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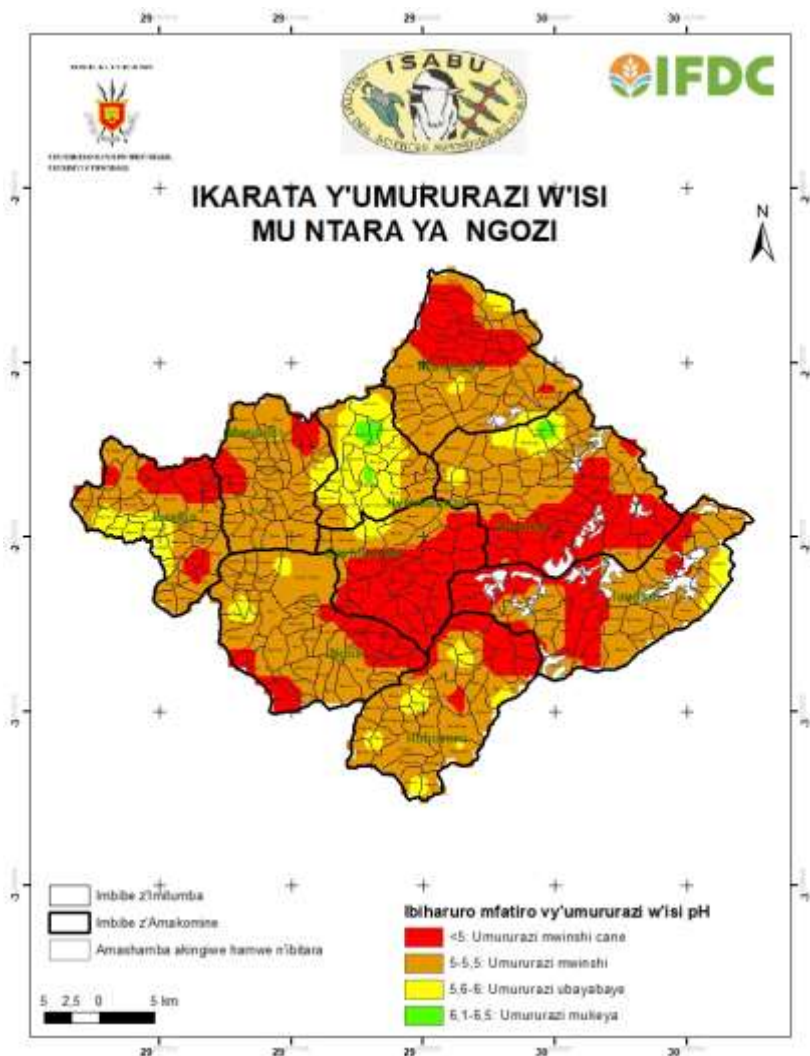


UBUSHIKIRANGANJI BW'IBIDUKIKIJE,
UBURIMYI N'UBWOROZI



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

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 ntrikiri agaseseshwa rumuri, bituma umwimbu ugabanuka kandi abantu nabo batera biyongera. Ibituma akanovera k'isi kagabanuka navyo ahanini n'ibi 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'uburimi bisunge ibiharuro vya none.

Amakarata 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 (ibisigarira 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 y'ayo 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 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 y’aho amakarata y’akanovera n’umururazi w’isi ndimwa yarakozwe hisunzwe ibiharuro vyavuye mu nzu nsuzumiro (Laboratoire). Mu nama yo kuyemeza, hasabwwe 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

