			-		

Key: P=Phosphorus, Ca=Calcium, NaCl=Sodium Chloride, Mg= Magnesium, K=Potassium, S=Sulfur, Fe=Iron, Cu= Copper, Co=Cobalt, I=Iodine, Zn=Zinc, Mn=Manganese, Se=Selenium.

Ndechipi chikafu chakanaka kupa mhou nemabhuru

Kusarudza chikafu chinopiwa mombe zvinofanira kuva zvakanangana nekuvepo kwekudywa kwakakwana kunovaka muviri kunosanganisira (energy, protein, minerals). Kumombe dziri kukura kushaikwa kwekudywa kunopa simba kunoita mombe isakura, nekudaro kudywa kunopa simba rakawanda kunodiwa kupiwa mombe. Kudywa uku kunosanganisira zvese zvinobva kuchibage, masunlower, upfu wakagaiwa uye zvinosara pachibage chinoshandiswa

panobikwa hwahwa. Kudya kune fibre kuno sanganisira soyabeans, mashanga echibage, mishanga enzungu, makanda anosara panosvinwa muto wemaranjisi uye gorosi. Nyaya zhinji dzinotaurwa pamusoro pemombe dzinodya chikafu chakawanda chazara kudya kunopa simba nekuvaka muviri zvakanyanaya apo dzinenge dzichifura dzega, izvi zvinokonzera chirwere chekufufutirwa zvoita kuti dzife. Kuregera mombe dzichidya dzega pasina ari kuongorora kwadziri kudyira kana kuswera zvinhu zvinofanirwa kungwarirwa nemurimi. Kudya kunovaka muviri kwemaproteins kuno sanganisira soyabeans dzakagaiwa, mhodzi dzedonje uye chibage chashandiswa kubika doro chakaomeswa. Kushandiswa kwekudya kwakavhenganiwa nezvinovavira urea kana *pre-mixed protein* zvinopawo kudya kwakakwana kune nitrogen.

Nemamwe manzwi kudya kune roughage kunobatsirawo mukura kwemombe. Mari dzinoshandiswa pakutengera mombe chikafu dzinoita shoma nekuda kweuswa nekudya kune kunogaika kuchivaka muviri zvinoita kuti murimi asatenga zvekudya zvine kudya kunovaka muviri kwakawanda. Murimi anofanira kubata pfungwa yekuti kupa zvipfuyo zvake kudya kune urea kunoda unyanzvi saka zvinoda kuti abatsirwe nachiremba wemombe. Pane dambudziko rekuti urea iyi akawandisa inogona kugadzira chepfu ikauraya mombe. Chikafu chakawanda roughage chinodiwa pakugadzira nekuvhengansisa zvokudya zvemombe. Kusarudza chikafu chine roughage zvinosanganisira uswa hweBermuda, hweRhodes uye star. Mashanga anobva kuchibage, mapfunde, uswa ndezvimwe zvinopa roughage yakawanda kumombe dzenyama. Mafuro emombe ndiyo sarudzo yekutanga mukupa mombe chikafu.

Miti yechikafu chemombe

Hurukuro mumapoka

- Ndechipi chikonzero chekuwedzera chikafu mumombe nguva yakunenge kusinganayi?
- Chii chinokonzera kusabereka zvakanyanya kwehandira nemhou?
- Ndezvipi iwe zvaunoti zvakakosha pakugadzira chikafu chekupa mhau, nematsiru ane mazamau uye handira munguva yakunenge kusiri kunaya?
- Ndezvipi zvinofanirwa kuchenjererwa nemurimi kana achipa mombe dzake kudya kwakawanda zvibnhu zvinovaka muviri?

Hakuna chikafu chimwechete chingapiwa mombe kusvika yakura. Mombe dzenyama dzinoda kupiwa kudya kwakakwana kunosanganisira maproteins, vitamins uye maminerals kuti murimi azadzise donzvo rake pakupfuya mombe dzenyama. Murimi uyu anogona kushanda akabatana nachiremba wemombe kuitira kana ane mubvunzo pamusoro pekudya kunodiwa nemombe dzake. Chinhu chikuru chakakosha kuva neurongwa hwakakwana hwekuchengetedza mafuro nechikafu chekudya chinodiwa nemombe. Mafuro nezvekudya zvakakwana uye zvemhando yepamusoro zvinodikamwa pakudya kwemombe. Ongororo yekudya kunowedzerwa kumombe inofanira kuva yakatsamira pakudya kwakapiwa mombe uye mutengo wekudya uye kugashirwa kwechirongwa ichi.

Sei zvakakosha kuva nemiti inodyiwa nemombe yakasiyana siyana papurazi?

Nguva yekupisa mwaka unounza kushushikana kumombe uye zvimwe zvipfuyo sezvazvinongoitawo kuvanhu. Munguva iyi kudywa kwemombe zvikuru sei uswa hunoshaikwa uyu hunenge huri hwemhando yepasi. Uhwandu hwezvinovaka muviri muuswa hunenge hwakawanda mumwedzi mishoma yegore. Sora parinokura roibva, rinoshaya zvinovaka muviri zvinoita rinetse kudzeya pamwe nekugaya mudumbu. Izvi zvinopa dambudziko kuti mombe dzigare dzisina utano. Vamwe varimi vanogona kuregera mombe dzavo dzichinofura musango kana kune dzimwe nzvimbo, asi chii chingaitwa kana mafuro aya asisipo? Nzira imwechete kupedza dambudziko iri kudyara miti papurazi pako iyo inopa zvokudya zvakanwana zvine utano kumombe dzako munguva yekupisa iyi kusina mvura. Miti iyi inoramba iine kudywa kunovaka muviri uye kunozeeka kwegore rese.



Miti yechikafu chemombe

Ndingawanepi kudywa kwemombe kunovaka muviri?

Rimwe redura rekudya kunovaka muviri mashizha emiti zvikuru sei kumiti inobereka zvine mhodzi. Miti iyi inowanikwa pamiti yechivanhu neyechirungu ikokasika kukura inosanganisira mipangara, mimvee, michecheni, Pigeon pea, Mulberry, Sesbania sesban, Acacia angustissima, Calliandra calothyrsus, Gliricidia sepium, Albizia lebeck and Leucaena leucocephala. Muti unonzi mu*Leucaena leucocephala* ndiwo uri pamberi pakuita kuti mombe dzibude mukaka wakapamidzira nemalitre gumi nemana 14litres pamhou imwe neimwe. Umwe muti unopa kudywa kunovaka muviri muti weMoringa oleifera, uyo unova wechirungu unokasika kukura. Imwewo miti haingopi kudywa kunovaka muviri chete asi inoberekawo mhodzi dzine kudywa kunodiwa nezvipfuyo. Mienzaniso yemiti iyi inosanganisira masekesa mipangara, mimvee, *Piliostigma thorningii*, *Dicrostachys cinerea*, *Amblygonocarpus andogensis*, *Faidherbia albida* ne*Acacia*. miti iyi haingopi zvinodiwa mumuviri wemombe kuti dzive neutano asi inoberekawo mhodzi pakati pemwaka dzinogona kudyiwa nezvipfuyo.

Dzimwe nzira dzandingashandisa kuva nemiti kana kudyara papurazi

Pane nzira dzakawanda idzo murimi anogona kusanganisa miti inodiwa nemombe papurazi.

Kuchengetedza miti inowanikwa munharaunda Protect local trees

Basa rokuita

- Miti inowanikwa munharaunda mako yakakodzera here kudyiwa nemombe?
- Pane miti inodyiwa nemombe here yasara munharaunda mako? Ndeipi uye mhodzi dzayo dzinoibva munguva ipi?
- Unogona here kudyara mhodzi dzacho?
- Ungadyara mhodzi idzi pai?

Nzira yekutanga iri nyore kuchengetedza miti iri munharaunda zvikuru sei iyo inobereka mhodzi inenge iri kukura papurazi remurimi wemombe dzenyama.

Kudyara miti

Kana pasina miti iripo papurazi kana paine mishoma, murimi anogona kutsvaka mhodzi odyara panzvimbo yekudyarira miti. Kana mhodzi dzichinge dzamera anobva adzidyara kutanga kwemwaka wekunaya kwemvura. Murimi anogona kudyara miti iyi akasanganisa nembeu pamakandiwa kana akakomberedza musha kana kuidyara yega mumunda.

Kudyara miti nembeswa pamwechete

Kana miti iyi ikadyarwa nembeswa, zvakajairika kudyara miti iyi mumitsetse yakafara mamita matatu kana gumi 3-10m. Kuparadzaniswa kwemiti iyi kunofanira kuita macentimetre makumi maviri nemashanu kana makumi mashanu 25cm-50cm. Unobva wadyara mbeswa pakati pemiti iyi uchidziparadzanisa zvezvaunogara uchiita.

Kudyara miti wakatevedza gandiwa kana pamusoro paro

Miti inogona kudyarwa wakatevedza makandiwa kana kudyara pamusoro, kuparadzanisa miti iyi zvakanyanya hakuna basa rakakura sezvo miti iyi isina mbeswa dzainenge ichikura nayo. Unogona kuiparadzanisa zvaunoda asi ona kuti miti iyi yakaparadzana mametre anoita matatu.

Kudyara panzvimbo imwe yakabatana

Murimi anogona kudyara miti iyi yakabatana yakaita fodder bank. Fodder bank zvinoreva nzira yekuchengetedza kudya kwemombe kwenguva yaunoda iwe semurimi. Sekuchengetwa kunoitwa mari mubhanga kusvika muridzi ava kuida, chikafu chemombe chinogona kuchengetwa pamiti iyi. Nzvimbo kana munda wakakura mametre anoisanganisa makumi mashanu kureba nekufara 50m by 50m inokwana mombe ina. Zvakakosha kudyara miti yakavhengana ingaita mhando nhatu kana ina kuti chive chikafu chemombe dzako. Unodyara miti iyi mumitsetse yakaparadzana macentimetre anoita makumim mashanu 50cm kunze mukati memitsetse iyi woiparadzanisa macentimetre anoita 30cm – 40cm. chengedza miti iyi yaunenge wadyara.

Miti iyi ingakohwiwa sei uye kushandiswa sei?

Pane nzira mbiri dzinogona kushandiswa nemurimi unogona kushandisa imwechete kana dzese nguva imwechete. Nzira yekutanga iri nyore kurega mombe dzako dzichidya mashizha nemhodzi pamiti iyi zvikuru sei mhodzi dzinenge dzakawira pasi. Nzira iyi ndiyo yakafanira kana miti yakaparadzana uye iri pese pese. Kana wakadyara miti iyi nenzira yekuita mabhanga (fodder banks) unoshandisa nzira yekutema miti iyi mushure memasvondo, mashoma kuti mombe dzidye mashizha aya achiri manyora kana kuti aoma. Iyi nzira inodaidzwa kunzi kutema nekusenga (cut and carry). Unofanira kutema miti iyi mushure mekunge yava negore kana kuti yareba mametre anoita rimwe kana maviri. Kana ukatema miti iyi isati yakura zvinogona kuzopa dambudziko pakukura kwayo mangwana. Mushure mekuitema kwekutanga, miti iyi inogona kuzotemwa mushure memasvondo masere kana gumi nemaviri zvichienderana nemwaka uye makuriro ayo mushure mekutemwa. Murimi anofanirwa kutema miti iyi yava nemacentimetre makumi mashanu kana makumi manomwe 50cm-70cm. Chikafu chekudyara ichi chinogona kuburitsa matonne matatu kana gumi kana chaomeswa pahekita roga roga mugore rimwechete. Nguva yakakodzera yekutema kana kufudzira mombe zvinosiyana siyana nenzvimbo. Nguva yakareba miti isimba kutemwa inoburitsa chikafu chakawanda asi zvine dambudziko rekuzowanza matanda asingazodiwi nemombe. Munzvimbo dzakanaka, murimi anogona kukohwa munguva yakaita masvondo matanhatu kana masere 6-8 weeks, asi munzvimbo dzisina kunaka anokohwa mushure memasvondo gumi nemaviri. Mhodzi dzakawanda dzinopa utano kudarika chibage. Kupa mombe chikafu chine mhodzi dzakawanda zvinoita kuti dziwedzere kurema kwadzo. Kushandisa chikafu chakavhenganiswa nemhodzi hazvidhure pane kutenga chikafu chakadzirwa. Muenzaniso uri pazasi unoratidza kuti unovhenganisa sei kudywa kwemombe kune utano.

Chikafu chemombe chinemhodzi netsanga zvavhenganiswa

Zvakashandiswa	Chikero (Kg)
Mashanga echibage	250
Tsanga dzechibage	200
Tsanga dzemapfunde	200
Masunflower akagaiwa	100
Mhodzi dzemu Piliostigma thorningii	200
Mhodzi dzemu Acacia erioloba	50
Zvese zvabatanidzwa (Total)	1000

Hurukuro mumapoka

Ungawana mhodzi dzinopa utano kumombe kubva kumiti ipi?

- Kubva kuruzivo rwaunarwo, ndekupi kudywa kwavhenganiswa kwaungapa mombe uchishandisa zvaunorima papurazi pako?
- Kunyange zvazvo nzira yekukohwa chikafu chinopiwa mombe yekutema nekusenga (cut and carry) ichida simba nevashandi vakawanda pane kurega mombe dzichidya miti iyi dzega, pane zvakanakaira nzira yecut and carry iyi.
- Ndezvipi zvezvimwe zvakanakira nzira iyi?

CHIKAMU 9

Kuchengeta Mafuro eMombe muNzvimbo Dzinorimwa neDzisingarimwi



Donzvo rechidzidzo

Mukupera kwechikamu chino vadzidzi vanofanira kuita zvinotevera:

- Kunzwisisa kukosha kwekuchengetedza nzvimbo dzinochengeterwa mombe. (Understand the importance of conserving the rangelands);
- Kuva neruzivo rwemafuro nezvirimwa zvinowanikwa munharaunda yekuchengetera mombe.
- Kunzwisisa ukama huri pazvirimwa, ivhu uye zvipfuyo zvinogaramo.
- Kunzwisisa nzira dzekuchengetedza mafuro nadzo kwemombe dzenyama.
- Kuziva kusimudzira nekuvandudza uswa nezvirimwa zvinowanikwa panochengeterwa mombe.



Hurukuro mumapoka

Usati waenda mberi, kurukurai pamusoro pekuti chii chinonzi kuchengetedza nekuongorora nzvimbo dzinochengeterwa mombe

- Tsanangura kuti chii chinonzi nzvimbo yekupfura mombe isingarimwi (rangeland).
- Ndeupi mutsauko uri pakati pemafuro emombe nenzvimbo inochengeterwa mombe isingarimwi (*range land and pastureland*).
- Zvakakoshi kuva nemuzinda wekuchengetera mombe kumurimi wemombe dzenyama.
- Doma uchinyora pasi mhando yemafuro anowanikwa pamuzinda wekuchengetera mombe (rangeland).

