

## IMFASHANYIGISHO KU BWOROZI BW INGURUBE



### ISOMO RYA MBERE : AKAMARO KO KORORA INGURUBE.

Ingurube, mu matungo yose yororewe mu rugo, niryo tungo ribyaza umusaruro utubutse ibyo iba yariye kurusha ayandi matungo ; n’ukuvuga ibiryo byose birayiyoboka; irya bike, ariko ikiyongera ibiro byinshi kandi vuba.

Ingurube irya byose uyihaye : ibisigazwa byo mu gikoni, ibiryo bikomoka ku bikatsi, ibituruka ku mavuta, ku miceri, ku ma- sukari, ku bworozi bw’amafi kandi bikayigirira akamaro. Ibyo bishobora kuzuzwa n’inyama, ubwatsi, ibinyampeke, n’imbuto.

Ingurube imwe n’ibibwana byayo ishobora kugera ku musaruro munini ku mwaka iyo ari ubwoko bwiza kandi ikaba yagaburiwe neza. Ishobora gutanga ibiro by’inyama bingana n’ igihumbi na magana atandatu mu mwaka (1.600).

Ingurube itanga ifumbire ikorehwa mu mirima kugira ngo umusaruro wiyongere.



***Ifumbire yaturutse mu bworozi bw'ingurube imwe kuva amezi atandatu gusa.***

Ariko umworozi agomba kumenya ko ingurube itagomba gutungwa n'umwanda uko abenshi babyibeshaho ; ingurube itunzwe no kurya imyanda no kuyibamo iba irwaye inzoka nyinshi n'utundi dukoko ku mubiri wayo bityo bigatuma inenwa , ntitange umusaruro ugaragara kandi ishobora kwanduza abantu indwara.

## ISOMO RYA KABIRI : KUMENYA GUTANDUKANYA AMOKO Y'INGURUBE YORORERWA MU RWANDA

**1. Ubwoko bw'ingurube nyarwanda :** Ingurube nyarwanda igira uruhu rw'umukara, rimwe na rimwe uvanze n'ambara y'umweru. Agahanga ni kagufi, ikinwa ni kirekire, amatwi ni matoya akaba yemye cyangwa aryamye ariko ntatendera. Uruti rwayo ni ruto, amaguru ni maremare kandi afite umubyimba muto.

Ubwo bwoko burwanya indwara, bwihanganira ubushyuhe, bwemera indyo ariyo yose.

Ubwo bwoko bw'ingurube bubwagura hagati y'ibibwana 8 -10, bubyara kabiri mu mwaka. Urubyaro rwa mbere ruboneka ingurube ifite umwaka (16 mois) n'igice cyangwa i myaka ibiri( 24 mois). Iyo ngurube ikura buhoro, igira ibiro 120 yujuje umwazaka n'igice.

Inenge yayo indi nuko iyo ikuze igira ibinure byinshi, bigatuma umusaruro ugabanuka,nayo igata agaciro.

**2. Ubwoko bwa Large White :** Ubwo bwoko bufite uruhu rwera, agahanga kanini gacuritse, ikinwa kinini ; amatwi ni manini kandi arahagaze ; bufite umubiri munini ugizwe n'inyama nyinshi ; amaguru yabwo ni manini kuko agizwe n'inyama nyinshi.

Ubwo bwoko bugerageza kurwanya, indwara ariko busaba kugaburirwa neza cyane ;

Ubwo bwoko bw'ingurube bubwagura hagati y'ibibwana 10-12, kabiri mu mwaka. Iyo ngurube ibwagura ubwa mbere ifite amezi 12,

ikura vuba, igira ibiro 70 ku mezi 5, itanga umusaruro' w'inyama mwiza cyane, ariko ikenera isuku no kugaburirwa neza cyane.

**3. Ubwoko bwa Landrace :** nabwo bufite uruhu rwera, agahanga karekare kandi kabyimbye ; amatwi manini aratendera. Umubiri wayo ni muremure ugereranyije na Large White.

Ubwo bwoko ntibufite ubushobozi buhagije bwo kurwanya indwara ariko umusaruro ni mwiza cyane kurusha n'uwa Large White. Umubiri wiyo ngurube ni muremure haba mu butambike cyangwa mu buhagarike.