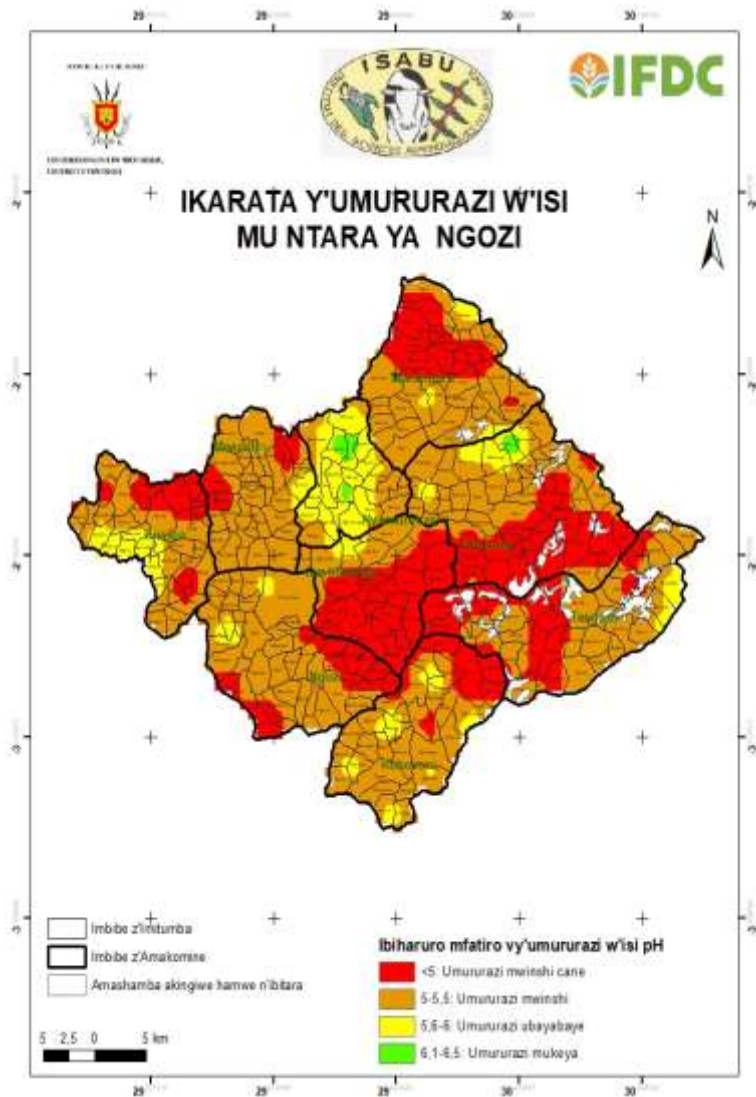
- Ibice 89 kw' ijana (89 %) vy'isi ndimwa vyo mu ntara ya Ngozi bifise umururazi mwinshi gushika kuri mwishi cane ;
- Ibice 10,5 kw' ijana (10,5 %) vy'isi ndimwa bifise umururazi ubayabaye ;
- Ahasigaye naho hafise umururazi mukeyi.

Komine Nyamurenza niyo ifise umururazi muke ugereranije n'izindi komine.

Uburyanire bw'isi ndimwa dufatiye ku rugero rw'umururazi

Urugero rw'umururazi	Uburyanire (ha)	Ibice kw'ijana (%)
Umururazi mwinshi cane	41747,2	30,4
Umururazi mwinshi	80325,9	58,6
Umururazi ubayabaye	14440,9	10,5
Umururazi mukeyi	660	0,5
Vyose hamwe	137173,9	100,0

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

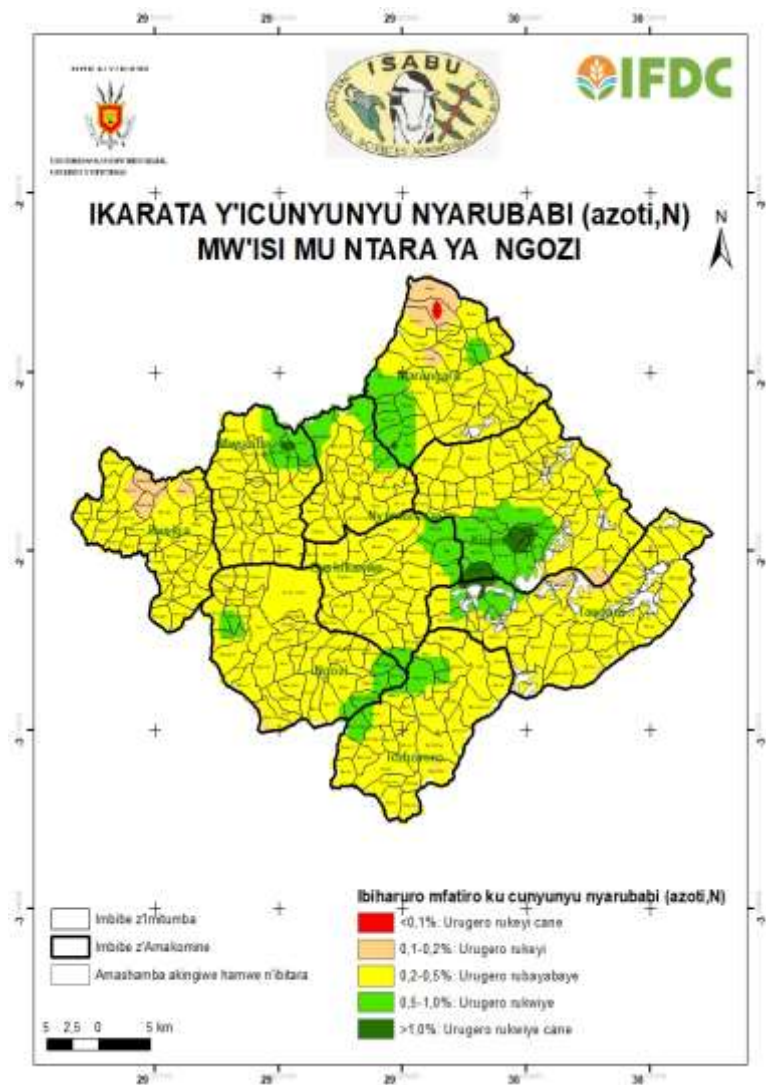
- Ibice 83 kw`ijana (83%) vy'isi ndimwa vy`intara ya Ngozi bifise icunyunyu nyarubabi kiri ku rugero rubayabaye ;
- Ibice 13 kw`ijana (13%) vy'isi ndimwa bifise icunyunyu nyarubabi ku rugero rukwiye.