9.1 Nhanganyaya

Rangeland inzwi rinoreva nzvimbo isingarimwi zvirimwa. Nzvimbo iyi haisanganisiri panoitwa zvekucherwa zvicherwa, uye pane midhuri nemigwagwa yemotokari. Nzvimbo iyi inogona kuva sango rakasvibira rine miti neuswa hwakawanda, gwenga kanawo nzvimbo yakazara matombo. Rangeland inosanganisira nzvimbo dzine uswa hwakawanda, makwenzi netumiti tudiki uye nzvimbo dzine miti yakaparadzana. Nzizi, tunyanza tudiki, makoronga nehova dzemvura ndizvo zvinovaka nzvimbo iyi. Nzvimbo dzinorimwa zvirimwa dzine uswa uye miti nezvimwe zvekugadzira kudya kwemombe dzinodaindza kunzi *pastureland*. Pastureland nerangeland zvinoda kufanana pane zvakawanda asi zvinosiyana benzi pakuti pastureland inorimwa uye kutariwa nenzira dzinoshandiswa mukurima. Izvi zvinosiya a nerangeland hairimwi uye haina anoitarira nekuti zvinongozviita zvega *ecological practices* inotarirwa kuburikidza nekuzviita zvoga.

9.2 Kukosha kwenzvimbo dzisingarimwi dzekufudzira mombe

Varimi veminda vadiki vemuZimbabwe vanoshandisa nzvimbo dzisingarimwi kufudzira mombe dzavo. Mune dzimwe nzvimbo, nzvimbo dzisingarimwi idzi mombe dzinogovana mafuro awa nemhuka dzemusango. Nerumwe rutivi, nzvimbo dzisingarimwi idzi dzakakoshera varimi vadiki ava nekuti ndiko kwegwa kwavanowana mafuro emombe dzavo. Kukosha kwenzvimbo idzi mukushandiswa kwadzo senzvimbo dzekutandarira uye kwekuwana mvura kuri kukura munyika yeZimbabwe. Izvi zvinoratidza kluti mune ramangwana nzvimbo dzisingarimwi idzi dzichatanga kutariswa nekuchengetedzwa senzvimbo dzekuitira zvakanwanda. Basa rakawanda renzvimbo idzi richatariswa nekuchengetedzwa panguva imwecheteyo nehanya neungwaru kuitira kuti dzisakuvadzwa kana kuparadzwa. Semuenezaniso nzvimbo dzisingarimwi dzinogona kushandiswa uri mubatanidzwa wezvinotevera:

- Senzvimbo yekuchengetera mhuka dzemusango;
- Nzvimbo yekupfura mhuka dzemusango;
- Kumafuro emombe;
- Kuvhima mhuka dzemusango;
- Kuchengetedza kana kudzivirira panobva rwizi kana rukova;
- Senzvimbo inobva mvura yezvipfuyo nemhuka.

Nzvimbo dzinorimwa nedzisingarimwi dzinobata chikamu makumi masere kubva muzana 80% munyika yeZimbabwe. Kuchengeta zvipfuyo munzvimbo dzisingarimwi idzi kwakakosha zvakanwanda mokuti ndiko kunobva nyama zhinji mumadhorobha emuZimbabwe uye matebwe nezvimwe zvatinowana kubva muzvipfuyo. Nzvimbo dzisingarimwi idzi dzinoshanda semuzinda unovanda mhuka dzemusango, shiri, zvinokambaira, hove netupukanana. Kuburitsa zvakanwanda kwakosha kwenzvimbo dzisingarimwi idzi dzinowanikwa muZimbabwe, chikamu makumi masere nena kusvika makumi masere kubva muzana 84-90% chinobata mhuka dzinoyamwisa, chikamu makumi manomwe kubva muzana 70% chinobata shiri, chikamu makumi matanhatu kubva muzana 60% chinobata zvinokambaira uye chikamu makumi mashanu kubva muzana 50% chinobata hove izvo zvinowanikwa munzvimbo idzi zvakanwanda mumagariro azvo.

Mombe dzenyama dzinochengetwa nevarimi vadiki uye makonzo nembeva zvine kuzeya kwakada kufana uko kunozvipa mukana wekuzeya nekugaya kudya kwakaomarara kunowanikwa munzvimbo dzisingarimwi idzi. Mhuka dzakaita semakonzo, nembeva, mbira netsuro zvine mudumbu munokwanisa kuti dzidye kunopa simba kwakaita sesora uye zvime zvinobva kumiti. Zvinhu zvakaita seshiri nehuku dzechivanhu dzinoda kudya kwekunonga nemuromo kwakaita setsanga izvo zvinoita kuti dziwanewo uku kubva mumichero yemusango, nhodzi uye midzi.

Hurukuro mumapoka

- Sei mvura yakakosha mukutarisa nzvimbo dzisingarimwi idzi?
- Munharaunda mako mune rombo rakanaka sei pamukana wekuwana mvura pakutarisa nekuchengetedza nzvimbo dzisingarimwi idzi?

Munzvimbo dzese dziri kumaodzanyemba kweAfrica, Zimbabwe ine mvura yakawanda kubva munzizi, nyanza, nzvimbo nyoro dzakaungana mvura uye pasi. Nokuda kwekuti nzvimbo dzisingarimwi idzi dzinowanikwa kumaodzanyemba kweAfrica uku, mvura yakakosha nechikamu makumi masere kubva muzana (80%) kuvagari vemuZambia vanogara munharaunda iyi. Mvura zhinji iri munzizi nemuhova dzemuZambia inopinda munzvimbo dzisingarimwi nemasango. Mekudaro utariri hwakakwana uye hwakakodzera hunodiwa pakutarira huwandu uye mhando yemvura inenge ichiyerera munzvimbo idzi.

9.3 Mhando dzemiti neuswa dzinowanikwa munzvimbo dzisingarimwi

Pane mhando dzakawanda dzakasiyana siyana dzinowanikwa munzvimbo dzisingarimwi idzi, asi zvinotevera ndizvo zvakanyanyo kukosha:

Uswa:

Uswa hunosanganisira zvese zvine mashizha matete akareba uye hunde dzine tumaburi tudiki. Uswa hauite mashizha ane maruva uye hunoita mhodzi dzakaita tsanga.

Forbs:

Iyi ndeimwe mhando yeuswa isina matanda kana tsotso uye tumiti tune mashizha makuru uye tunoita maruva akanaka. Tumiti tuzhinji tune maruva twemusango uye mauswa emusango tunodaizwa kunzi maforbs.

Makwenzi:

Iyi miti midiki yakaita makwenzi ine mashizha makuru. Makwenzi aya akasiyana nemiti pakuti haana hunde huru, asi kuti makwenzi aya ane tuhunde twakawanda wanda. Zvinogonekawo kuti unoita mubatanidzwa wemuti negwenzi asi kazhinji makwenzi haakuri kuita miti.

Browse

Izvi zvinosanganisira pamusoro pemakwenzi panodyiwa nemombe uye mhuka dzakasiyana siyana.

Mast

Izvi zvinobata mhodzi dzichamora uye michero yemusango zvinobva pamakwenzi izvo zvakakoshera mhuka dzemusango neshiri. (Is the term for the seeds and wild fruits that shrubs produce and is especially important for wildlife and scavenging village chickens).

9.4 Kudyidzana nekupindirana kwemafuro nemhuka munzvimbo dzisingarimwi

Hurukuro mumapoka

- Ungasimudzire sei nzvimbo dzisingarimwi idzi munharaunda maugere?
- Ndeapi matambudziko anogona kuuya nekuda kwekuchengeta mombe dzenyama kana kuva nebhizimusi remombe dzenyama usingatarisisi kuchengetedza nzvimbo dzisingarimwi idzi?
- Chii chinonzi kuchinjanisa mafuro? Kuchinjanisa nzvimbo dzemafuro (rotational grazing) idzi zvingaitwa sei kusimudzira purazi rako?

Kubvisa sora risina kunaka mumafuro:

Masora (weeds) mumafuro uye nzvimbo dzisingarimwi anokanganisa mafuro emombe gore rega rega uye zvinokonzera kufa kwemombe nekukuvadza mombe zvikuru sei minzwa. Kubviswa kwesora rinokuvadza mombe iri kunotanga nekuva nemafuro ane utano. Sora risina kunaka iri idambudziko rinofanirwa kuonekwa zvikuru sei kana uswa huchikura. Utariri hwakakwana hwemafuro emombe kunosanganisira sarudzo yakanaka yemiti neuswa yakawanda yakasiyana siyana, ivhu rakasimba, utariri hwekunofurira mombe uye kubvisa tupukanan tunounza zvirwreze mumombe twakaita sezvikwekwe. Kana utano hwemafuro hukadzikira sora risina kunaka rinotora mukana wekukura. Pasi kana nzvimbo ine ivhu chete ndiyo nharaunda inofarirwa nemasora aya. Kana sora risina kunaka rikakura rinofanira kumiswa nekubviswa nekusakura kana kudzura kana kushandisa mishonga yechirungu. Kusvika damudziko rinoita kuti uswa hunodyiwa nemombe hudzikire ragadziriswa, uswa haumere uye sora risina kunaka rinobva razara panzvimbo iyi.

Kutenderera uchitarisa mafuro:

Kufamba uchiongorora mafuro ndihwo hwaro mukubvisa sora risingadiwe munzvimbo dzinofura mombe asi vazhinji vanotarisa urongwa uhu pasi. Izvi zvinosanganisira kufamba netsoka kana kushandisa motokari uchitarisa huvepo hwesora risina kunaka kudyiwa nemombe nezvirimwa. Izvi zvinoita kuti murimi aone uvepo hwedambudziko iri kuti atore matanho akakodzera kudzima dambudziko iri. Uwandu hwesora iri, miti neuswa zvakasiyana siyana nzvimbo dzinowanikwa uswa uhu zvakakosha mukudzima dambudziko iri. Nzira dzekuchengetedza mafuro emombe dzinofanira kunge dzakatsimbirira pauswa nemiti yakanyanyisa kuwanda munharaunda iyi uye kudzivirira kutekeshera kweuswa hunenge husina kuzara panzvimbo iyi.

Mamiriro euwandu hwekudya kwakakwana kwesora:

Mhou kana ichinge yafura uswa munzvimbo inochengeterwa mombe isingarimwi inoburitsa mupfudze une Nitrogen inoita chikamu makumi manomwe nepfumbamwe kubva muzana 79%, chikamu makumi matanhatu nenhanhatu kubva muzana 66% chePhosphorus, Potassium chikamu makumi mapfumbamwe nembiri 92%. Nerumwe rutivi zvole zvataurwa izvo hazvirevi kuti zviri mumupfudze uyo zvino shandiswa neivhu kuti rite huswa hwakanaka. Mupfudze unoitwa nemombe idzi panzvimbo yose asi kuti unoungana pamimvuri inozorora mombe, padzinodira uye padzinomwira mvura. Mombe dzine tsika yekudya mafuro akanaka dzonoisa mupfudze panzvimbo isingaiti uswa hwakanaka. Izvi zvinoratidza kuti murimi anofanira kuisa fotoriza (fertilizer) kana mupfudze kubva mumatanga kuti uswa hukure zvikuru sei kunofurwa nemombe idzi.

Mvura inodiwa nemombe:

Mombe dzenyama dzinoenda kunomwa mvura kaviri pazuva. Murimi anofanira kunzwisisa mamwiro anoita mombe dzake mvura kuti aderedza dambudziko reku kukurwa kwevhu (*soil erosion*) sezvo mombe dzichita nzira dzakawanda padzinenge dzichifamba kuenda kunomwa mvura. Munyika yeZimbabwe varimi vadiki vazhinji vanotora mukana wekupa mombe dzavo mvura inowanikwa munzizi, tunganza, madhamu uye hova. Mombe huru dzinomwa mvura yakawanda malitres makumi matanhatu kana zana pazuva rega rega zvichienderana nemwaka. Mvura zhinji inodiwa nemombe munguva yekupisa kubva muna Gunyana kusvika Mbudzi. Murimi anopa mombe dzake mvura nemapipe uye matangi anofanira kuuona kuti

mvura yadirwa uye matangi ake akazara. Rangarira kuti muvarimi vadiki vemombe, mombe dzinouya kuzomwa dzakabatana seboka kwete imwe imwe.

Mamiriro euswa hunodyiwa nemombe - kuwanda kwemiti neuswa zvinoita kuti kudya kwemombe kuvepo tichitarisa uremu kuti zvakawanda sei? Izvi zvakaratidzwa pazasi:

Site has 76%-100% by weight of desirable forage plants for beef cattle. 40 40 40

Site has 51%-75% by weight of desirable forage plants for beef cattle. 30 30 30

Site has 26%-50% by weight of desirable forage plants for beef cattle. 20 20 20

Site has 0%-25% by weight of desirable forage plants for beef cattle.

9.5 Mamiriro neutariri hwenzvimbo dzisingarimwi dzinochengeterwa mombe

Utariri hwenzvimbo dzinochengeterwa mombe zvinoreva kuva nehanya nezviwanikwa zvemunzvimbo idzi zvinosanganisira zvirimwa, ivhu, mhuka uye mvura kuitira kuzadzisa zvido zvenharaunda. Chakosha chisingazivikanwi nevakanaka pautariri uhu kuzadzikisa kudta kwemunharaunda. Kupfuya mombe kwakosha, asi kuchengetedza mhuka dzemusango, nenzvimbo dzekutandarira nemvura ndizvo zvava kutariswa zvakanyanaya. Kushandiswa kwakanaka kwenzvimbo dzisingarimwi idzi kunoitwa kuburikidza nekuongorora uye kutarisa nekusandura zvakawanda.

Mhuka nezvipfuyo zvingagarisana here zvakanaka

Nzvimbo dzisingarimwi idzi inzvimbo dzinowanikwa zvakakasiyana siyana zvinogaramo. Mhuka nezvipfuyo zvinogona kugarisana zvakanaka pasina kurwisana sezvo zvichida nekuda zvinhu zvakasiyana siyana. Nemamwe manzwi, utariri hwezvipfuyo hwakakwana ndechimwe chombo chekusimudzira pekugara pemhuka. Muenzaniso, kufura kunoita mombe musango eKafue zvinokurudzira kukura kwemakwenzi anodyiwa nenyati neKfue lechwe. Mune dzimwe nzvimbo zvipfuyo zvinogona kuita mapitse/ makwikwi nemhuka dzemusango dzakaita selenchwe dzichirwira mafuro kana mvura. Chinhu chakosha chinoda kurangarirwa ndechokuti mombe hadzina kuipa kumhuka dzemusango. Dzimwe mhuka dzemusango dzine utano uye dzine pundutso, asi dzimwe dzinoparadzira zvirwere dzakaita senyati dzinounza chirwere chemahwanda. Utariri nekungwarira mafambiro emafuro ndiro danho guru kupedza makatanwa pakati pezvipfuyo nemhuka.