**4. Andi moko y'ibyimanyi**

**Large White\*Inyarwanda** : irwanya indwara kandi itanga umusaruro ushimishije iyo igaburize neza.

**Large White\*Landrace \* Duroc** : ubwo bwoko buherutse kugera mu Rwanda buturutse muri Irland Burwanya indwara kandi butanga umusaruro mwiza.



## **ISOMO RYA GATATU: GUHITAMO UBWOKO BWO KORORA**

Umworozi ahitamo akurikije ubushobozi bwe bwo korora :

Niba adashoboye kuzibonera indyo izinogeye, ibiraro bisukuye, • yorora ubwoko nyarwanda.

Ashobora kubona ubwatsi buhagije n'ibisigazwa byo mu gikoni, • icyo gihe yakorora ibyimanyi by'Inyarwanda n'ubwoko bwa kijyambere.

Ariko amoko meza yo korora n'ay'umwimerere kuko atanga • umusaruro mwinshi ku mworozi

ushoboye kuzitaho uko bikwiye, n'ukuvuga kuzigaburira indyo yuzuye kandi izinogeye, zikagira isuku ihagije, hakaboneka n'uburyo bwo kurwanya indwara.

## **ISOMO RYA KANE : GUHITAMO IMFIZI CYANGWA INYAGAZI Y'ICYORORO**

### **Ibikoresho bikenerwaA. .**

**1 ) Ibiranga ingurube** byoroheje bikoreshwa mu Rwanda ni amaherena ; aboneka mu bigo bicuruzwa imiti y'amatungo, cyane muri AGROTECH. Iherena yambikwa ku gutwi kw'igurube bityo rigafasha kutayitiranya n'indi.

**2) Ifishi y'ubworozi** , yandikwamo, ibiranga ingurube byose : nomero y'herena, igihe yavukiye,

### **Ibikenerwa kwandikwa no kumenywa muri iyo fishi ni :**

#### **Uburumbuke a)**

Umubare w'imbyaro-

Umubare w'ibibwana bivuka kuri buri rubyaro

Umubare w'amabere-

#### **b) Imikurire**

- Uburyo ibibwana byiyongera ibiro kuva bivutse

- Ibibwana bipimwa ubwa mbere bifite ukwezi kumwe, hanyuma buri kwezi kugeza amezi arindwi.

- Ibiro biyongereyeho bigabanwa hagati y'iminsi yacyiyemo: ayo magarama iyo ari hejuru niho ingurube iba yunguka vuba inyama zikenerwa.

#### **c) Imico**

Ingurube , cyane imfizi zifite amahane ,zirwana,zitongana .

#### **Kuvana m'ishyamba ingurube zidafite umusaruroB. .**

Izigomba kuvanwamo n'izikurikira :

- izitiyongera ibiro ;

- imbyeyi zibyara byinshi cyane kuko zigira ibibazo by'amata make bikananirwa konsa ibibwana byazo.

- Izifite ingeso mbi: ingurube cyangwa imfizi zigira imico mibi ( kurwana, gutongana, ubugome.....), izo zikurwa vuba mu bworozi.

#### **ImyiyorokereC.**

Imfizi itangira kwimya ifite amezi umunane ;

Ishashi ishyirwa ku mfizi ifite amezi arindwi ;

inyagazi ihaka amezi atatu, ibyumweru bitatu n'iminsi itatu,

**Icyitonderwa** : ibibwana bipimwa ibiro hagamiye gutoranyamo ibitanga umusaruro , bigomba kuba bingana, bifite igitsina kimwe, bikaba ari iby’ubwoko bumwe

Inyagazi igomba kubona amazi meza kandi ahoraho, icyari cyiza gisukuye, indyo yuzuye ;

Iyo bivutse bigomba guicibwa amenyo bita canines kugira ngo bidakomeretsa nyina igihe bifata amabwana.

Ibibwana bikonye bikeneye icyari cyinshi kandi kinini ; nti hagomba kubamo umuyaga mwinshi.

Nyuma y’icyumweru kimwe bimaze kuzuzwa iminsi umunane bihabwa inombe isukye ; bavanga sulfate de fer mu itaka, bakaziha kugira ngo bitagira ibibazo cyo kubura amaraso nyuma y’ibyumweru bibiri.

