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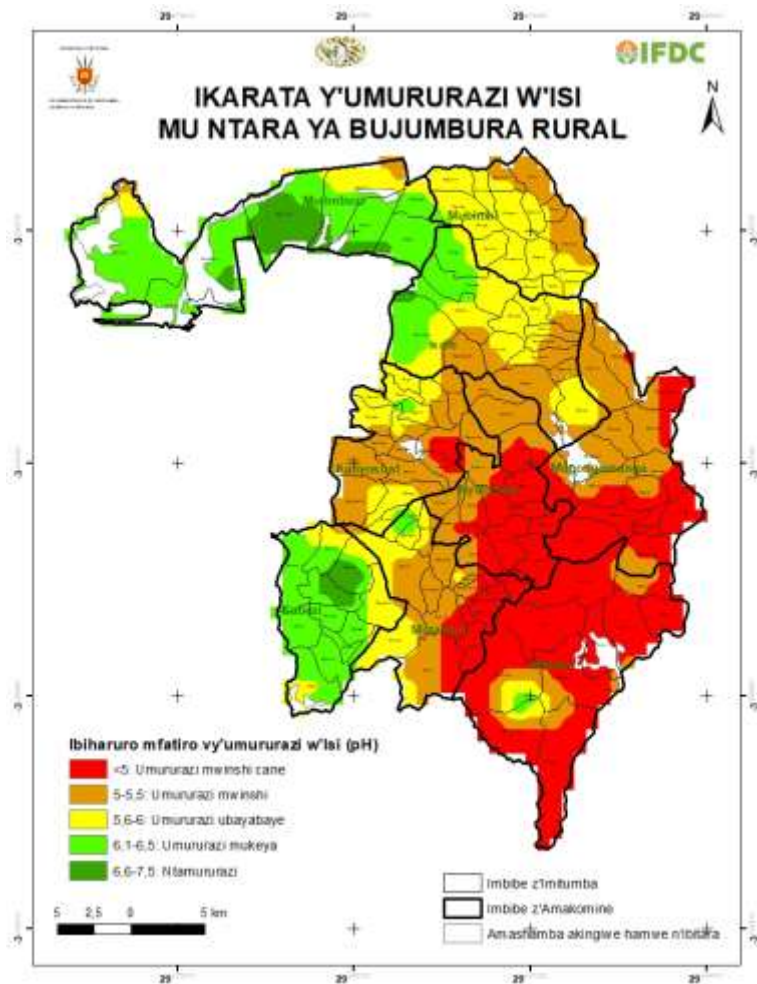


UBUSHIKIRANGANJI BW'IBIDUKIKIJE,  
UBURIMYI N'UBWOROZI



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

**Umwaka wa 2022**



*Bujumbura, Ruheshi 2022*

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## **1. 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 ahani 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 vyunyuyu: 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 (ibigigarira vy'imfungurwa, umwanda muto na mukuru,

ibisigarira vyo mu mahinguriro,...), 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'ivyunyunyuyu 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 (pH), y'ivyunyunyuyu 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 bafashanije n'abo mu gisata kijejwe gufumbira isi ndimwa mu bushikirangaji bw'ibidukikije, uburimyeye n'ubworozi bafashwe mu mugongo na IFDC, baragiye mu gihugu cose batora ivu 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 birenga gato 25 kw' ijana (25 %) y'isi ndimwa yo mu ntara ya Bujumbura bifise umururazi mwinshi gushika kuri mwishi cane;

- Ibice birenga gato 45 kw`ijana (45%) y`isi ndimwa nta mururazi bifise;
- Muri rusangi, amakomine yo mu kiyaya c`Imbo afise isi itagira umururazi ariko amakomine yo mu Mirwa afise umururazi mwinshi gushika kuri mwinshi cane, Amakomine yo mukarere ka Mugamba nayo afise umururazi mwinshi gusumba ayandi.

Uburunganire bw`isi ndimwa dufatiye ku rugero rw`umururazi (pH)

<b>Urugero rw`umururazi</b>	<b>Uburunganire (ha)</b>	<b>Ibice kw`ijana (%)</b>
Umururazi mwinshi cane	17754,8	21,3
Umururazi mwinshi	2775,3	3,3
Umururazi ubayabaye	17754,8	21,3
Umururazi mukeya	24536,5	29,5
Ata mururazi	23240,7	27,9
isi irimwo kariciyumu na manyesiyumu kurugero rwo hejuru.	14997,3	18,0
<b>Vyose hamwe</b>	<b>83304,6</b>	<b>100,0</b>





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

##### 4.1. Ibiharuro mfatiro ku cunyunyu nyarubabi (N)

Urugero	Urugero rwa 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 birenga gato 86 kw`ijana (86 %) vy'isi ndimwa bifise urugero rubayabaye ku cunyunyu nyarubabi ;
- Ibice 11 kw`ijana (11%) vy'isi ndimwa bifise urugero ruri hasi.