Nzvimbo dzisingarimwi dzehurumende nedzisiri dzehurumende

MuZimbabwe chikamu makumi manomwe kubva muzana 70% chenzvimbo dzisingarimwi ndechehurumende. Izvi zvinoreva kuti nzvimbo huru iri pasi pehurumende zvichisanganisira masabhuku nemadzishe nevanhu. Nzvimbo iri mumaoko ehurumende hainyanyoshandiswa zvine pundutso kudarika nzvimbo dziri mumavoko vanhu nekuda kwekuti makareko nzvimbo dzange dzisingaite kugara dzakabva dzaenda mumaoko ehurumende. Izvi zvinoreva kuti zvipfuyo zvinoda simba rakawanda kuti zviwane kudya. Vanhu vanopfuya mombe munharaunda yehurumende iyi vanofanirawo kushandisa nzvimbo idzi zvakaita sekuchengeta mhuka uye pekutandarira. Kumwe kushandiswa

kwenzvimbo dzisingarimwi idzi zvakasiya siyana kunogona kuderedza kuchengetwa kwezvipfuyo. Munzvimbo dzhurumende idzi, vanochengeta zvipfuyo vanofanira kusimudzira uye kugadzira panowanikwa mvura, munyu uye kukomberedza newaya munzvimbo dziri pasi pevanhu (private land) zvese izvi zvinoitwa nemuridzi wenzvimbo iyi. Munzvimbo dzhurumende vanhu vanofanirawo kuona kuti vachengetedza zvinowanikwamo. Nzvimbo dziri mumaoko ehurumende nemadzishe nehumwe utongi vanooita sarudzo dzekuti vangade kuchengeta zvipfuyo zvakawanda sei uye kwenguva yakareba sei. Sarudzo idzi dzakasununguka kana zvichiitwa munzvimbo dziri mumaoko evanhuwo zvavo. Utariri hwenzvimbo dziri mumaoko ehurumende hunoita nechinangwa chekuzadzisa zvido zvevanhu uye gutsaruzhinji. Mumakore zana apfuura, zvizvarwa zvakawanda vakatora nzvimbo idzi senzvimbo dziri kutambiswa vakaona kuti kuchengeta mombe ndiko kwakakodzera. Iko zvino vanhu vakawanda vari kufara kushandisa nzvimbo idzi senzvimbo dzekutandarira. Nekudaro vanhu vari kuramba vachikurudzirwa kuti vasatora nzvimbo idzi kudziitira mafuro kana kupfuira mombe. Munguva inotevera, vanhu vanoshandisa nzvimbo dzisingarimwi idzi vanofanira kuzanisa kukosha kunounzwa nezvipfuyo kwakaita senyama kusimudzira upfumi hwenharaunda nekukosha kunounzwa nemhuka.

9.6 Nzira dzekuchengetedza mafuro nadzo

Kuchinjanisa mafuro/Rotational grazing

Kuchinjanisa mafuro kunoreva zvakasiyana kuvanhu vakasiyana siyana. Mukukurukura nevarimi vakawanda munyika maererano nekutarira kuchengetedza mafuro ndakaona kuti zvinoreva zvakasiyana kuvarimi. Duramanzwi rinotsananghura nyaya iyi richiti kutevedzwa kwemafuro achichinjaniswa pachitevedzwa urongwa. Kumurimi wembesa zvinoreva kudyara mbesa dzakasiyana siyana uchisandura mbesa mwaka wega wega. Kumurimi mudiki (rotational grazing) zvinoreva kuti mombe dzinofudzwa mumimnda yakasiyana siyana zvichienderana nehuvepo hweuswa. Chinangwa chikuru chekuchinjanisa mombe ,mafuro kuti uswa huwane mukana wekukura. Rotaion/ kutenderedza zvinongoreva kufambiswa kwemombe kubva mumuzinda wadzinenge dzichifura kuenda kune mumwe.

Donzvo guru renzira iyi nderekupa mombe dzenyama mukana kuuswa hwadzinodya uye kupa nguva yakakwana kuuswa kuti huite zvaakanaka. Izvi zvinogoneka kuburikidza nekupa mombe dzenyama uswa hwakakwana kwenguva yakatarwa yekufura dzobviswa dzoendeswa kune mumwe munda. Kukura kwehuswa kunokurumidza kana kuchinjwa uku kukaitwa nekukasika. Zvidzidzo zvekurima zvinoburitsa pachena kuti uswa hunotora nguva inoita mazuva mashanu kana masere kuti hukure mushure mekuchekwa, saka mombe dzinofanirwa kuchengetwa kwemazuva anoita mashanu dzichifura kuitira kuti uswa husadzurwa nemidzi izvo zvinokanganisa mafuro. Nzira yakanaka yekuchinjanisa mafuro aya kupa mombe dzenyama mukana wekudya uswa. Nguva yekufura iyi ikadarika mazuva ataurwa izvi zvinokanganisa mombe pamwe neuswa. Funga nekuona mafuro ako sedura rekudya kwemombe dzako. Unofunga here kuti ungatarisira kuti mombe dzako dziite zvakanaka kana dura raiiswa uswa mushure memazuva mana kana mashanu. Uswa unyoro hunokurudzira kudy kwakanaka zvinorevawo kuita kwemombe zvakanaka.

Uwandu hweminda yemafuro anodiwa

Mukuita urongwa hwerotational grazing murimi anofanira kutarisa uwandu hwemombe dzake, zwiwanikwa zvekushandisa uye zvinangwa zvinoda kuzadziwa nemurimi. Kuboka rega rega remombe raunoendesha kunofura, panofanira kuva neminda yekufurira paddocks mishanu kuitira kuti huwane nguva yekukura. Mizinda yekufurira gumi inowedzera mombe kuti dzive nenguva yekufura. Mizinda makumi maviri inowedzera kuti murimi aone kudiwa nekukura kwemombe neuswa. Izvi zvinogona kuratidza sezvinorema asi zvinogoneka murimi akakomberedza mafuro aya neminzwa. Mombe dzakadzidziwa kugara muwaya uye kufamba dzichichinjaniwa mafuro mushure memazuva maviri kuti dzinofura dzinosangana nemurimi pasuwo dzakamirira kuita zvakadzidziwa.

Zvinotariswa kana uchiita urongwa hwerotational grazing

- Tarisa zvikuru sei mwaka wegore kana uswa hwakura munzvimbo mako. Izvi zvinoita kuti uone kuti mizinda yako inogona kufurwa nemombe imwe.
- Kusimba kweivhu munharaunda mako zvinokosha sezvo zvichiita kuti uswa hukasike kukura.
- Tora mukana wenzvimbo nyoro dzine mvura munguva yekupisa kuti uone kuvepo kwekuzana kwenzvimbo nyoro pakati kudyara muriwo uye mafuro emombe.
- Tarisa zvakare muripo nemutengo wekupa mombe idzi chikafu uchienzanisa nekuita urongwa wekushandisa rotational grazing.

Chii chinonzi kufura uswa zvapakfurikidza mwero panzvimbo (overgrazing?)

Vanhu vazhinji vanonyanyotarisa kuti zvipfuyo nemhuka zvinokonzera kuti nzvimbo dzakawanda dzishaye uswa nekuda kwekufura kwakanyanya uye kuwandisa. Kufura kwakanaka kunosimudzira utano nemamamriro enzvimbo zhinji dzisingarimwi. Asi, kana nzvimbo ikabviswa uswa hwakawanda hwakasvibira izvi zvinogona kuti hutadze kuzobuka zvakare. Nzvimbo yakafurwa uswa zvakananyanya inonetsa kuona asi inogona kuonekwa kuburikidza nekuwanda kwesora risingadyiwe nemombe, kukurwa kwevhu uye kudzikira kweuswa hunodyiwa nemombe. Kungwarira kunodiwa munhu asati ataura kuti nzvimbo yadyiwa zvakananyanya (overgrazed). Hadzisi nzvimbo dzese dzisingarimwi dzine pundutso saka biomass shoma hazvirevi kuti nzvimbo yava overgrazed. Uswa husingadyiwi nemombe hunogona kukura kudarika zvinodyiwa nemombe uye mvura zhinji inogona kunaya yokukura ivhu munzvimbo dzinofurwa zvakanaka.

Zviratidzo zvenzvimbo yadyiwa zvakananyanya nemombe overgrazed munzvimbo dzisingarimwi zvinowanza kuitika munzvimbo dzisingatariswi nekuchengetedzwa semafuro. Nzvimbo zhinji dziri mudunhu rekuChamhembe, nepakati peLupane ane mafuro akanaka nekuda kwemvura uye mombe shoma munzvimbo iyi. Chimwe chinangwa chekutarisa mafuro awa kuda kudzima dambudziko reovergrazing. Mutariri mukuru wenzvimbo iyi akaona dambudziko iri anatora matanho akakodzera kudzima dambudziko iri.

Nzvimbo dzine mafuro asingachengtedzwi

Iyi inzvimbo inenge yakatsva nemoto ine miti neuswa hwerudzi rwe *hypparrhenia* species (tall and erect grass), *Heteropogon contortus* and *pyramidalis* (short but erect grass), *urochloa pullulans*(semi-prostrate), *cynodon dactylon*. Uswa uhu hune nguva yahunoda kukura mumwedzi waZvita naNdira, hunoita maruva muna Kukadzi naKurume zvichienderana nenzvimbo. Izvi zvinobva zvateverwa nenguva diki yekukura nekubuka kwesora muuswa hukuru uye humwe uswa hwakaita secynondon dactylon munguva yekupisa. Uswa uhu ndiho hune kudya kunodiwa nemuviri hunokura munharaunda iyi, kudya uku kunobata chikamu chisere kana gumi kubva muzana 8-10% chezvinovaka muviri mumwedzi waZvita naNdira. Uswa uhu hunozodzikira zvinovaka muviri pahunenge hwakura hwaoma muna Kukadzi naKurume.



Mombe ichifura uswa hwakaoma

Kuvarimi vadiki kuti vashandise nzvimbo idzi panofanira kuva nenguva dzekufudza nekuzorodza mafuro awa. Mombe ina kana gumi dzinofanira kufura pahekita imwe yoga yoga. Mafuro awa anofanirwa kuzorodzwa mazuva makumi matatu kana mashanu muna Zvita naNdira. Munzvimbo dzinonaya mvura yakawanda neiri pakati nepakati mafuro awa anogona kuzorodzwa kwemasvondo mana kana matanhatu.

9.7 Kuchengetedza nzvimbo dzisingarimwi

Zvinotevera ndezvimwe zvakakosha mukuchengeta nzvimbo dzisingarimwi.

- Kuderedza uwandu hwemombe uchitarisa kuti mafuro nemiti zvakanwanda sei?
- Kuwedzera uwandu hwemombe - uchitarsia huvepo hwemafuro emombe.
- Kuramba uchiita hurongwa hwekuwedzera mombe dzenyama.
- Kuronga madyiro nemafuriro achaita mombe dzako dzenyama.
- Kuramba uchiita utariri pamombe dzako.
- Kugadzira nzvimbo dzinomwirwa nemombe dzako.
- Kudyara uswa hunodyidzana kuti mafuro asimukire.

Kusosa kana kukomberedza mafuro:

Kukomberedza mafuro newaya kana neminzwa kunochengetedza mafuro sezvo zvichipa uswa nguva yekukura. Uwandu humombe hunogona kuwedzerwa kana kuderedzwa kuti murimi azadzise zvinangwa zvake mukutarira nekupfuya mombe. Uswa nezvinodyiwa nemombe zvinofanirwa kusarudzwa neungwaru nokuti mombe dzinoda kudya zvakasiyana siyana. Muenzaniso ndewekuti, mombe dzinoda kudya uswa asi mbudzi dzinoda makwenzi, hwai dzinodya zvakavhengana uswa mashizha nezvimwe zvakadaro. Zvinodyiwa nezvipfuyo izvi zvinosiyana zvichienderana nepazvinokurira kana kudyirwa nezvipfuyo nemamiriro enzvimbo. Muenzaniso hwai dzinogona kufura pamakomo asi mombe hadzisoni kudaro.

Kupisa uswa:

Moto ndechimwe chezvinhu chinogona kunyuka mumamasango nemagariro emhuka. Munzvimbo dzinochengetwa moto unogona kushandiswa kupisa uswa nenzira dzinotenderwa. Mumatunhu ekumaodzanyemba varimi vanoshandisa moto kuderedz adambudziko retsine uye mafeso zvichiita kuti uswa hugozokura zvakakanaka pakunaya kwemvura. Kuwanda kweuswa husingadyiwe nemombe idambudzikjo munzvimbo dzine mafuro emombe. Vanochengeta nzvimbo idzi vanoshandisa moto, mishonga kubviswa sora ravasingadi kuti uswa hwakanaka hukure.



Kupisa nzvimbo diki sedanho rekuti uswa hukure zvakakanaka

Hurukuro mumapoka

- Unoda mizinda (paddocks) mingani inofurira mombe dzako dzenyama?
- Ndezvipi zvaunotarisa pakushandisa urongwa hwerotational grazing?
- Ungada here kuita mubatanidzwa wemafuro akakomberedzwa newaya nevavakidzani vako senzira yekuwedzera mafuro munzvimbo dzisina mafuro akawanda?
- Ndezvipi zvaungatarisa usati waita mubatanidzwa uyu?

CHIKAMU 10

Utano hweMombe



Donzo rechidzidzo

- Kunzwisisa zvakanakira kuva nezvirongwa zvekuchengetedza hutano hwemombe.
- Kunzwisisa zviga/zvimiso zvechirongwa chakanaka chokuchengetedza utano hwemombe.

10.1 Nhanganyaya

Zvokuita

- Doma zvimwe zvezvinhu zvakajairika zvekuchengetedza utano hwemombe.
- Itai hurukuro pamusoro pezvako sha zvinounzwa nekuchetedza utano hwemombe.

10.2 Zvimiso zvinoratidza urongwa hwakanaka hwekuchengedza utano hwemombe

Zvinhu zvinotevera ndizvo zvinoratidza urongwa hwakanaka hwekuchengetedza utano hwemombe:

- Nharaunda yakachena;
- Kutsaura mombe dzichangouya kubva kune dziri kurwara;
- Chikafu chine utano;
- Kupa mombe mushonga nenguva;
- Kudzoredza(*retention*)mombe dzakasimba dzisina zvirwere;
- Kukasika kuona kana pane zvinenge zvakanaganisika kana urwere pamombe;
- Kuchengeta magwaro anopa huchapupu(*records*) hweutano hwemombe.