Nyuma y’ibyumweru bibiri bihabwa indyo ikungahaye muri protéine kugira ngo isimbure ariya mata ya nyina aba yatangiye kubura. Ibibwana bicutswa nyuma y’amezi abiri, nyina niyo ivanwa mu

ibwana..





*Ibibwana byujuje ibyumweu bibiri biri*

### **ISOMO RYA GATANU: IKIRARO CY'INGURUBE**

Mu kiraro hakenerwa umwanya wo kwinyagambura, umwuka mwiza, isuku, ahantu hakomeye kandi hari n'umuyaga.

#### **Ibipimo by'ikiraro**

Imbyeyi n'abana bazo : 10 m<sup>2</sup>-

Inyagazi : 2,5 m<sup>2</sup>-

Imfizi : 20 m<sup>2</sup>-

Ingurube zikonye : 2 m<sup>2</sup> -

Hagomba buri gihe guteganywa umwanya utubatsemo kugira ngo ikiraro cyagarwe bibaye ngombwa.

Ikiraro gishobora kubakwa n'ibiti mu mwanya w'matafali ahiye iyo umworozi afite amikoro make ; hasi agakoresha beto ku bipimo bingana na 1 umufuka w'isima kuri 2 imifuka y'umucanga na 3 imifuka ya garaviye. icyo gihe hagomba kubaho ubuhaname kugira ngo amaganga ajye asohoka ye kureka aho iryama.

Na none, ikiraro gishobora kuba cyubakiye hejuru ariko hakoreshejwe imbabari zikomeye zijya mu mwanya wa beto twavuze haraguru

Ikiraro cy'imbyeyi Kigomba kuba gishinzemo ibiti bigitandukanya n'aho ibibwana bikivuka bizajya biba kugira ngo nyina itabiryamira mu gihe cyo kubyara cyangwa icyo konsa .

**Imbehe n'Igikoresho cyo kunyweramo;**

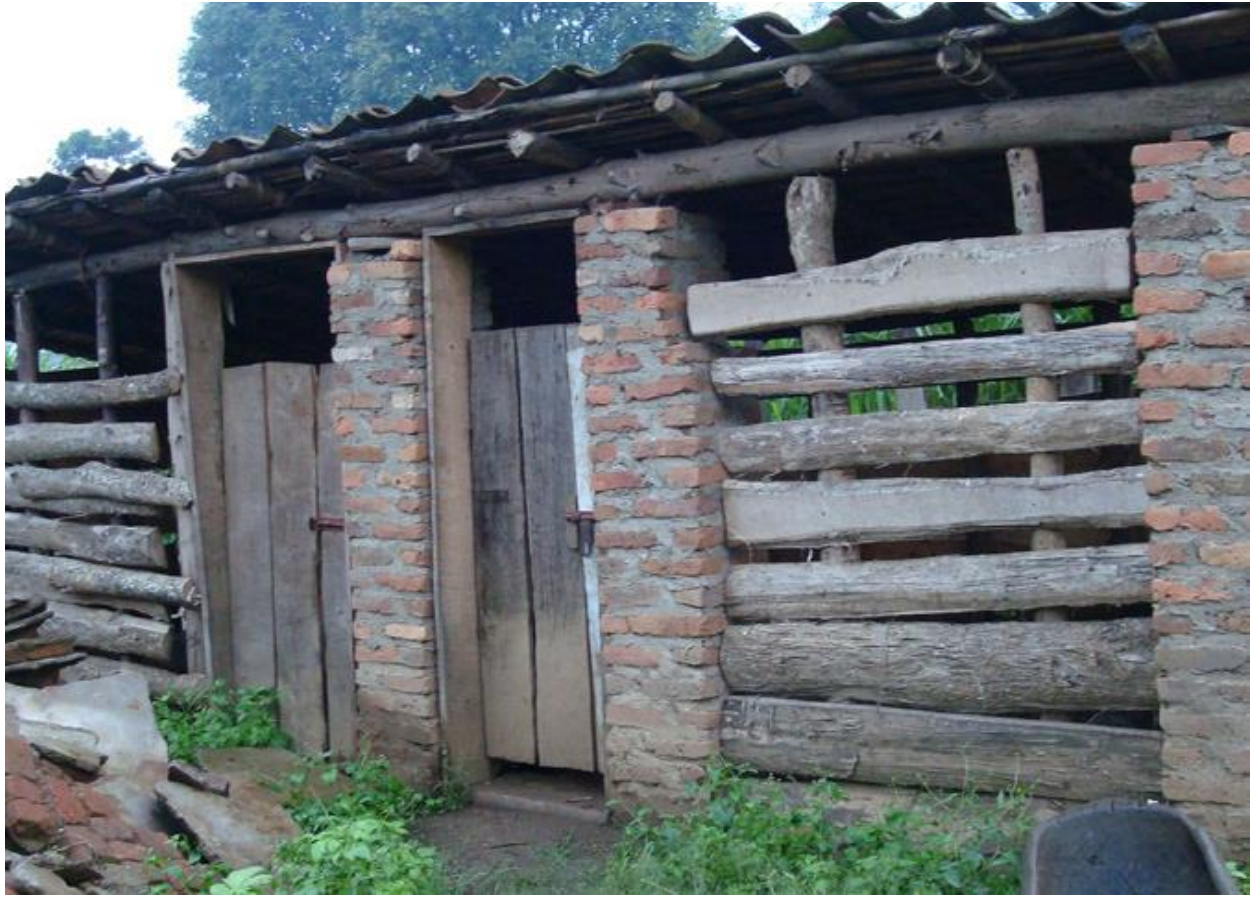
Bigomba kuba bikozwe mu giti gikomeye ; Ibyiza n'ukubikora mu giti kiremereye ku buryo ingurube itagisunika ngo gihirime igihe cyose ishakiye. Ibyo bikorwa mw'ishusho y'umuvure mitoya.