*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	2,6	0,0
Rukeyi	9236	11,1
Rubayabaye	71801,3	86,2
Rukeyi cane	2246,8	2,7
<b>Vyose hamwe</b>	<b>83286,6</b>	<b>100,0</b>



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

**5.1. Ibiharuro mfatiro ku cunyunyu rukomezangingo  
(P) (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 58 kw`ijana (58%) vy`isi ndimwa vy`intara ya Bujumbura bifise icunyunyu rukomezangingo (P) kiri ku rugero ruri hasi cane ;
- Ibice birenga 99 kw`ijana (+99 %) vy`isi ndimwa vy`intara ya Bujumbura bifise icunyunyu ca

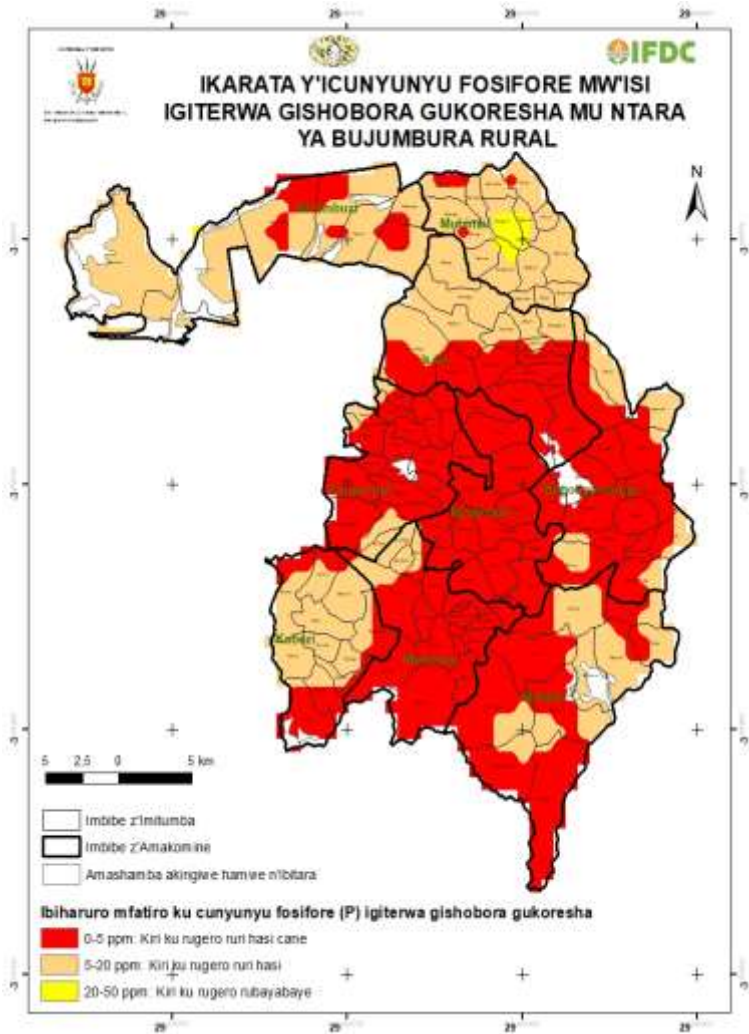
rukomezangingo kiri ku rugero ruri hasi canke hasi cane ;

- Amakomine ya Mubimbi, Mutimbuzi, Kabezi ifise icunyunyu rukomezangingo (P) biragendeka ugereraniye n`izindi komine.

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

<b>Urugero</b>	<b>Uburinganire (ha)</b>	<b>Ibice kw`ijana (%)</b>
Ruri hasi cane	47975,7	57,6
Ruri hasi	34731,1	41,7
Rubayabaye	631,8	0,8
<b>Vyose hamwe</b>	<b>83338,6</b>	<b>100,0</b>

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



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

### 6.1. Ibiharuro mfatiro ku cunyunyu 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 birenga gato 46 kw`ijana (46%) vy'isi ndimwa yo mu ntara ya Bujumbura bifise icunyunyu nyaruteke kibayabaye ;
- Ibice birenga gato 26 kw`ijana (26%) vy'isi ndimwa yo mu ntara ya Bujumbura bifise icunyunyu nyaruteke gikeyi ;