Zvimiso zvadomwa pamusoro apo zvichatsanangurwa chimwe nechimwe pazasi sezvinotevera:

Nharaunda yakachena (*A Clean environment*)

Murimi anofanira kushambidza nzvimbo inogara mombe kuti dzigare dziine utano hwakanaka. Kushambidza nekushandisa mishonga zvinouraya hupenyu hunotevedzwa nehutachiona hunounza zvirwere. Pekudyira pemombe hapafaniri kugara pakanyorova uye mombe dzinofanira kupiwa mvura yakafanira kuitira kuderedza kupararira kwezvirwere

Kutsaura mombe dzichangouya kana dzirikurwara (*Isolation of sick or new animals*)

Mombe itsva dzinenge dzichangouya dziine mazuva ari pakati pegumi kana makumi maviri nerimwe *10-21 days* dzinofanira kutsaurwa kubva kuboka ragara riripo. Kana ukaona pane mombe iri kurwara, itsaure woiongorora kuitira kudzivirira chirwere chisapararira. Mombe dzinenge dzafa nechirwere dzinofanira kupiswa kana kuchererwa pasi dzofusirwa.

Chikafu chine utano

Urongwa hwekupa mombe chikafu chine utano zvine chekuita neutano uye kamuitire kemombe. Kupararira kwezvirwere mumombe kunogona kumiswa nekupa mombe chikafu chine utano pazera roga roga muupenyu hwadzo.

Kupa mushonga nenguva (*Timely vaccination*)

Ipa mombe dzako uchitevedza matanho ekupa mombe mushonga anoitwa munharaunda yako, kubaiwa uye kupiwa kwemishonga nemhando yemishonga yacho zvinoenderana neurwere hunenge hwakamboitika kana hwakajairika munharaunda mako. Varimi vanokuridzirwa kuti vadaidze vanamazvikokota veutano hwemombe kuti vapiwe ruzivo pamusoro pezvirwere zvinokanganisa mombe dzavo munharaunda mavo.

Kudzoredza mombe dzakasimba dzisina zvirwere (*Retain animals that are physically sound and free from disease*)

Chengeta mombe dzisina zvirwere. Mombe dzisina utano dzinokudyira mari nekuti dzinoda kurapiwa nemishonga.

Kukasika kuona kana pane zvinenge zvakanganisika (*Early diagnosis*)

Kana mombe ichinge yafa daidzai vana mazvikokota veutano hwemombe vaiongorore. Ipai mombe mushonga mushure mekunge ongororo yechirwere yaitwa zvakasimba uye munofanira kunge maona zvechokwadi chirwere chinenge chaibata. Kupa mombe mushonga munhu aine fungidziro yechirwere zvinogona kumudyira mari. Varimi vanokurudzirwa kuti vatange vawana ruzivo rwakakwana kubva kumadhokotera vanova ivo vana mazvikokota vasati varapa mombe inenge ichirwara.

Kuchengeta magwaro anopa huchapupu hweutano hwemombe (*Keep good records*)

Kuchengeta magwaro pamusoro pemombe nezvirwere zvakakoshera kudzivirira mombe kubva pazvirwere. Izvi zvinoita kuti murimi asimudzire utano hwemombe dzake.

10.3 Kukwanisa kuona mombe dzinorwara

Kuti ukwanise kuona kuti mombe dzako dzine neutano unofanira kukwanisa kuona dzinorwara nedzisingarwari. Panofanira kunge pane zvinoratidza kuti ukwanise kuona kana mombe yako ichirwara. Kukwanisa kuona mombe kana ichi rwara zvinobatsira murimi kuti atore matanho akakodzera anosanganisira kupa mushonga, kutsaura kana kupa chikafu chine utano.

10.4. Zvinoratidza kuti mombe ineutano hwakanaka

Hurukuro mumapoka

- Govana nevamwe zvaunoziva pamusoro pematidzikiro emombe ine utano.

Munongedzo uripazasi unoratidza kuti mombe ine utano inenge yakaitasei

Mombe yakazvimirira (Individual animal)	Boka remombe (Herd/Goup)
<ul style="list-style-type: none"> ● Mvere dzinenge dzichihwinya uye kutsvedzerera ● Nzeve dzakasimudzwa dzichitambiswa zvakananyanya ● Musoro wakasimudzwa ● Maziso anopenya uye kuona kwese kwese ● Mhuno yakachena yakatsvinda uye ichibuda madonwe etumvura ● Kuzeya kana mombe yakazorora ● Kufema zvakanaka ● Muswe uchitambiswa uchidzinga nhunzi 	<ul style="list-style-type: none"> ● Mombe dzese dzinenge dzakamira dzakangwara ● Mombe dzinohvunduka kana dzikavhundutsirwa dzinomanya dzese nguva imwechete ● Mombe dzese dzine miviri ine utano ● Mhuru dzinenge dziri pamadzimai adzo uye dzichiyamwa ● Mombe huru dzinoonekwa dzichitamba uye kudzidzisa dzechidiki kutamba nekusvetuka

Zvinoratidza kuti mombe haina utano hwakakwana

Mombe imwe(Individual)	Boka remombe (Herd/Goup)
<ul style="list-style-type: none"> ● Kuomarara kweganda ● Nzeve dzinenge dzakaremba dzisingatambiswi ● Musoro unenge wakatsikitsira pasi ● Kusashambidzika kwemhino uye kuoma muromo ● Kusazeya kana mombe ichinge yakazorora ● Kusafema zvakanaka ● Kusafura kana kudya zvakanaka ● Muswe kutadza kudzinga nhunzi 	<ul style="list-style-type: none"> ● Mombe dzese dzinenge dzakavata dzisingaratidzi kuchangamuka ● Kusavhunduka kana dzichinge dzavhundutsirwa ● Kuva nemuviri usingaratidziki uye kumira mambava ● Kusayamwa kwemhuru uye kurambiwa kumwiwa kwemhou ● Kusatamba dzese mombe ● Mombe kusafamba nedzimwe

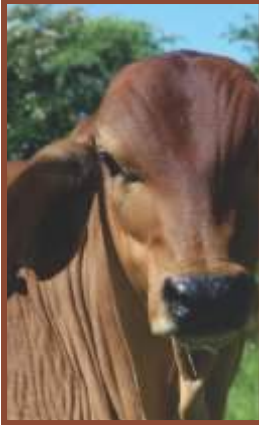
Zviratidzo zvinoratidza kushaikwa kweutano mumombe

Chirwere zvinoreva kusagadzikana mumuviri mechipfuyo. Kunyangwe zvirwere zvine zvino zvikonzera zvinoonekwa nezvisingaonekwi zvinosanganisira maronda, utachiwana mabakitiriya, makonye emudumbu zvese zvinokanganisa mafemero, kudziya kwemuviri uye kupomba ropa kwemoyo.

Inzwi rekuti “*vital sings*” rinoreva zvinosanganisira kudziya kwemuviri, kufema uye kupomba kunoita moyo ropa. Kunewo zvakananda zvinoitwa nenhengo dzemuviri asi izvo zvitatu zvadomwa ndizvo zvinonyanyokanganiswa nekuda kweurwere muutano hwemombe dzenyama. Varimi havafaniri kungotarisa chete kusanduka kwechimiromo chemombe dzavo chete asiwo kudzidza kugona kuona kusagadzikana kwemuviri mumombe kana vachinge vatarisisa utano hwemombe kuti vakwanise kudzima urwere uhu.

CHIKAMU 11

Zvirwere Zvinokonzerwa neZvikwekwe muZimbabwe



Donzo rechidzidzo

- Kuziva zvirwere zvinowira mombe muZimbabwe;
- Kunzwisisa zvinokonzerwa zvirwere zvakajairika zvinobata mombe dzenyama;
- Kuziva kuti ungaona sei zvirwere izvi;
- Kuziva kuti zvirwere izvi zvingadzivirirwa sei;
- Kukwanisa kufananidza kana kubatanidza zvinoonekwa pamombe yafa neurwere husingazivikanwi nezviri kuonekwa pamombe yafa neurwere hunozivikanwa;
- Kukwanisa kuona mombe dzinorwara kubva muboka.

11.1. Nhanganyaya

Zvirwere zvinobata mukati memuviri memombe zvinokonzerwa netumbuyu tudiki tusingagoni kuonekwa nemaziso asi nemichini inokudza (*microscope*). Tumbuyu utwu tunosanganisira utachiwana (*virus*), bhakitiriyi (*bacteria*) uye zvinopfukuta (*fungi*). Mombe inenge yabatwa netumbuyu utwu inoonekwa nezviratidzo zvinotevera:

- Kudziya zvakanyanya kwemuviri (*fever*);
- Kurova zvakanyanya kwehana;
- Kubuda kweropa munzvimbo dzakasiyana siyana;
- Kufema kwakanyanya;
- Kusada kudyu kwemombe;
- Kusafamba zvakanaka uye kuzvitsaura muboka redzimwe mombe;
- Kana mombe inorwara ikavhundutsira haitirimuki zvakanyanya.

Zvirwerere zvinotevera ndizvo zvinowanzokonzerwa netumbuyu utwu mumombe dzevarimi vadiki munharaunda:

11.2. Chirwere chemahwanda (*foot and mouth*)

Chirwere ichi chinowanza kubata mombe uye mhuka dzine mahwanda uye chinoonekwa nezvinhu zvakaita sekuita maronda pamuromo pemombe, patsoka uye pamahwanda. Chirwere ichi chinowanzoitika kunzvimbo dzakaita seMatabeleland, Manicaland neMasvingo. Kana chirwere ichi chichinge chapararira mombe dzinofanira kurambidzwa kufamba kuenda kunzvimbo dzakasiyana siyana nebato rezveutano hwemombe re veterinary Department. Chirwere ichi chinogona kuparadzirwa nenguruve dzinodya nyama inenge yasiwa. Zvakare chirwere ichi chinopararira kuburikidza nekumwa nekufema. Utachiwana hunokonzerwa chirwere chemahwanda hunogona kuparadzirwa kunzvimbo dziri kure.

Zviratidzo

Zvinokasira kuonekwa zviru pachena kuita maronda ane mvura pamuromo wemombe ayo anozoputika kuita maronda akashama anorwadza zvakananyanya. Mushure mezvizi unoona masiriri kana rute asi zvinoda kungwarira nekuti zvinogona kudaro chiri chirwere *cherabies*. Mombe inoburitsa kurira kunoita kunge yadya zvinovava. Kanaombe iyi ichidya inoonekwa ichitsenga zvine kakuchenjera ichitya kudzimbirwa maronda anenge ari mumuromo. Nechepamusoro pemahwandaombe inoita zvakanare maronda anova anoitadzisa kufamba zvakanaka. Maronda awa anogona kuita paminyatso uye zvinokonzerwa kuti minyatso iputike zvinogona kukanganisa zamu zvoderedza uwandu hwemukaka. Zvimwe zvezviratidzo izvi kudziya muviri zvakananyanya uye kusvoda. Unogona kuona chirwere ichi nekupararira kwechirwere ichi muboka remombe uye uhandu hwemombe dzinenge dzabatwa nechirwere ichi. Mhuru ndidzo dzinowanzo kubatwa nechirwere ichi kudarikaombe huru uye dzinofa dzisina kuratidza zviratidzo zveurwere uhu. Zvinonyanyoonekwa zvakanjeka pamombe dzabatwa nechirwere ichi maronda pamuromo, pamahwanda uye paminyatso.

Marapirwo nekudzivirira

Hurukuro mumapoka

- Ndedzipi nzira dzaunoshandisa kudzivirira uye kurapa zvirwere zveombe?

Chirwere chemahwanda chirwere chinoda kudzivirirwa mukati menyika uye nekunze kwenyika. Semurimi zvakanakosha kuti uzivise bato rezveutano hwezvipfuyo rinenge riri pedyo newe Veterinary Office or Agritex Office. Izvi zvinofanira kuitwa nekukasika sezvo kunonoka kuchizokonzerwa kurasikirwa nemombe kwakananyanya. Chirwere ichi chinogona kudziya hurumende nemurimi mari yakawanda pakuedza kuda kurwisa chirwere. Mafambiro emombe anofanira kutariswa zvakananyanya.

11.3. a. Tungundu (Anthrax)

Ichi chirwere chinokonzerwa nebakitirira (**bacteria**). Chirwere ichi chinowanzoonekwa nekufa kunoitaombe chiripo ripocho. Zvinokonzerawo kufa kwevanhu zvese nemombe. Chirwere ichi chinobva muvhu kana kuchinge mamiriro ekunze asanduka uye kana mvura zhinji yanaya kana kuti kwaita nzara. Mamiriro nemanairo emvura munyika yedu anokonzerwa chirwere ichi. Chirwere ichi chinogona kupararira kune dzimwe nzvimbo kuburikidza nenyama kana matehwe emombe dzinenge dziinacho. Kufura kwemombe munzvimbo dzinenge dzine chirwere ichi zvinokonzerwa kupararira kwacho uye kupinda mumombe. Kana tumbuyu kana bacteria richinge rapinda mumuviri wemombe rinopinda munyama rogadzira chepfu inonzi (**lethal toxin**) muropa inokonzerwa kufa kwemombe nekukasika.

Zviratidzo

Pachinotanga chirwere ichiombe dzinowanikwa dzakangofa pasina kuratidza kurwara. Asi ukaramba uchiongorora unozoono kudziya kwemuviri kwanyanya kwemombe, kusafema zvakanaka uye kubuda dzihwa rakasimba rakaremba. Mombe inozotanga kugwinha gwinha yodonha yofa. Mushure mekufa ropa rakasvibira rakakora rinoonekwa richibuda

munzeve, mumuromo, kumashure uye mumaziso. Ropa iri haribundiri kana kugwamba. Mombe dzinenge dzafa makumbo adzo haawomi kana kusindimara anongoremba. Mushure mezvizvi kana chirwere ichi chapararira mombe dzinoita mazuva maviri kuti dzife uye zviratidzo zvinotevera:

- Kudziya zvakanyanya kwemuviri;
- Kunetseka pakufema;
- Kuramba kudya;
- Mombe dzinenge dzine mazamu dzinotsvodza dzinoyamwisa dzinoshaya mukaka kana kuderera kweuandu kwemukaka;
- Kuungana kwemvura dzemumuviri parurimi uye pachipfuva nekunhengo yekubereka nayo;
- Kuungana kwedzihwa iri rinenge riine tsvina rakatsvuka. Zvese zvataurwa izvo pamusoro zvinopa munongedzo wekuti uone kuti chirwere chetungundu asi chese chinokonzerwa kufa chiripopripo zvinogona kudaro chiri chirwere **cheblackleg**.

Kana mombe ichinge yafa nechirwere chetungundu, nzeve dzayo, mumuromo, mumaziso munobuda ropa rakasviba uye risina kugwamba. Zvitunha zvemombe dzinenge dzafa zvinokasika kuora. Murimi haafaniri kuvhura zvitunha zvemombe yafa netungundu anofanira kudaidza vana mazvikokota vehutano hwemombe vari munharaunda veVeterinary Department.

