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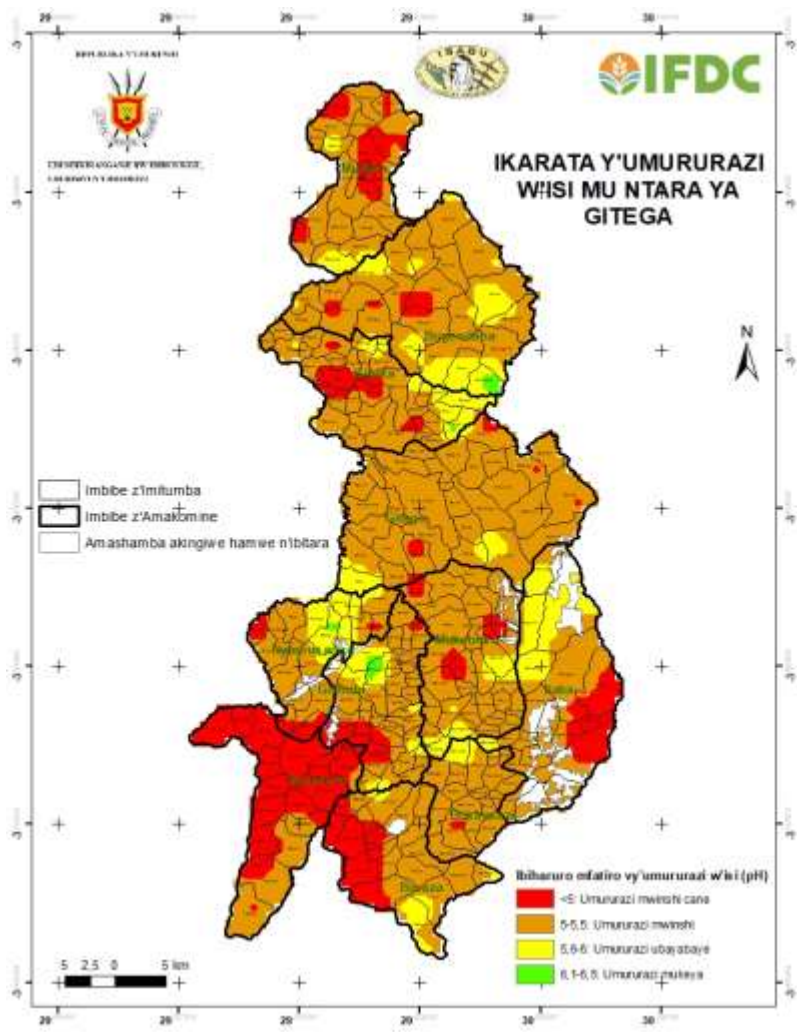


UBUSHIKIRANGANJI BW'IBIDUKIKIJE,  
UBURIMYI N'UBWOROZI



**AGATABU KEREKANA AMAKARATA  
Y'AKANOVERA K'ISI NDIMWA YO MU  
NTARA YA GITEGA**

**Umwaka wa 2022**



*Bujumbura, Ruheshi 2022*

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# **1. INTANGAMARARA**

## **1.1. Ingene akanovera k'isi ndimwa kifashe**

Itituka ry'isi ndimwa mu Burundi ntirikiri agaseseshwa rumuri, bituma umwimbu ugabanuka kandi abantu nabo batera biyongera. Ibituma akanovera k'isi kagabanuka navyo ahanini nibi bikurikira : kudakoresha neza ibisigarira vy'ivyimburwa, kutarwanya inkukura ku rugero rushimishije, ubuhinga n'ubumenyi budakwiye mu guhingura no kurwiza ifumbire y'ikirundi,....

Kugira ngo isi isubire yimbuke, birakenewe ko hamenyekana ingene isi yifashe muri rusangi mu gihugu kugira ngo abafasha n'abakorera mu gisata c'uburimyi bisunge ibiharuro vya none.

Amararata yo mu ntara yafatiye ku rugero rw'umururazi w'isi (pH), ku vyunyuny : rukomezangingo (P), nyarubabi (N) na nyaruteke (K). Ubuhinga bwinshi burakoreshwa rero mu kugarukana akanovera k'isi ndimwa : gukoresha ifumbire y'ikirundi ; gukoresha ishwaraga, guhingura imicafu yo mu ngo n'ibisagara (ibisigarira vy'imfungurwa, umwanda muto na mukuru,

ibisigarira vyo mu mahinguriro, bibanje gupimwa....), kurwanya inkukura, gukoresha neza ifumbire y'ikizungu, n'ibindi n'ibindi.