*Imbabari zigomba gukoreshwa mu kubaka ikiraro cy'ingurube*

**Icyitonderwa :** nta myenge minini igomba kuba hasi hagati y'imbabari kugira ngo ingurube itavunika ikirenge giseseyemo.







***Ibiraro cyubase hasi ariko pavement ikozwe na beton ikomeye ikwiriye ibikandagizo byingurube kuko zikunze gucukura kubera ibiro byazo byinshi ugereranyije n'uturunge dutoya.***



***Kino kiraro cyubakiye hejuru , hari pente yo kumanura amaganga hasi. Imbabari zigeze hejuru kubera ikibazo cy'abajura.***



*Ikiraro gishizweho imbabari kugera hejuru kubera ikibazo cy'abajura*



*Ikiraro cy'ubakishije amatafali rukarakara, hejuru hakaba hari imyanya itanga umwuka.*

**IZI NI INGERO Z'IBIRARO BYUBATSE NABI CYANE KU BURYO BITAGOMBA  
KWIGANWA.**



*Ikiraro cyubatse nabi , imbabari zisimbujwe ahenshi n'uduti duto. Imyenge iri hagati y'utwo duti ni minini cyane ku buryo ibibwana byanyuramo bikagwa hasi bigapfa cyangwa bikavunika.*



*Ikiraro cyubatse nabi cyane; reba imyenge minini cyane hagati y'ibiti, ku buryo ibibwana byacamo*



*Ikiraro kidasakaye, ingurube ihungabanwa n'izuba*





*Ibi biraro birafunganye, ntibyubakiye hejuru ku buryo ingurube zibamo zigaragura mu byondo. Akenshi zirasohoka.*

**IMBEHE EBYIRI ZUBATSE NABI IMWE IKOZWE UKO BIKWIYE**



*Iyi mbehe ikozwe mu gice ky'ikijerekani ;ni mbi kuko ingurube  
yayihirika ko yishakiye*



*Iyi mbehe ni mbi ikozwe mu gasafuliya k'icyuma ingurube yahirika*



*Iyi n'imbehe ikozwe mu matafali ahiye ni nziza, yubakiye ku nzu irakomeye.*

## **ISOMO RYA GATANDATU: IMIRIRE Y'INGURUBE**

Ubwatsi bugaburirwa ingurube bugomba kuba bworoshye, bikiri butoto

Indyo igomba kuba ifite intungamubiri zose za ngombwa ingurube ikenerwa.