Marapirwe nekudzivirira

Chirwere ichi kana chichangotanga munogona kupa mombe dzenyu mushonga unonzi **penicillin/ oxytetracycline**. Mukaka kana nyama inobva mumombe dzinenge dzine chirwere ichi hadzifaniri kudyiwa nevanhu kana imbwa. Mombe dzinenge dzafa dzinogona kupiswa kana kuchererwa pasi mugomba rakadzika mamita anoita maviri uye gomba racho rinofanira kuvharwa **nelime**. Mombe hadzitenderwi kufamba kana chirwere ichi chaitika. Kuva neutsanana ndizvo zvinoita chiwere ichi chisapararira muvanhu. Kubaiwa kwemombe uye kudzipa mushonga zvinofanirwa kuitwa gore rimwe nerimwe.

11.3.1 b. Brucellosis

Ichi chirwere chinokonzerwa nebacteria inokanagnisa nhengo dzinoita mombe dzeberekane. Chiratidzo chikuru chikuru chechirwere ichi kutsvodza, kunonoka kubata zamu kwemombe kana mombe zhinji kutadza kuita vana. Vanhu vanogona kubatira chirwere ichi kuburikidza nekumwa mukaka kana kubata mhuru dzinenge dzatsvodzewa kana kubata zvitunha zvemombe dzinenge dzafa. Varimi vanorasikirwa neupfumi nekuda kwechirwere ichi kuburikidza ne:

- Kudzikira kwehuwandu hwemukaka nekuda kwekutsvodza
- Kufa kwemhuru kunovhiringa kupfuiwa kwemombe dzakanaka dzenyama
- Kurasikirwa nemhou dzakanaka kuburikidza nekutora danho rekubvisa mombe dzisina chadziri kupa kumurimi (**culling**).

Mombe dzemazera ese dzinogona kubatwa nechirwere ichi asi chinowanzobata mombe dzava kuberekena (**breeding**). Chirwere ichi chinogona kutapuriranwa kubva kumhou ichipa mwana asi kumombe huru zvinokonzerwa nekunamatira kwemvura dzinenge dzabva pamombe inenge yatsvodza. Mombe zvakare dzinogona kubatira chirwere ichi kuburikidza nekusangana (**mating**) kana kudya chikafu chinenge chiine chirwere ichi. Chirwere ichi chinogona kuzobata dzimwe mombe kuburikidza ne:

- Kudya zvinobuda kana mombe ichinge yatsvodza;
- Kuburikidza nekumwaya mvura dzine chirwere nemuswe;
- Kusvibiswa kwezamu nechirwere nemaoko anenge abatira chirwere;
- Kuburikidza nemombe inofura mafuro anenge aine chirwere ichi;
- Kusangana kwehandira nemhou/ tsiru dzine chirwere ichi.

Kupararira kwechirwere kubva mune rimwe boka chichienda kune rimwe boka zvinoitika kuburikidza nehandira kana dzichisangana nemhou kana kufura sora rinenge raendwa nemvura kana mhou yatsvodza.

Zviratidzo

Kutsvodza kwemombe mushure memwedzi mishanu ichinge yatora zamu. Guvhu rinodzokera mukati mushure mekubereka uye mushure mezvizvi chibereko chinobva chakanganiswa. Mushure mekukanganisika uku kasarapiwa zvinokonzera kuti mombe isabereka. Kana mhou ikaita pamuviri kechipiri kana kechitatu zvinokonzera kuti itsvodze. Zvimwe zviratidzo zvinosanganisira ku:

- Kuunyana kwemhodzi(**testicles**) dzehandira izvi zvinokonzera kuti handira itadze kuitisa mhou nematsiru mazamu;
- Kuunyana panobatana mabhonzu emombe asi zvinenge zvisingarwadzi.

Ongongororo yekuona kuti chirwere ichi chapinda mumombe inogona kuitwa kuburikidza kuongorora mukaka uye ropa izvi zvinoitwa nana mazvikokota vezvemombe muimba yesaenzi (laboratory).

Marapirwo echirwere chacho

Hapana murapirwo unonzi ndiwo unogutsa chirwere ichi asi chirwere ichi chinogona kupedza nekubaya mombe nemushonga unonzi *S19 (Brucellois)*. Kupa mhuru mushonga uyu dziine mwedzi mina kana misere *4-8 months* dzisati dzasvitsa gore zvinoderedza dambudziko rekutsvodza.

Handira dzinofanira kutariswa chirwere zvakakosha kuti chidzivirirwe. Handira dzinenge dziine chirwere ichi dzinofanira kutengeswa kana kuurayiwa dzoitwa nyama.

11.4. Chimbwa mupengo (*Rabies*)

Rabies chirwere chinokonzerwa neutachiona chinokonzerwa kufa kwezvipfuyo. Chirwere ichi chinounzwa nemhuka inenge yabatira chirwere ichi kuturikidza nekurumwa kana kutapurirana nemate. Pfungwa huru ndeye kuti mhuka dzinochengetwa mumusha hadzisiridzo dzinotanga nechirwere ichi asi kuti kuchenjera kunodiwa kana uchibata mhuka dzinenge dzine chirwere ichi. Mhuka inenge yabatwa nechirwere ichi inopanduka uye ine hashha dzekuda kuparadza kana kuita seine chirwere chetsviyo.

Zviratidzo

Mombe dzinogona kubata chirwere ichi mushure memasvondo matatu yarumwa kana dzamarwa nembwa, nebere, gava kana imwe mhuka inechirwere ichi. Mucherechedzo yechirwere ichi ndeinotevera:

Zvainoita kana iri muchimiro chekubatwa netsviyo:

- Kupingana kwemakumbo eshure kana ichifamba, makumbo emberi anoshaya simba uye kurembera kwemuswe usina simba;
- Kutambura kuita tsvina;
- Kusiririka mate;
- Kutadza kugwauta kana kukuma;
- Kuwira pasi kwemhuka ichitadza kumuka;
- Kufa mushure memazuva maviri mombe yatadza kumuka.

Chimiro chayo kana ine hashha

- Mhuka inenge yakangwara isingadi kunzwa ruzha kana kuona zvinofamba inenge ichida kuparadza;
- Kusagadzikana;
- Kuhukura kana kukuma zvisina kujairika;
- Handira dzinonyanyisa kuda hadzi zvisina kujairika kana irimombe inokwanisa kutasva dhongi.

Chirwere ichi chinofungidzirwa kuti chinowanikwa munzvimbo dzinofamba imbwa zvakananyanya

Hurukuro mumapoka

- Chirwere ichi chakajairika here munzvimbo yaunogara uye chingapedzwa sei?

Marapirwe nemapedzerwe acho

Kubaisa imbwa dzese nekatsi nekuti ndidzo dzinounza chirwere ichi. Kuongorora uye kudzivisa kufamba kwembwa.

Chirwere chemapapu (Pneumonia)

Ichi chirwere chemapapu chinokonzerwa nemakonye, bacteria uye utachiona. Kazhinji kacho bacteria ndiyo inotora rupande rukuru kukonzera chirwere ichi, ndicho chikonzero vachikurudzira kushandisa mushonga wetetracycline.

Zviratidzo

Sezvo pneumonia chiri chirwere chemapapu, zviratidzo zviripachena ndezvinoti:

- Kubuda madziwa akanyanya akaita mvura mumhino anozochinja iota ruvara rwemondo ozokora;
- Kutambudzika kufema zvakanaka;
- Kupisa kwemuviri kunopfuvura 40C;
- Mombe inorwara inofambira kumashure kwedzimwe kana yakamira inotsikitsira pasi;
- Kana mhuka ichinge yafa mapupu ayo anoamarara uye anenge akanamirana nechifuva.

Marapirwe

Kukasika kurapa nemushonga we tetracycline long acting

11.5. (Blackleg)/chirwere chemapandauko

Chirwere chinobata mombe, mbudzi nehwayi chinokonzerwa kuunyana kana kusviba makumbo uye chinokonzerwa ne bacteria rinonzi clostridia. Chirwere ichi chinoonekwa nekukonzera maronda mumombe dzechidiki dzine zera rinobva pamwedzi gumi kusvika makore maviri. Chirwere ichi chinowanopinda neparurimi, pamahwanda nemakumbo. Bacteria rinokonzerwa chirwere ichi rinogona kurarama muvhu uye muZimbabwe chirwere ichi chinowanopinda onekwa mumwaka wekurima muna Ndira, Kukadzi kana munguva yekupisa muna Gunyana na Gumiguru.

Zviratidzo

Mushure memazuva maviri mombe yabatwa nechirwere ichi inodziya muviri uye inoramba kufamba. Kusanduka kweruvara rweganda uye kubuda ropa mumhino. Mombe inozofa mushure mekuramba kudya kurukutika kupera simba uye kuneta .

Marapirwe

Hurukuro mumapoka

- Blackleg chirwere chakajairika muZimbabwe, ungaitasei kudzivirira mombe dzako kubva kuchirwewere ichi?

Sezvo blackleg ichikonzerwa neClostridia inowanikwa panzvimbo imwechete, nzira iri nyore kupedza dambudziko iri kupa mombe mushonga. Kupa mombe mushonga kunofanira kuva pakuronga zveutano hwemombe. Varimi vanofanira kupa mushonga mombe dzisati dzakura dziri pazera rinobva pamwedzi mitanhatu nemakore matatu. Mazvikokota wezveutano hwemombe anofanira kudaidzwa pakubaya mombe uye vagadziri vemishonga vanofanira kunge varipo.

11.6. Chirwere chetsanga muziso (Eye infection)

Mombe dzinoita dambudziko retsanga muziso kana dzabaiwa neuswa dzichifura. Varimi vanoona uswa kana mhodzi dzeuswa mumaziso emombe zvinovhiringidza kusvinura zvokonzera tsanga muziso. Kugurira uswa hwakareba nderimwe redanho rinogona kutorwa kuderedza dambudziko retsanga mumaziso.

Zviratidzo

Mhuka ine tsanga muziso inoonekwa nekubuda misodzi mumaziso. Maziso anenge aine utera pakusvinura saka anogara akavharwa uye akatsvuka mukati. Ziso rinogona kucheneruka pamusoro zvinoratidza udzamu hwedambudziko.

Marapiro

Chirwere chetsanga chinogona kurapiwa nekushandisa mushonga we tetracycline long acting mushure mezviratidzo zvekutanga. **Mastitis** inogona kushandiswa kurapa tsanga kana kukuya kuya hozhwa

11.7. Kuora kwemazondo (*Foot rot*)

Ichi chirwere chinokanganisa mahwanda embudzi, hwai kana mombe. Zvipfuyo zvinotambura nekufamba sezvo zvinenge zvichirwadziwa.

Zviratidzo

- Zvipfuyo zvinoramba kufamba nekuda kwekurwadziwa
- Pazvinofamba zvinorwadziwa pakutsika

Marapirwo

- Kana zvipfuyo kana zvine maronda pamahwanda dzinofanirwa kubaiwa ne tetracycline izvi zvinofanirwa kudzikorodzwa kwemazuva maviri kana matatu zvichienderana nekuti zvipfuyo zvirikupora here.
- Dambudziko remakangazha rinogona kupedzwa nekufambisa mombe pamvura ine

- mushonga panzira padzinopinda napo mudanga kana mudhibhi.
- Kudzivirira dambudziko iri zvipfuyo zvinofanira kugara pakachena uye pakaoma.

11.8. Kuzvimba dumbu (Bloat)

Chirwere chinoita kuti mombe izvimbe dumbu zvakapfurikidza mwero nekuda kwekuzara mhengo mudumbu. Mudumbu memombe mune makonye anobatsira kuti dzizeye chikafu kana bundo. Panenge pachizeewa chikafu ichi makonye anobudisa mweya wakawanda mudumbu mweya uyu ukasabuda unokonzeresa chirwere chekuzvimba dumbu. Kupa mombe chikafu chakaita sechibage, nyemba zvinokonzera chirwere chekuzvimba dumbu.

Zviratidzo

Kuzvimba dumbu kuritivi rwekuruboshwe kana kurembera dumbu zvinoita kuti mombe itadze kufema zvakanaka. Mombe inenge ichifema nemumukanwa asi kupisa kwemuviri kunenge kuri panotenderwa.

Marapirwo

Mweya uyu unogona kubudiswa nekupinzwa tsono muganda kuruboshwe rwedumbu mweya worenge uchibuda zvisoma nezvisoma. Kana izvi zvichiitwa mombe inofanira kunge yakavata zvakanaka asi kana mombe ikaramba yakadaro munofanira kudaidza chiremba wemombe kana umwewo mazvikokota wenyaya idzi. Kudzivirira dambudziko iri hamufaniri kupa mombe zvikafu zvine mhodzi.

11.9. Chirwere chemanyoka (*Calfscours*)

Ichi chirwere chinobata mhuru dzichangozvarwa. Chirwere ichi chinokonzera kurasika kwemvura mumuviri zvichikonzera kufa kwemombe mushure mema awa gumi namaviri. Zvinhu zvinotevera zvinotungamira kuti mhuru dziite manyoka:

- Kusapa mhuru mukaka wekutanga mushure mema awa matanhatu.
- Mamiriro ekunze anosanganisira kupisa, kutonhora zvakanyanya uye nzvimbo dzakanyanyisa kunyorova.
- Kusashambidzika kwenzvimbo dzinochengeterwa mhuru.
- Kupa mhuru mukaka wakawandisa.

Zviratidzo

Izvi zvinosanganisira:

- Mhuru dzinoita manyoka anenge akazara mvura asi asina ropa mushure mekunge dziine mazuva mashanu ekuzvarwa nawo izvi zvinoitika kana manyoka awa achinge akonzerwa **nebacteria**.

- Kurasikirwa nemvura zvakanyanya kwemhuru mumuviri kunoonekwa kuburikidza nekuwira kwemaziso uye kusahwinya kweganda nekuomarara.
- Kupisa kwemuviri kunogona kusashanduka asi mhuru inogona kushaya simba yozofa
- Utachiwana (*virus*) hunogona kukonzera chirwere chemanyoka ichi mushure mekunge mhuru dzine mazuva mashanu kana gumi nemashanu dzaberekwa. Mhuru dzinobatwa nemanyoka awa chinyararire uye zvishoma nezvishoma dzoita manyoka akawanda ane mvura zhinji asi dzinoramba dzichiyamwa mukaka.
- Manyoka anozoonekwa mushure memazuva gumi nemana (*14 days*) anogona kunetsa kurapa. Tsvina inoitwa nemhuru idzi inenge ichinhuwa uye inenge iine mabara musana uye ropa. Zvakare mhuru dzinenge dzichidziya muviri uye kurasikirwa neuremu (*weight*) nekukasika. Mombe dzinogona kuita dambudiko rekusabvuma kurapika zvikuru sei kana chirwere ichi chakonzerwa *nebacteria*
- Manyoka anokonzerwa nekuda kwekupa mombe chikafu (*dietary feeding*) anowanikwa mumhuru dzinenge dzine masvondo ari pasi pematatatu mushure mekuzvarwa. Izvi zvinogona kukonzera nekuda kwekupa mhuru mukaka wakawandisa. Mhuru dzinenge dzakasimba uye dzichipenya pakutanga asi dzozongotanga kushaya simba uye kuwonda.
- Zvekudya zvisina utano uye kusadya kunogona kukonzera kusanzwisika kwerudzi rwemanyoka aya.