## **1.2. Intumbero nyamukuru yayo makarata**

Gufasha kugarukana akanovera k'isi mu kwerekana urugero rw'ivyunyunyuru nyamukuru n'umururazi turiko kugira ngo abajewe gufata ingingo no kuzishira mu ngiro bavyisunge.

Kugira dushikire iryo hangiro hakoze ibi bikurikira :

- Gukora amakarata y'umururazi, y'ivyunyunyuru bikuru bikuru : nyarubabi (N), rukomezangingo (P) na nyaruteke (K);
- Gutanga insiguro y'ivyibonekeza ku makarata ;
- Gutanga intumbero yo gufumbira isi ndimwa.

## **2. INGENE IBIKORWA VYAKURIKIRANYE**

Abakozi bo muri ISABU bafashanijwe n'abo mu gisata kijejwe gufumbira isi ndimwa mu bushikirangaji bw'uburimy, ubworozi n'ibidukikije bafashwe mu mugongo na IFDC, baragiye mu gihugu cose batora ivu ry'isi ndimwa mu bibanza 1377. Iryo vu ryapimiwe muri

ISABU. Inyuma yaho amakarata y’akanovera n’umururazi w’isi ndimwa yarakozwe hisunzwe ibiharuro vyavuye mu nzu nsuzumiro (Laboratoire). Mu nama yo kuyemeza, harasabwe ko hokorwa amakarata intara ku ntara n’insiguro yayo no gushika muri komine.

### 3. IKARATA Y’UMURURAZI/UBUKARIHE (pH)

#### 3.1. Ibiharuro mfatiro vy’umururazi w’isi (pH)

Urugero	Ibiharuro mfatiro vy’umururazi w’isi
umururazi mwinshi cane	< 5
umururazi mwinshi	5 - 5,5
umururazi ubayabaye ;	5,6 - 6,0
umururazi mukeya;	6,1 - 6,5
nta mururazi;	6,6 -7,5 :
isi irimwo kariciyumu na manyesiyumu kurugero rwo hejuru.	> 7,5

#### 3.2. Ivyashitsweko

- Ibice 87 kw’ ijana (87%) vy’isi ndimwa vyo mu ntara ya Gitega bifise umururazi mwinshi gushika kuri mwishi cane ;

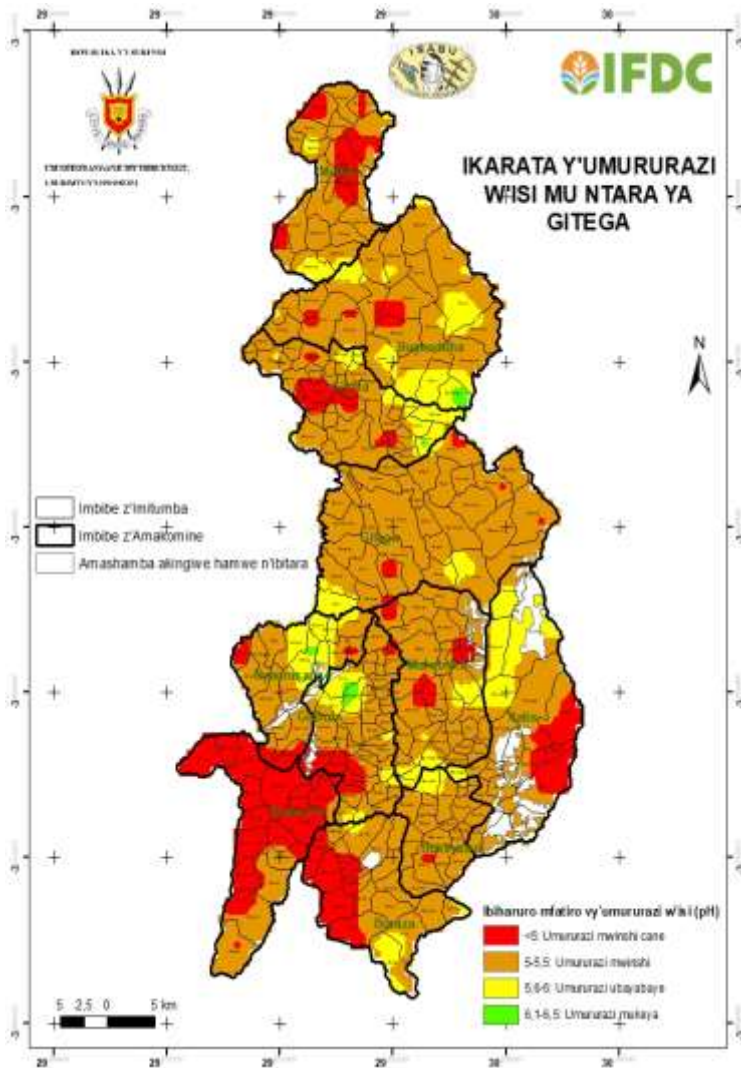
- Ibice 13 kw' ijana (13%) vy'isi ndimwa vyo mu ntara mya Gitega bifise umururazi ubayabaye;
- Ikomine ya Ryansoro niyo ibangamiwe n'umururazi kurusha izindi zose.