Indyo igomba kuba iseye cyangwa ikasemo uduce duto duto kuko amenyo y'ingurube aba atarakomera kugeza amezi atatu. Muri rusange igifu cy'ingurube kiroroshye ntabwo gikomeye nk'icyinka, ihene cyangwa intama

Iyo ndyo igomba kuba ikungahaye muri phosphores na calcium , kugira ngo amagufa y'ingurube akomere.

**Amoko atandukanye y'ibiryo bigaburirwa ingurube :**

**A Ibiryo bisanzwe bigaburirwa ingurube ariko bidatuma zikura vuba :**

1. Ibisigazwa byo mu bikoni : ingurube zirabikunda ariko hagomba kuvanwamo ibikombe ;, amashashi, n'amacupa
2. Ubwatsi : - Amakoma cyangwa insina ; birazikomereza ariko ingurube zirabyihanganira iyo zongerewe ibindi biryo.
  - Ibinyampeke : Ibigorigori, tripsacum laxum, setaria, pennisetum, ariko bitangwa bikiri bitoto n'ukuvuga bitararaba.
  - Ibinyamisogwe : Desmodium, Mukuna, Stylosantes , acaliandra, luzerne, n'ibindi birakenerwa cyane kuko bitanga inyubakamubiri ( protéines) ituma ingurube zukura vuba.
3. Ibisigazwa by'inganda zitunganya ibikomoka ku buhinzi : son de blé, de maïs, ariko kubera bikomera cyane , bikorehwa bukeya ; mu biryo bivangwamo kuri 1/3. Hari kandi ibisigazwa byo mu nganda zitunganya inzoga bikungahayemuri proteine.

**B. Ibiryo bifite intungamubiri zuzuye :**

**Ibyo biryo biba bigizwe n'ibi bikurikira :**

- Ibinyampeke cyangwa: Ibigori , umuceri.....
- Ibinyamisogwe : Amasaka, Soya, Ibishimbo, Amashaza.....
- Ibinyabijumba : Ibijumba , Ibirayi, Imyumbati, Ibisheke.....
- Ibisigazwa mu bihingwa : Tourteaux de coton, d'arashides, Mielasse
- Ifu y'inyama, y'amaraso, y'amagufa, y'amafi.....
- Vitamines na oligoéléments

**Urugero rw'ibipimo by'ibiryo n'uburyo bitegurwa**

<b>Ibibigize</b>	<b>Urugero rukoreshwa imyumbati yonyine</b>	<b>Urugero rukoreshwa imyumbati ivanze n'umuceli</b>
- Imyumbati Yumye	76 kg	41 kg
- Ifu y'ibisigazwa by'umuceli	/	20 kg
- Son de riz	15 kg	12 kg
- Tourteaux d'arachides	4 kg	2 kg
- Ifu y'amasamake	2 kg	2 kg
- Ifu y'amaraso	2,5 kg	2,5 kg
- Ifu y'amagufa	0,5 kg	0,5 kg
- Sel	<b>100 kg</b>	<b>100 kg</b>
<b>Total</b>		

Concentrés vitaminiques	150 g	150 g
Méthionines	50 g	50 g

Ibigize iyo ndyo muri rusange :

- Ibitanga ingufu ni 70%
- Ibyubaka umubiri 15%
- Ibitanga vitamini n'ibikomeza amagufa ni 2%

Hashobora gukoreshwa ishwagara n'amagufa n'ibishishwa by'amagi bimaze gutwikwa kandi biseye, cyane ku bibwana.

Iyo ifuu y'amaraso n'amasamake bibuze, hakoreshwa ibyatsi bikungahaye muri protéines Niyo mpamvu gutera uduti nka acalliandra calothyrsus, Sesbania sesbania, Leucaena leucocephala mu mulima bigira akamaro.

Ibishishwa by'imyumbati, by'ibijumba kubiziha bitetse

**Urugero rw'ibiryo bitangwa hakurikije ibiro by'ingurube**

<b>Ibiro ingurube ipima</b>	<b>Ibiro by'ibiro igaburirwa</b>
20 kg	1 kg
30 kg	1,4 kg
40 kg	1,8 kg
50 kg	2,2 kg
Hejuru ya 50kg	2,5 kg

Kuva ingurube igejeje ibiro 70 igipimo cy'iburyo ntigomba kurenza 2,4 kg kugira ngo idakomeze  
kwiyoungera ibinure