Marapirwo echirwere

Mushure mekuona manyoka aya zvakakosha kugadzira uye kupa zvipfuyo mvura ine shuga nemunyu (*salt and sugar solution*). Uye kupawo mvura imwe yakachena munodyira mhuru. Zvakare unogona kuvhanganisa upfu kana furawu wogadzira bota izvi zvinobatsira nyoka dzemudumbu dzinobatsira pakuzeya. Nzira mbiri dzataurwa idzo dzinogona kumisa dambudziko remanyoka iri. Mimwe mishonga yechirungu yakaita se **sulphanoids** uye **tetracycline** inogona kupiwa kumhuru dzine mazera aripasi pemwedzi miviri. Kana kudziya kwemuviri kwakanyanyisa unogona kushandisa majekiseni akaita **seoxy-tetracycline**.

Nzira dzekudzivirira nadzo

- Kuchengeta mhuru zvine utsanana mukati;
- Onai kuti mhuru dzawana mukaka wadzo wekutanga mushure memaawa anokwana kuita matanhatu padzinenge dzazvarwa (6hrs);
- Kutsaura zvipfuyo zvinenge zvichirwara kubva kune zvisingarwari.

11.10. Chirwere Chemapundu Paganda (Lumpskin)

Ichi chirwere chinoonekwa kuburikidza nekuita mapundu akakura paganda rezvipfuyo. Kazhinji chirwere ichi hachiurayi mombe asi kuti chinoderedza uwandu hwezviwanikwa

zvinobva mumombe zvakaita mukaka, matehwe uye nyama. Mazera ese emombe anobatwa nechirwere ichi. Chirwere ichi chinoonekwa mushure memakore akawanda pachinenge chapararira kana kutanga semuenzaniso chinogona kutanga mushure memakore mashanu kana varimi vasina kubaisa mombe dzavo.



Zviratidzo

Mapundu anoonekwa paganda rezvipfuyo uye kumira mambava akafara macentimetre anosvika rimwe kana mana 1-4cm. Mapundu awa anowanikwa paganda chete asi anogonawo kuita mumhino ayo anozogona kuita maronda. Zvakare panogona kuita kuungana kwemvura dzemumuviri (*oedema*) munhengo dzinenge dzine chirwere ichi zvikuru mumakumbo pahuro uye padumbu. Muviri unogona kupisa zvakapfurikidza zvinokonzera kubuda madzihwa mumhino. Kuwirwa nedambudziko rinounzwa nemabacteria kunogona kukonzerwa nekusabaya mombe mishonga inodzivirira uye inoba masoja emuviri simba. Izvezvi zvinogona kuunza kusagadzikana mumuviri zvokonzera kuti zvipfuyo zvife.

Marapirwo

Kushandisa mishonga usingadhure kubaya mombe gore negore kudzivirira kubva kuchirwere ichi. Tinogona kurapa nemushonga unonzi **sulphonamides** kana kuti **oxy-tetracycline**.

Zvirwerwe Zvinounzwa neZvikwekwe



Donzvo rechidzidzo

- Doma mhando dzezvikwekwe;
- Kuva neruzivo rwezvikwekwe zvakajairika muzimbabwe;
- Kunzwisisa zvirwere zvinounzwa nezvikwekwe;
- Kunzwisisa zvirwere zvakajairika zvinounzwa nekuda kwezvikwekwe muZimbabwe.



Hurukuro mumapoka

- Doma mhando dzezvikwekwe zvawakasangana nazvo munharaunda maunogara. Ndeapi matambudziko anounzwa nezvikwekwe kumombe dzako?

12.1 Nhanganyaya

Zvikwekwe zvinogara pamombe zvichisveta ropa pamwe nekukuvadza ganda rezvipfuyo. Zvine muromo wakapinza uye muviri wakazvimba kana kuomarara. Pamusoro zvine ganda rakaomarara rinonzi *shield* zvikuru sei zvikono zvacho *males*. Zvikwekwe ndizvo zvinokonzera kupararaira kwezvirwere muzvipfuyo. Zvirwere zvinounzwa nezvikwekwe *tick-borne diseases* zvinounza kurasikirwa kwakanyanya kwevarimi nekuda kwekufirwa nezvipfuyo. Pazvinhu zvese zvinoparadzira zvirwere muzvipfuyo zvakaonekwa kuti zvikwekwe ndizvo zvinopa dambudziko rakakura kuvarimi rekurasikirwa nemari uye nezvipfuyo zvakanyanya uye zvinokonzera kurasikirwa kana kushomeka kwehuwandu hwezvipfuyo takatarisa upfumi hwenyika yedu yeZimbabwe.

12.2. Tingaona sei zvikwekwe

Hurukuro mumapoka

- Zvii zvaungaona nazvo, kugona kudoma zvikwekwe zvemhando dzakasiyana siyana?
- Ungagona sei kupatsanura zvikwekwe izvi zvakasiyana siyana?

Enzanisa zvawashandisa kudoma nezvakapiwa pazasi:

Shield/ scutum

Izvi zvinoshandiswa kuti murimi agone kuona kana chikwekwe chiri chechikadzi kana chirume. *Scutum* iyi inogona kuva ine ruvara kana kusava narwo, ruvara urwu ndirwo runoshandiswa kuona mhando yechikwekwe.

Maziso

Maziso echikwekwe anowanikwa pedyo *nescutum* pamashure pemakumbo ekutanga. Anogona zvakare kuvapo kana kusavapo zvichienderana nemhando yechikwekwe.

Festoons

Iyi migero (grides) inowanikwa kwakapesana nekunoperera mutumbi tichienzanisa nekumusoro wechikwekwe. Zvakare mafestoons aya anogona kuvapo kana kusavapo zvichienderana nemhando yechikwekwe.

Ruvara rwemakumbo

Makumbo echikwekwe anogona kuva neruvara runwechete kana kuita mavara mavara nemitsetse.

Muromo

Muromo unogona kuva wakareba uye wakapinza kana kuva mupfupi.

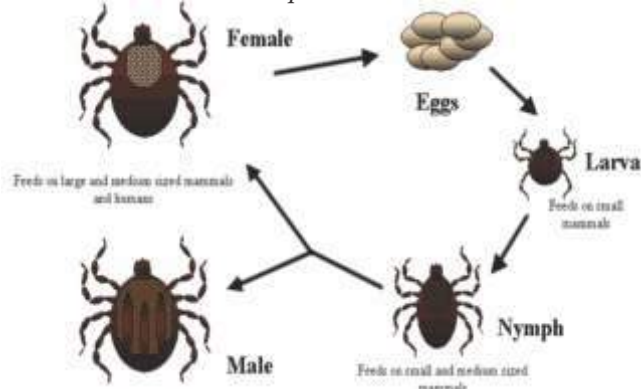
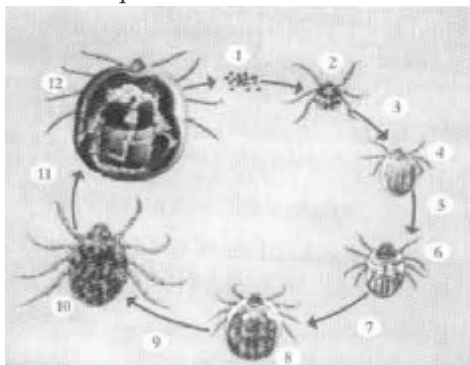
Nzvimbo dzazvinofarira nezvikwekwe pamutumbi (Predilection site)

Zvikwekwe zvine nzvimbo dzazvinofarira kugara uye kuruma zvichikweva ropa. Zvinogona kuwanikwa munzeve, pazasi pemuswe, muhapwa kana paminyatso yemombe. Zvikwekwe zvakajairika zvinowanikwa muZimbabwe ndezvinoti:

- Brown ear tick (Rhipicephalus)
- Blue tick (Boophilus)
- Bont legged tick (Hyalomma)
- Bont tick (Amblyoma)

Maberekerwo echikwekwe

Mufananidzo uri pazasi unoburitsa matanho nemararamiro echikwekwe kubva pakuzvarwa kusvika chakura



Mazai (1) anokandirwa namai otsotsonywa pobuda zvikwekwe zvidoko (2) zvokura (3) kuenda padanho rekutanga (4) mushure mekunwa ropa rezvipfuyo. Danho rechikwekwe chikuru rekutanga (4) chokura zvakare (5) chiri pachipfuyo kuenda padanho rechipiri rekukura (6) apa chinenge chichimwa ropa rechipfuyo (7) apa chinobva chaguta nekukura dumbu neropa **engorged**(8). Chinozokura kuita chikwekwe chikuru (9). Mai vakuru vechikwekwe vanosangana nababa (**mate**) zvakare zvosveta ropa kekupedzisira (11) zvisati zvazadzwa vazadzwa neropa **engorged** (12) chikwekwe chinobva chabva kunotsvaka pekugara, panzvimbo inodziya pekukandirira mazai.

12.3 Zvikwekwe zvakajairika zvinowanikwa muZimbabwe

1.) Brown ear tick (*Rhipicephalus*)

Iyi mhando yechikwekwe ndiyo inofambisa chirwere che **Corridor disease** uye **East Coast Fever** mumombe. Zvakarewo chikwekwe ichi chinogona kufambisa chirwere che **Red Water (Babesiosis)**. Chikwekwe ichi chinowanikwa munzeve dzemombe uye pamuswe pedyo nepanobuda nendove. Zvikwekwe izvi zvikawanda zvinogona kupararira nemutsipa nehuro yemombe.



Brown ear tick (Rhipicephalus) fed and unfed

Zvatingaona nazvo chikwekwe ichi

Chikwekwe ichi chine ruvara rutsvuku kusanganisira makumbo acho. Muromo wacho mupfupi uye wakapamhamha. Ukanyatsocherekedza zvakanyanya chinoonekwa kuti chine mativi matanhatu uye chakada kuita seimba yemakona. Maziso echikwekwe ichi aripo uye chine mafestoons. Chikwekwe ichi chinogona kugara pazvipfuyo zvitatu 3 hosts zvakasiyana chisati chabva kuenda pachinofarira kuti chikandire mazai.

3.) Blue tick (*Boophilus*)

Chikwekwe ichi ndicho chinofambisa chirwere chinonzi Red Water (Babesiosis) uye Gall sickness (Anaplasmosis) muzvipfuyo. Chikwekwe ichi chinowanikwa pamutsipa mumakumbo uye muzasi medumbu.



Boophilus tick infection on the neck, head and shoulders

Zvatingaona nazvo chikwekwe ichi

Chikwekwe ichi chine ruvara rupfumbu uye ruvara rwedenga (blue). Zvikwekwe zvikono zverudzi urwu zvidoko uye zvinomera kamuswe kadiki. Chikwekwe ichi chine maziso asi hachina mafestoons.

3.) Bont legged tick (Hyalomma)

Ichi chikwekwe chinonyanyozivikanwa nekufambisa chirwere cheTick paralysis (Sweating sickness) neRed Water (Babesiosis) muzvipfuyo. Chikwekwe ichi chinowanikwa pasi pemuswe uye patsoka kana pakati pemahwanda emombe.



Hyalomma tick



Amblyomma

Zvatingaona nazvo chikwekwe ichi

Chikwekwe ichi chine makumbo ane ruvara rwakasiyana siyana uye muromo wacho wakareba. Mafestoons anogona kuvapo kana kusavapo uye meso aripo zvakare. Chikwekwe ichi zvakare chinogona kusveta zvipfuyo zvitatu zvakasiyana chisati chaguta ropa kuti chinokandira mazai acho.

4.) Bont tick (Amblyoma)

Ichi chikwekwe chikuru chine ruvara runoonekera uye chinozivikanwa nekukonzera chirwere cheHeart Water (Cowdriosis) muzvipfuyo uye uye chinokuvadza ganda kuburikidza nekuruma. Chikwekwe ichi chinowanikwa pasi pemuswe uye pazasi pedumbu.

Zvatingaona nazvo chikwekwe ichi

Scutum yacho ine ruvara ruonyanyoonekera uye muromo wacho wakareba uye wakarurama. Mafestoons acho anoonekera zvakare chine maziso.

12.4. Zvirwere zvinounzwa nezvikwekwe

Zvokuita

- Nonga zvikwekwe ugoedza kudoma zvikwekwe izvi zvinenge zviru pamombe dzinowanikwa munharaunda maunogara.
- Zviise mumupanda zvikwekwe izvi kuti ndezvemhando ipi?
- Ndezvipi zvirwere zvinounzwa nezvikwekwe izvi?
- Ndeapi matambudziko aunasangana nawo mukuda kupedza kana kuderedza

Zvirwere zvinounzwa nezvikwekwe idambudziko rinobva pakusava neutariri hwakakwana. Kana matanho akakodzera akatorwa zvirwere izvi zvezvikwekwe hazvingaparariri uye dai zvisipo. Matambudziko ekushaikwa kwehutariri hwakakwana muvarimi vanhasi nevanezuro anobva pazvinhu zvinotevera:

- Kusava neruzivo rwakakwana pane zvinokonzera zvirwere uye kuderedza zvirwere,
- Kushaikwa kwemari, midziyo uye michina nepekushandira pakakwana,
- Kushandiswa kwenzvimbo,
- Kukoshesa kwechivanhu chedu uye zvatinotenda.

Kusava neruzivo rwakakwana pane zvinokonzera zvirwere uye kuderedza zvirwere

Varimi vazhinji vadiki havana ruzivo rwakakwana rwekupfuya mombe dzenyama uye vacho vane ruzivo urwu havadi kudzidzisa varimi ava. Rimwe dambudziko nderekuti varimi vekare havadi kutambira ruzivo urwu kubva kune vakafundira zvekupfuya mombe sezvo vachitenda munzira dzavo dzekurima nadzo dzekare.

Kushaikwa kwemari, midziyo uye michina nepekushandira pakakwana

Dambudziko iri rinowira varimi vadiki avo vasina mari nemichina yekuti vazvivakire madhamu, madhibhi, kufenza nzvimbo dzemafuro uye matanga akakwana panga gara mombe dzavo. Nekuda kwaizvozvi, mombe dzavo dzinofamba mitunhu yakareba kunotsvaka mvura, uye mukufamba uku ndipo madzino batira zvikwekwe izvo zvavasingazogoni kurwisa. Varimi vadiki ava havadi kushandisa mari yavanenge vawana mushure mekutengesa zvipfuyo zvavo kuti vadzime dambaudziko rezvikwekwe iri.

Kushandisa kwenzvimbo diki

Varimi vadiki vanoshandisa nzvimbo diki dzekurima sezvo vasina magwaro anoita kuti vawane nzvimbo huru pavangachengetera mombe. Nzvimbo dzanochengetera zvipfuyo zvake dzinenge dzisina kupoterredzwa newaya uye havakwanisi kuita utariri hwepamusoro saka zvipfuyo zvavo zvinovhengana nezvevamwe varimi vakasiyana siyana. Izvo zvinopa mukana wemombe kubatira zvikwekwe.