*Uburinganire bw'isi ndimwa dufatiye ku rugero rw'umururazi*

Urugero rw'umururazi	Uburinganire (ha)	Ibice kw'ijana (%)
Umururazi mwinshi cane	31184,5	17,0
Umururazi mwinshi	128067,7	69,8
Umururazi ubayabaye	23379,4	12,7
Umururazi mukeya	807,8	0,4
<b>Vyose hamwe</b>	<b>183439,3</b>	<b>100,0</b>



### 3.3. Ikarata y`umururazi (pH)



## 4. IKARATA Y'ICUNYUNYU NYARUBABI (N)

### 4.1. Ibiharuro mfatiro ku cunyunyu nyarubabi

Urugero	Ibiharuro vya nyarubabi kw`ijana (%)
Rukeyi cane	< 0,1
Rukeyi	0,1-0,2
Rubayabaye	0,2-0,5
Rukwiye	0,5-1,0
Rukwiye cane	>1,0

### 4.2. Ivyashitsweko

- Ibice 30 kw`ijana (30 %) vy'isi ndimwa bifise urugero rubayabaye ku cunyunyu nyarubabi ;
- Ibice 70 kw`ijana (70 %) vy'isi ndimwa bifise urugero rukeyi ;

Amakomine ya Bukirasazi, Ryansoro na Buraza afise urugero ruri hejuru ugereranije n'ayandi makomine

*Uburinganire bw`isi ndimwa dufatiye ku rugero rw`icunyunyu nyarubabi*

<b>Urugero rw`icunyunyu nyarubabi</b>	<b>Uburinganire (ha)</b>	<b>Ibice kw`ijana (%)</b>
Rukeyi cane	622,4	0,3
Rukeyi	128416,3	70,0
Rubayabaye	54400,6	29,7
<b>Vyose hamwe</b>	<b>183439,3</b>	<b>100,0</b>



**5. IKARATA Y' ICUNYUNYU  
RUKOMEZANGINGO (P) IGITERWA  
GISHOBORA GUKORESHA**

**5.1. Ibiharuro mfatiro ku cunyunyu rukomezangingo  
(mg/kg)**

Urugero	Ibiharuro vya rukomezangingo (mg/kg)
Kiri ku rugero ruri hasi cane	0 - 5
Kiri ku rugero ruri hasi	5 - 20
Kiri ku rugero rubayabaye	20 - 50
Kiri ku rugero rukwiye	50 - 100
Kiri ku rugero rukwiye cane	>100