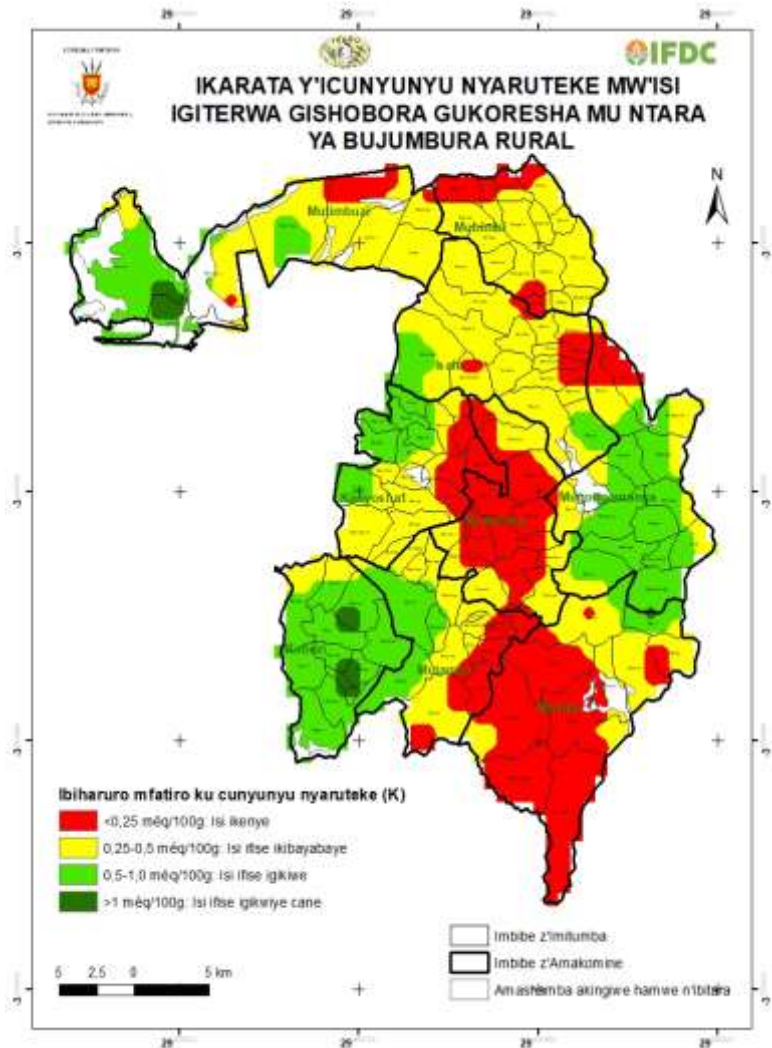


- Ibice vyababa 27 kw`ijana (27%) vy'isi ndimwa yo mu ntara ya Bujumbura bifise icunyunyu nyaruteke gikwiye.
- Amakomine ya Mugongo-Manga na Kabezi ifise isi ndimwa irimwo icunyunyu nyaruteke cinshi. Amakomine ya Mukike n'igice ca Nyabiraba afise icunyunyu nyaruteke kiri hasi cane.

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

<b>Urugero</b>	<b>Uburinganire (ha)</b>	<b>Ibice kw`ijana (%)</b>
Urugero ruri hasi	21302	25,6
Urugero rubayabaye	38691,9	46,4
Urugero rukwiye	22317,2	26,8
Urugero rukwiye cane	1003,7	1,2
<b>Vyose hamwe</b>	<b>83314,9</b>	<b>100,0</b>

### 6.3. Ikarata y'icunyunyu nyaruteke mw'isi igiterwa gishobora gukoresha



## **7. INSIGURO**

Isi ndimwa y'intara ya Bujumbura igizwe n'ibice mirongo ine nabitanyu kw'ijana (45%) bitagira umururazi (pH). Ahafise umururazi ubayabaye naho hangana n'ibice mirongo ibiri n'icenda kw'ijana (29%). Amakomine yo mu kiyaya c'Imbo nta mururazi afise. Icunyunyuru nyarubabi (N) kiri ku rugero rubayabaye kubice murongo umunani na bitandatu kw'ijana (86%) ariko icunyunyuru rukomezangingo (P) kiri ku rugero rudashemeye ku bice birenga mirongo icenda n'icenda kw'ijana (+99%).

## **8. GUSOZERA**

Icunyunyuru rukomezangingo (P) gitegerezwa kwongerezwa mw'isi ndimwa y'intara yose ya Bujumbura. Ivyunyunyuru nyarubabi (N) na nyaruteke (K) birakenewe kwongerezwa kugira ibiterwa bikure neza Gukoresha ishwaraga mu kugabanura umururazi w'isi birafasha mu kubohora icunyunyuru rukomezangingo (P) kiba caboshwe n'ivyunyunyuru vy'ubumara. Gukoresha ifumbure y'ikirundi birafasha mu gusahiriza ifumbire y'ikizungu yarisanzwe ikoreshe.

**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%			