Kukoshesa kwechivanhu chedu uye zvatinotenda

Mombe dzinoita rupandi rwakakura muupenyu hwevanhu munyika yeZimbabwe. Dzinogona kuva dura remari zvikurusa munguva yenzara, mbiri yemunhu munharaunda inogona kuunzwa nekuda kwemombe. Mombe dzinoshandiswa seusavi pamitambo yakaita semabira, jakwara, kuroora uye pandufu. Nekuda kwetsika dzechivanhu idzo murimi anogona kusarudza kuva nemombe zana panzvimbo isina kunaka kuchengetera mombe. Zvinhu zveutariri hwakakwana hwekuchengeta mombe hwakaita sekudhibhisa, kufirita, kupa mushonga wekumwa, kupa chichafu chekutenga uye kusarudza handira nemhou dzakanaka zvinogona kusaitwa nevarimi nekuda kwetsika dzechivanhu. Varimi vechidiki vane pfungwa yekuti hurumende ibasa rayo rekurapa uye kudzivirira zvirwere kumombe dzavo saka vanotadza kubatana kuti vapanane mazano uye kutenga mishonga kuti varwise dambudziko rinowira zvipfuyo zvavo.

Zvokuita

- Peta chikamu chino nekudoma zvirwere zvinounzwa nezvikwekwe munharaunda maunogara.

CHIKAMU 13

Zvirwere Zvinonyanyokonzerwa neZvikwekwe muZimbabwe



Donzvo rechidzidzo

- Kunzwisisa zvirwere zvinoparadzirwa nezvikwekwe.
- Kukwanisa kuona zviratidzo zvezvirwere zvinounzwa nezvikwekwe.



Hurukuro mumapoka

- Zeya pamusoro pezvirwere zvinounzwa nezvikwekwe munharaunda maunogara.
- Doma zviratidzo zvezvirwere izvi.
- Zvipfuyo zvingani zvakabatwa nezvirwere izvi munharaunda mako?
- Ndeapi matanho awakatora kurwisa zvirwere izvi?
- Ndezvipi zvawakaita uye zvawakashandisa kurapa zvirwere izvi?
- Kunzwisisa zviratidzo zvekusava neutano kana chipfuyo chichirwara.



13.1 Nhanganyaya

Zvirwere zvinounzwa nezvikwekwe muZimbabwe ndezvinoti:

- East Coast Fever (Corridor disease);
- Gall Sickness;
- Heart water (Cowdriosis);
- Red water (Babesiosis);
- Sweating Sickness (Tick toxicosis/paralysis).

31.2 East Coast Fever (Corridor disease)

Chirwere ichi chinounzwa nechikwekwe chinonzi *brown ear tick*. Chikwekwe ichi chinowanikwa munzeve dzemombe uye pamuswe dzinova idzo nzvimbo dzisingasvikirwi nemushonga kana mombe dzichifiritwa. Zvipfuyo zvinotanga kuratidza chirwere ichi mushure memasvondo matatu dzichinge dzabata nechirwere ichi. Chirwere ichi chinoita chete kunowanikwa chikwekwe chemhando *yebrown tick ear*.

Zviratidzo zvechirwere ichi

- Kupisa kwemuviri;
- Kupera simba;
- Kudzikira muviri;
- Kuita manyoka ane ropa;
- Kana mombe yava kutandadza inoburitsa mafuro akachena mumhino, mumuromo uye kukosora;
- Kufa kwakanyanya kwemombe zvisinganzwisiki.

Kuti varimi vaone huvepo hwechirwere ichi che*Corriddor* mazvikokota kana chiremba wemombe anofanira kutora ropa shoma rekunoongora kumuzinda wezveutano hwemombe. Varimi vanofanira kutarisa zviratidzo zvapiwa pamusoro apo kuti vaone huvepo hwechirwere ichi muzvipfuyo zvavo. Zvakare varimi vanofanira kutarisirawo kuvapo kwevimwe zvirwere zvakaita *sered water*, anaemia uye jaundice.

Marapirwo

Zvikwekwe zvinofanirwa kubviswa pazvipfuyo nenzira dzinosanganisira kufirita, kudhibhisa, hutariri hwakakwana hwemafuro, kushandisa mafuta ezvikwekwe *tick grease*. Kufambiswa kwemombe zvisiri pamurau kunofanira kurambidzwa. Mombe dzinogona kubaiwa mishonga yakaita se*Butalex/ Parvexon (Clexon), Oxytetracycline*.

13.3 Gall Sickness/ Chirwere chenduru/ Nyon'o

Ichi chirwere chinobata mombe mbudzi nehwei asi chinonyanyobata mombe. Mumombe chirwere ichi chinokonzera kudzikira kwemuviri, kukanganisa ropa zvinokonzera *anaemia nejaundice*. Chirwere ichi chinogona kupararira kuburikidza nemhesvi (tsetseflies), uye zvikwekwe zvemhando dzose nekushandisa majekiseni ane tsvina. MuZimbabwe chikwekwe chemhando *yebblue tick* ndicho chinoparadzira chirwere ichi.

Zviratidzo zvechirwere ichi

- Kupisa muviri;
- Kudzikira kwemuviri;
- Kufema nekukurumidza;
- Mhino dzakaoma;
- Kutambura pakuita tsvina;
- Kuburitsa dzihwa rakacheneruka;
- Mombe dzine mazamu dzinogona kutsvodza;
- Chirwere ichi chinowanzo kupesaniswa nechimwe chirwere chakada kufanana nacho che*Red Water Babesiosis* kana *Heartwater Cowdriosis*.

Kana mombe ikafa nechirwere ichi zvinotevera zvinoonekwa:

- Ropa rakavhengana nemvura ;
- Kudzikira muviri;
- Kubuda kweropa panzvimbo dzakaita semoyo neitsvo;
- Chiropa chinokura uye nduru inokura yozvimba;
- Mudumbu remombe munenge makaoma musina nduru;
- Kuti chiremba aone chirwere ichi anofanira kutora ropa rese remombe oenda naro kunoongororwa.

Marapirwo nekudzivirira

Mombe dzinoda kubatwa zvakanaka kana dzichirapiwa kutira kusakuvadza. Hamufaniri kushandisa tsono yamunenge mambo shandisa kubaya dzimwe mombe. Kana muchinge

maona zveidi kuti pane chirwere chenduru ichi chapinda muzvipfuyo munokurudzirwa kutsaura zvipfuyo zvinorwara kubva kune dzisingarwari. Mushonga *weoxytracycline* unogona kushandiswa mushure memazuva makumi maviri nemasere ega ega kana pachinge pabviswa zvikwekwe. Chirwere ichi chinogona kudzivirirwa kuburikidza nekufirita mombe zvikwekwe uye kuendesha mombe kudhibhi

Heart water (Cowdriosis)

Ichi chirwere chinobata mombe nehwai nembudzi chichi konzerwa nezvichikwekwe chinonzi *bont tick*. Chirwere ichi chinoonekwa kuburikidza nekukwira kwakupisa kwemuviri, kuvhunduka, kuita manyoka uye kuungana kwemvura muchipfuva nemudumbu memombe.

Zviratidzo

- Kupisa muviri;
- Kuvhunduka kwezvipfuyo kunosanganisira kusagadzikana pakufamba, kutsenga mazino nekuruma, kubwaira bwaira kwemaziso achipindurudzwa, kuruma nekudzirira vanhu nekuparadza zvinhu, kuita sebofu, kuwira pasi uye kuzofa kwechipfuyo;
- Kuita manyoka zvisoma.

Zviratidzo zvapiwa izvo hazvionekwi panguva imwe chete semuenzaniso chipfuyo chinogona kupisa muviri chichitadza kumuka uye manyoka. Pamwe pachopachona kusaona kuti chipfuyo chiri kurwara chobva chafa chiripo ripocho, unofanira kutarisa pachafira zviratidzo zvapiwa izvo. Chipfuyo chese chinenge chichiita zviratidzo zvapiwa izvo unofanira kuchifungidzira huvepo hwechirwere ichi. Kana chichinge chafa *neHeart Water* chiratidzo chikuru chinoonekwa imvura yakawanda zvakanyanya inenge yakaungana muchipfuva nemudumbu.

Izvi zvinosanganisira:

- Mvura mumoyo;
- Mvura inoungana mumuviri ineropa rakabundira.

Marapirwo nekudzivirira

Zvinhu zviviri zvakakosha pakurwisa chirwere ichi kubvisa zvikwekwe nekurapa:

- Kubaya majekiseni nemushonga *wetetracycline long acting (LA/10kg body weight)*;
- Kudzivirira kana kuderedza zvikwekwe kuburikidza nekudhibhisauye kufirita zvipfuyo.

13.4 Red water (Babesiosis)

Chirwere *cheRed Water* chinofambiswa nezvikwekwe zvabva zera kuendesha kuzvikwekwe zvidiki kuenda kumhuka kana kuti kubva kuzvikwekwe zvoga kuenda kumhuka. Chirwere

ichi chakajairika kunzvimbo dzakaita seBinga uye Hwange. Red Water zvakare inowira mombe dzinenge dzakamboita zvikwekwe kana kugara munzvimbo dzine zvikwekwe zvakawanda. Chipfuyo chinenge chine chirwere ichi chinenge chichipisa muviri zvakapfurikidza mwero. Chirwere ichi chinokonzerwa nezvikwekwe zvinonwa mombe ropa zvakaita *sebont neblue tick*. Ongororo ikaitwa mutsinga dzezvipfuyo zvine chirwere ichi munoonekwaa kuti munenge musina ropa uye kuita weti yakasangana neropa.

Zviratidzo

Zviratidzo zvechirwere ichi zvinosanganisira

- Kupisa kwemuviri;
- Chipfuyo chinoramba kudywa uye kupusa kumeso nekushaya simba;
- Kutadza kuzeya;
- Kuderera kweuwandu hwemukaka uye kusafema zvakana;
- Weti inosanduka rudzi kubva pakutsvuka kuenda kubrown;
- Zvipfuyo zvine mazamu zvinogona kutsvodza;
- Kusagadzikana pakufamba.

Kana zvipfuyo zvako zviine chirwere ichi *cheRed Water* unofanira kutarisirawo huvepo wezvire zvakaita se:

- *Gall sickness (Anaplasmosis)* nekuda kwekurasika kwakanyanya kweropa uye *jaundice*;
- *Heart water (Cowdriosis)* nekuda kwekukanganisika kwepfungwa.

Kana ukaongorora mombe inenge yafa nechirwere *cheRed Water* unoona zvinhu izvi:

- Jaundice;
- Itsvo dzakasviba uye dundira rinenge riine weti yakatsvukuruka.

Marapirwo

Munogona kuwana rubatsiro kunana mazvikokota vezvemombe *Veterinary Assistant* vari munzvimbo mamunogara. Asiwo munogona kubaya zvipfuyo nemushonga *weImidicarb* kana *Berenil*.

Sweating Sickness (Tick toxicosis/paralysis)

Sweating sickness inokonzerwa nechikwekwe chinonzi *bont-legged ticks (Hyalomma)*. Chinowanobata zvipfuyo zvidoko zvinenge zviine zvikwekwe pamuviri. Mombe inenge yabatwa nechirwere ichi inenge ichipisa muviri uye kubuda mvura zvakanyanya uye kudikitira kunoonekwa muganda.

Zviratidzo

Zviratidzo zvinotevera zvinoonekwa kana chipfuyo chichidikitira

- Kupisa muviri kwanyanya;
- Kusada kudya, kurukutika uye kupera mvura mumuviri uye kukwasharara kweganda;
- Kubuda kwedzihwa mumhuno nemumaziso;
- Mombe inogona kufamba yakakombama musana;
- Mombe inogona kusvuuka ganda uye kupera mambava;
- Kusafamba zvakanaka kweropa mumuviri zvinozokonzera, kuoora kwedzimwe nzvimbo uye kuita maronda pamuromo zvinozokonzera kuti;
- Mhuru dziite masiriri akareba anozokonzera kurasikirwa nemvura mumuviri.

Marapirwo nekudzivirira

Hapana nzira chaiyo iri pachena yekurapa chirwere ichi. Kubvisa zvikwekwe ndiyo nzira iri nyore kudzivirira chirwere ichi.

Tumbuyu Tunobata Zvipfuyo (Parasites)



Donzvo rechidzidzo

- Kuziva zvakakoshera tumbuyu tunogara mudumbu mezvipfuyo;
- Kuziva tumbuyu tunokonzera kurwara muzvipfuyo;
- Kuziva zviratidzo zvezvipfuyo zvinenge zvatwa netumbuyu utwu;
- Kuziva matanho anotorwa kurwisa nekurapa tumbuyu utwu.



Hurukuro mumapoka

- Ndedzipi mhando dzetumbuyu turi kuunza zvirwere kuzvipfuyo munharaunda maunogara?
- Zvii zvaunona muzvipfuyo zvinenge zvatwa netumbuyu utwu?
- Buritsa pachena zvirongwa zvamunazvo uye nzira dzekupedza tumbuyu utwu

14.1. Nhanganyaya

Tumbuyu (parasites) tupuka tunogara mukati kana pamuviri wezvipfuyo tunokuvadza zvipfuyo kuburikidza nekuruma kana kumwa ropa yemhuka yatunenge twakagara pairi. Tumbuyu tunogara kunze kana pamuviri pechipfuyo tunopiwa zita rekunzi *maexternal parasites* uye tunogara mudumbu tunonzi *mainternal parasites*. Mapoka maviri ataurwa etumbuyu utwu ese anogona kukonzera kurasikirwa nezvipfuyo kwemurimi. Semurimi unofanira kuziva mhando dzetumbuyu utwu uye matanho anotorwa pakurwisa dambudziko ratunogona kuunza. Makonye emudumbu anodaidzwa kunzi *roundworms neliver fluke* ndiyo emamwe marudzi etumbuyu twemukati mezvifpuyo anopedza zvipfuyo zvevarimi muZimbabwe. *Medium* kana kuti *brown stomach worms* nderumwe rudzi rwemaroundworms akajairika kuvanhu. *Matapeworms* kunyange achibata zvipfuyo zvakaita semombe haanyanyokuvadza kana kupa dambudziko rakanyanya kumombe, kudzivira uye kurapa tumbuyu utwu zvinoenderana neruzivo rwemafambiro anoita tumbuyu utwu zvichisiyana nzvimbo nenzvimbo. Kubvisa tumbuyu utwu tose zvinogona kunetsa asi zvinogona kuderredza nekushandisa mishonga kuburikidza nezvirongwa zvakanganana nekurwisa tumbuyu.

14.2. Tumbuyu twakakosha mumuviri yezvipfuyo

Kune mhando nhatu dzetumbuyu dzinoiswa mumapoka matatu dzinoti *roundworms, tape worms nema flukes*

14.3. Marapirwo

Mishonga mizhinji inowanikwa muzvitoro zvevarimi. Mishonga iyi inowanikwa iri pakasiyana siyana dzinoti: *Avermectins, Ivermectin, Dormectin, Eprinomectin, and Moxidectin or Benzimidazoles (Oxfendazole, Albendazole, fendbendazole)*.