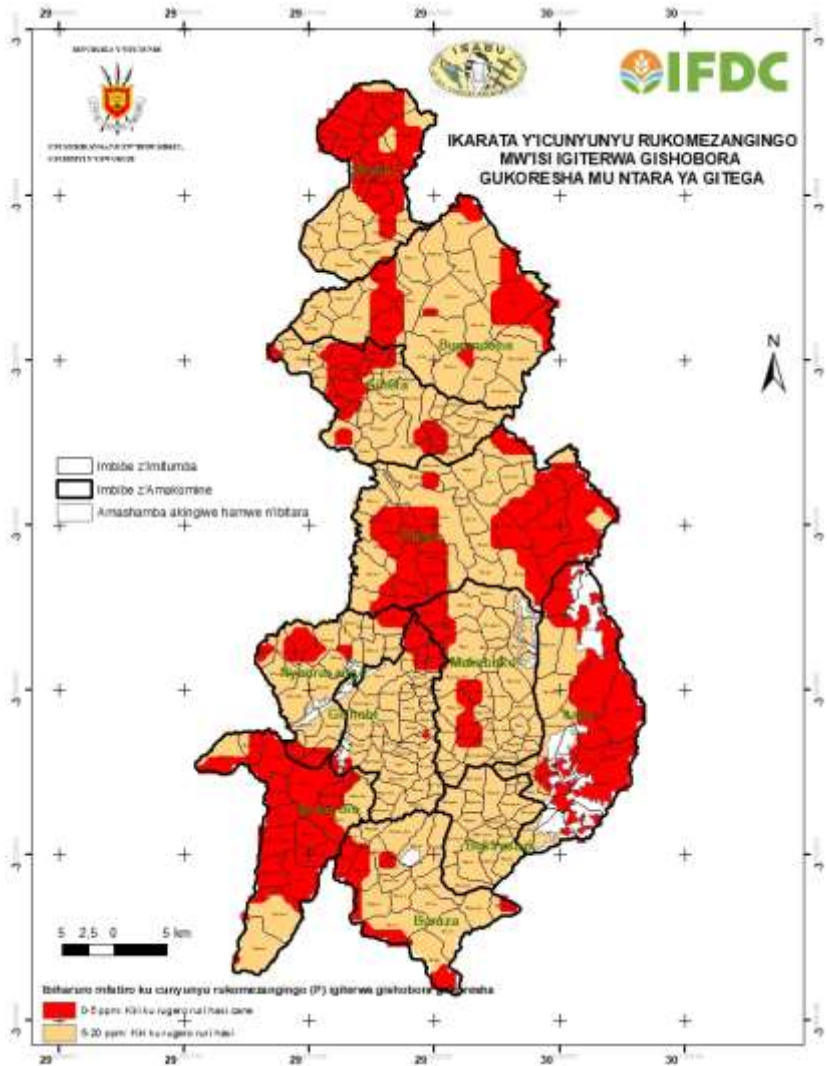
**5.2. Ivyashitsweko**

- Ibice 35,9 kw`ijana (36 %) vy`isi ndimwa vy`intara ya Gitega bifise icunyunyu ca rukomezangingo kiri ku rugero ruri hasi cane;
- Ibice 64 kw`ijana (64 %) vy`isi ndimwa vy`intara ya Gitega bifise icunyunyu ca rukomezangingo kiri ku rugero ruri hasi.

Uburinganire bw'isi ndimwa dufatiye ku rugero rw'icunyunyu rukomezangingo igiterwa gishobora gukoresha

Urugero	Uburinganire (ha)	Ibice kw'ijana (%)
Ruri hasi cane	65894,1	35,9
Ruri hasi	117545,3	64,1
Vyose hamwe	183439,3	100

### 5.3. Ikarata y'icunyunyu rukomezangingo (P) igiterwa gishobora gukoresha



## 6. IKARATA Y'ICUNYUNYU NYARUTEKE (K) IGITERWA GISHOBORA GUKOresha

### 6.1. Ibiharuro mfatiro ku cunyunu nyaruteke (még/ku magarama ijana y`ivu ryumye)

Urugero	Ibiharuro vya nyaruteke (még/ku magarama ijana y`ivu ryumye)
urugero ruri hasi;	< 0,25
urugero rubayabaye ;	0,25-0,5
urugero rukwiye ;	0,5-1,0
urugero rukwiye cane.	>1,0