1.) Makonye emudumbu (*Roundworms*)

- Awa makonye anogara mudumbu nemuura hwezvipfuyo
- Makonye awa anokuvadza dumbu, ura kana kusveta ropa rinogara muura hwechipfuyo
- Kuparadzwa kweura nemakonye awa kunokonzera kurwara nekufa kwezvipfuyo

Makonye aya anokandira mazai mudumbu anozoburitswa nendove yezvipfuyo ayo anozotsotsonywa mumauswa. Mushure mekutsotsonywa makonye madiki anozopinda mudumbu apo mombe inobatanidzira ichifura sora. Kune makonye zvakare anogona kugara muganda anonzi *filarial worms*. Makonye aya anokandira mazai nekaburi kadiki kanenge kari paganda ayo anozotakurwa kuendeswa kune dzimwe mombe nenhunzi.



Round worms live in the stomach and intestines

2.) Tapeworms

Awa makonye akareba ane misoro inoita seine zvirauro uye miromo yekusveta yakareba zvakare anoonekwa mundove yezvipfuyo.



Tape worm (Flatworm) consists of multiple segments



Liver affected by tapeworms

3.) Flukes

Awa makonye anogara muchiropa/chitaka chezvipfuyo achimwa nekusveta ropa uye kukuvadza chiropa/ chitaka. Mombe dzinenge dziine makonye awa dzinorasikirwa nemuviri

uye kufa. MuZimbabwe dambudziko remakonye emhando iyi anoitika munzvimbo dzakasvinga mvura, munzizi uye nzvimbo dzine mafuro akazara mvura isiri kuyerera.



Liver fluke (Flatworm). One-segmented worms with head and tail in one

14.4. Zvakakoshera tumbuyu tunogara mumuviri memombe/ Nyongororo

Kazhinji tumbuyu *parasites* tunokanganisa kupfuya mombe asi kune tumwewo tumbuyu kana makonye anowanikwa mudumbu memombe ayo anobatsira mombe pakuzeya chikafu chakaita semashanga uye uswa. Makonye aya akashaikwa mudumbu mombe inogona kuita dambudziko pakuzeya chikafu.

Nyongororo dzinokanganisa mombe dzenyama kuburikidza ne:

- Kukanganisa matumbu;
- Kuuraya mapapu;
- Kuparadza chiropa/chitaka;
- Kukonzera chirwere chekurasikirwa neropa.

Nyongororo kana tumbuyu utwu tunogonawo kutapurirwa kuvanhu mushure mekunge vadya nyama kana mukaka hwezvipfuyo zvinenge zviine tumbuyu utwu.



Internal worm damage in the abomasum

Zviratidzo

Zvinhu zvinotevera zvinoonekwa kana mombe ichinge yabatwa nemakonye kana nyongororo:

- Kukanganisika chimiro chemombe uye kusakura;
- Kukwasharara kweganda;
- Kusada kudya kupera mvura mumuviri uye kudzikira kwemuuviri;
- Kusakura kwechipfuyo kunyange chikafu chinovaka muviri chiripo;
- Kuwira shaya uye kushaikwa kweropa mumuviri;
- Zvidya zvemombe zvinotaridzika kuzara tsvina nekuda kwemanyoka;
- Mombe dzinogona kuita dumbu guru rinenge rakaremba risina chinhu.

Marapirwo

Tumbuyu tunokonzera zvirwere mumombe tunogona kudzivirirwa nekubvisa makonye anokonzera zvirwere. Munofanira kugadzira chironywa chinotanga nekutarisa makonye awa mundove yemombe mogona kushandisa mishonga inosanganisira Rafoxanide, Nitroxynil, Triclabendazole, Thiabendazole, Piperazine and Phenthiazine. Murimi anofanira kudaidza chiremba wemombe kana achishandisa mishonga iyi kana achiita chironywa chokubvisa makonye anokonzera zvirwere. Chironywa ichi chinobata matanho anosanganisira:

- Kubvisa mhuru kubva kumombe huru;
- Kupa chikafu chine utano chinoita kuti mombe dzisabatwa nemakonye aya ;
- Kubatanidzawo nzira dzinosanganisira kufudza mombe uchienda nemazera adzo uchitanga nemhuru kotevera dzichangorumurwa wopedzisira nehombe;
- Kushandisa nzira dzakaita serotational grazing;
- Mombe dzinogona kupiwa mvura inobva munzvimbo dzakachena dzakaita sematsime akavharwa pane kuti dzimwe mvura yakasviba yemunzizi kana mudhamu;
- Kuisawo mushonga, mumvura kana pambwe emunyu adzinonanzva.

11.5. Dzimwe nzira dzokurwisa tumbuyu tunokonzera zvirwere mumombe

Izwi rechirungu rekuti **FIGHT** ndiro rinoshandiswa kurwisa tumbuyu utwu rinomirira zvinotevera:

F=Full dose - kumwisa mushonga - Murimi ngaaape mombe mushonga wakakwana kubvisa makonye awa mudumbu kana mushonga wakakwana wokufirita kubvisa zvikwekwe.

I=Ideal timing - unofanira kuziva kuti mushonga wako unogara zvakadini uine simba kuitira kuti ugoziva pekuzofirita mombe zvakare. Unofanira kuzivawo muraramire wechikwekwe kana makonye kuti ugoziva kushandisa mushonga nenguva yakakodzera semuenzaniso munguva yekupisa mazayi ezvikwekwe nemakonye anoparara saka munofanira kuisa mushonga kuparadza zvikwekwe pazvinenge zvichikandira kana kutsotsonya kuitira kuderedza huwandu wezvikekwe.

G=Give it a break - mushure mekushandisa mushonga kwenguva zvikwekwe zvinogonawo kurwisawo mushonga uyu zvinokonzera kuti zvisafe. Kana waona izvi zvaitika unogona kushandisa mumwe mushonga kwenguva diki. Mushure menguva diki iyi unogona kuzodzokera kumushonga wako wekare.

H= Hold and treat - kana uchangotenga dzimwe mombe, haufaniri kudzibanidza neboka ragara riripo. Tanga wadziisa padzo dzega (HOLD) paunokwanisa kudzirapa makonye (TREAT) izvi zvinodzivirira zvikwekwe nezvirwere.

T=Test - tanga waona kana mushonga wauri kuda kushandisa uri iwo chaiwo unogona kushanda basa rawakagadzirirwa.

Hurukuro mumapoka

- Tsanangura uchishandisa manzwi ako kuti inzwi rekuti **FIGHT** rinokurangaridzei maringe renzira dzekurwisa nyongororo nezvikwekwe.
- Ndedzipi nzira dzakajairika dzaunoziva dzekurwisa nyongororo?
- Munharaunda mauri munobviswa makonye sei?

CHIKAMU 15

Maronda muMombe



Donzvo rechidzidzo

Mukupera kwechikamu chino vadzidzi vanofanira kunge vave:

- kuziva kukosha kwemaronda muzvipfuyo;
- kukwanisa kuona mombe dzine maronda;
- kuziva kudzivirira nekurapa maronda.



Hurukuro mumapoka

- Matuso emaronda kumombe dzenyama;
- Zviratidzo zvinoratidza kuti mombe ine maronda;
- Kutu murimi angadzivirire sei kuti mombe dzake dzisaita nemaronda;
- Ungarape sei mombe dzako maronda.

15.1 Nhanganyaya

Maronda zvinoreva kuchekeka kana kuvhurika kweganda remombe. Kune mhando mbiri dzemaronda. Maronda anoita paganda ayo anokanganisa chimiro cheganda. Maronda akadzika (deep wounds) awo anokanganisa mukati meganda anoda vana mazvikokota vemombe *Veterinary Assistant or \ Veterinary Office r*. Mombe inogona kukuvadzwa netsono, chipikiri, waya pagumbo kana simbi kucheka ganda, kana tambo yakasungwa zvakasimba inogona kukuvadza ganda remombe. Mombe inopenga kana kutunga inogona kukuvadza dzimwe. Kutu murimi anzwisise nyaya iyi zvakadzama anogona kushandisa chinyorwa chakanzi *Refer to dehorning in Cattle Beef Production for Small Scale Farmers Book 1*.

Kudzivirira nekuderedza kurasika kwerope kana mombe yakuvara

Maronda akadzama, tsinga dzemumuviri memombe dzinogona kukuvadzwa. Tsinga dzinofambisa ropa kuenda kunhengo dzese dzemuviri dzikadimbuka, ropa rinobuda zvakanyanya rine simba kunge mvura iri kubuda mumadiridziro. Izvi zvinenge zvichikonzerwa nekurova kwehana. Zviri nyore kuti murimi aone pari kubuda neropa. Asi kana tsinga dzinotora ropa kuendesa kumoyo dzikadimburwa, ropa risina simba rakanyanya rinobundira nekuungana zvova nyore kuti rigone kudzivirirwa risabuda rakawanda. Izvi zvinopa njodzi diki kuupenyu hwemombe.

15.2 Zvakakoshera kurapa mombe maronda

Mukupfuya neutariri hwemombe dzenyama, zvakakosha kutarisawo hutano hwemombe. Izvi zvinoitwa nekuti kukosha uye mutengo wemombe unoiswa kana kutariswa maringe nekunaka kwehutano hwayo, muviri uye uremu. Kusimudzira utano nechimiro chemombe, varimi vazhinji vadiki munyika yeZambia vanochengetedza mombe dzavo kuburikidza nekukomberedza newaya, kuvaka matanga, mafuro uye midziyo inoshandiswa pakuchengeta mombe.

Nemamwe manzwi murimi akasava nehanya yekutora matanho ekudzivirira zvipfuyo zvake, mombe dzake dzinogona kupinda panjodzi yekukuvadza apo dzinenge dzichiedza kubuda muwaya uye padzinenge dziri kudhibhiswa, kupiwa mishonga kana kuiswa mumota kuti dzinotengeswa. Maronda anenge aiswa pamombe idzi anokonzera marwadzo uye kusagadzikana muzvipfuyo. Maronda awa anogona kutungamirira kune zvimwe zvirwere zvinokonzera netumbuyu twakaita *sefungus nebacteria*. Maronda zvakare ano konzera kuti mombe dzisafamba zvakanaka, pakushanda mukurima uye kuburitsa mukaka wakakwana sezvo dzinenge dzichitadza kufura zvakanaka. Kusagashirwa kwemombe kana yaurawa nekuda kwemaronda munzvimbo dzinourairwa mombe dzatengwa zvinokonzera kurasikirwa nemari kumurimi.

Zviratidzo zvemombe ine maronda

Mombe yakakuvadza inoratidza zvinotevera:

- kubuda ropa zvichikonzerwa nekurwa kana kuchekwa newaya, chipikiri kana simbi yakapinza;
- Kutadza kufamba zvakanaka;
- Kutadza kufura zvakanaka;
- Marwadzo;
- Ronda rakashama/ kuvhurika rinoonekwa paganda.

15.3 Maronda Matsva

Sedanho rekutanga kurapa ronda, kudzivirira kana kuderedza kubuda kweropa kuburikidza nekutsimbirira nzvimbo yakuvadza. Basa rekutsimbirira iri kuitira kuvhara tsinga dzinenge dzichiunza ropa. Kana zvabudirira ropa rinobva rabundira panzvimbo iyi kuti risaramba richirasika zvakananyanya. Kushandisa mucheka wakachena kana donje paronda iri wakatsimbidzira zvisoma zvinodzivirira kuti ropa risarasike zvikuru kutsinga. Ropa rine simba rakanyanya rinobva kutsinga rinogona kuita kuti ropa risabundira (*clot*) saka zvinoda kuti ropa iri rimiswe kwekanguva. Izvi zviru nyore kana ronda iri riri pagumbo. Unoita izvi kuburikidza nekuisa tambo yakasimba wakatenderedza kana wakaisa nechepamusoro panorasika neropa racho. Tsvaka katanda kana puranga wosunga netambo kuitira kumisa ropa risaramba richibuda. Nzvimbo inenge iri pazasi pepakakuvara inobva yashaya ropa. Izvi zvinogona kuuraya nyama, saka unofanira kubvisa tambo iyi pamaminutes mashanu kana gumi 5 to 10 minutes kuti ropa rifambe kusvika chiremba wemombe auya *Veterinary Assistant/ Officer*.



A fresh wound on the rear hing-leg of beef cattle

15.3 Maronda agarisa

Nedzimwe nguva maronda matsaru anenge akanganiswa nehonye saka tinofanira kuasuka/kuageza nekubvisa tsvina inoita kuti asapora. Unogona kuita izvi uchishandisa mvura ine munyu kana mishonga yakaita se (**Dettol, Savlon or Iodine**). Unogona kukwiza ronda iri uchishandisa donje kusvika nyama chena isina tsvina yoonekwa kana ropa shoma roonekwa kutsvuka. Suka ronda iri nemvura ine munyu woisa mushonga paronda iri. Vhara ronda iri uye woona kuti raramba rakachena. Unogona kuramba uchisuka ronda iri kana waona kuti tsvina iri kuramba ichikanganisa kuti ripore.

Marapiro nekudzivirira

Kudzivirira maronda kwakakosha nokuti uvepo hwemaronda hunogona kukanganisa zvakawanda. Unogona kushandisa zvinotevera kudzivirira maronda:

- Kubvisa nyanga mombe dzako kuti maronda asaita kuburikidza nekutungana;
- Kubvisa zvinhu zvakapinza zvinokuvadza zvakaita semarata panodyira mombe;
- Kuchengezedza mombe kubva kuzvinhu zvinokuvadza zvakaita sezvikwekwe.

Kurapa :

- Suka maronda nemvura ine munyu kana kushandisa mishonga yakaita se *Dettol or Potassium permanganate solution*
- Shandisa mishonga *antibiotics* yekudzivirira kurapa nzvimbo dzinenge dzaenda *mabacteria*
- Shandisawo miti yechivanhu inowanikwa munharaunda yakaita segavakava, muvenga honye kana murunju runju.

Mukupeta chikamu chino kurukurai pamusoro pemufananidzo inotevera nemibvunzo yakapiwa.

Hurukuro mumapoka

Rimwe zuva uchimuka mangwanani woona kuti imwe yehandira dzako iri kubuda ropa nekuda kwekukuvadza. Mushure mekutarisisa nekuongora handira iyi unoona kuti ine ronda guru rakadzama.

- Tsanangura kuti unorapa sei ronda iri uchishandisa mishonga yechivanhu kana yechirungu?
- Semaonero ako iwe chii chakaipira mombe dzine maronda?
- Ndezvipi zvakajairika zvinokonzera maronda kumombe papurazi pako?
- Ungaita sei uye kushandisa nzira dzekudzivirira maronda papurazi pako?

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