### 6.2. Ivyashitsweko

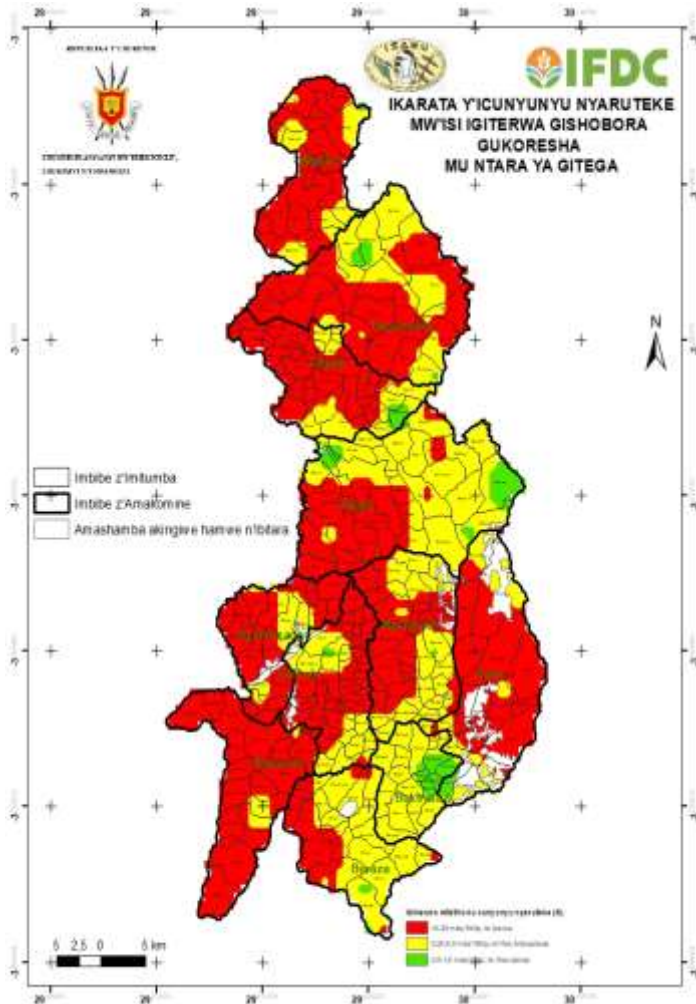
- Ibice 38 kw`ijana (38 %) vy`isi ndimwa vyo mu ntara ya Gitega zifise icunyunu nyaruteke kibayabaye ;
- Ibice 60 kw`ijana (60 %) vy`isi ndimwa vyo mu ntara ya Gitega zifise icunyunu nyaruteke gikeyi.
- Amakomine ya Bukirasazi, Buraza n`igice ca Gitega zifise icunyunu nyaruteke kiri hejuru ugereranije n`izindi.



Uburunganire bw`isi ndimwa dufatiye ku rugero rw`icunyunyu nyaruteke igiterwa gishobora gukoresha

Urugero	Uburunganire (ha)	Ibice kw`ijana (%)
Urugero ruri hasi	109477,8	59,7
Urugero rubayabaye	68959,6	37,6
Urugero rukwiye	5001,9	2,7
Vyose hamwe	183439,3	100,0

### 6.3. Ikarata y'icunyunyu nyaruteke (K) igiterwa gishobora gukoresha



## **7. INSIGURO**

Isi ndimwa y'intara ya Gitega ifise n'umururazi, icunyunyu ca nyaruteke (K) na nyarubabi (N) bikeyi. Icunyunyu ca rukomezangingo (P) ni gike gushika kubice vyababa ijana kw'ijana (100%).

## **8. GUSOZERA**

Ivyunyunyu vya rukomezangingo (P) na nyaruteke (K) bitegerezwa kwongerezwa mw'isi ndimwa y'intara yose ya Gitega. Gukoresha ishwagara mu kugabanura umururazi w'isi birafasha mu kubohora icunyunyu ca rukomezangingo kiba caboshwe n'ivyunyunyu vy'ubumara. Gukoresha ifumbure y'ikirundi birafasha mu gusahiriza ifumbire y'ikizungu yarisanzwe ikoreshwa.

**IVYONGEWEKO: Urugero rw’ishwagara ikoreshwa mu ndimo**

Ubwoko bw’isi	Ibipimo vy’umururazi w’isi	Urugero rwo kuvura isi	Urugero rwo kubungabunga isi
		Kg/are	Kg/are
Isi y’ibumba/inombe	< 4,7	17	6
	4,7-5,2	14	6
	5,2-5,7	7	5
	>5,7	0	0
Isi y’ikivuvu	< 4,7	14	5
	4,7-5,2	10	5
	5,2-5,7	7	4
	>5,7	0	0
Isi y’umusenyi	< 4,7	8	4
	4,7-5,2	5	4
	5,2-5,7	3	3
	>5,7	0	0
Ibi biharuro bifatiye kw’ishwagara ikorerwa mu burundi. Ibipimo vyayo ni: CaO:27% gushika kuri 30%; MgO:20% gushika kuri 21%			