Komine Kiremba, n`ibice vy`amakomine ya Marangara, Mwumba na Nyamurenza bifise icunyunyu nyarubabi ku rugero ruri hejuru ugereranije nahasigaye.

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

Urugero rw`icunyunyu nyarubabi	Uburinganire (ha)	Ibice kw`ijana (%)
Rukeyi cane	92,8	0,1
Rukeyi	4025	2,9
Rubayabaye	113467	82,8
Rukwiye	18027,3	13,2
Rukwiye cane	1442,7	1,1
Vyose hamwe	137054,8	100,0

4.3. Ikarata y'icunyunyu nyarubabi (N)



**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

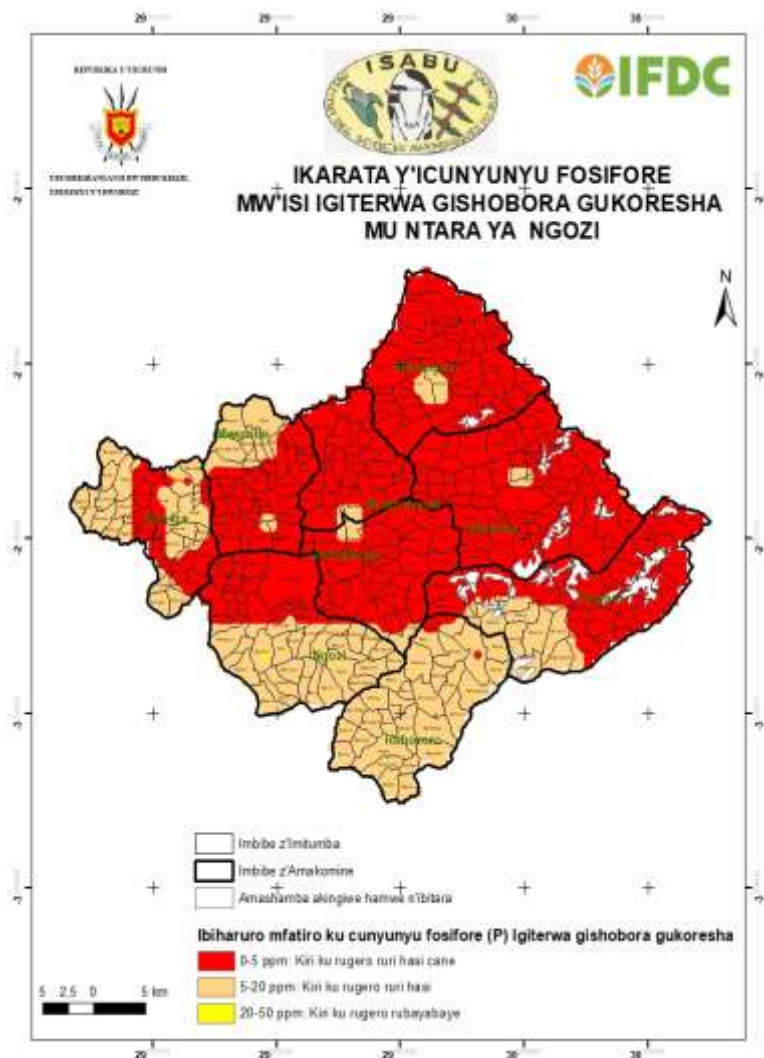
5.2. Ivyashitsweko

- Ibice 66,5 kw`ijana (66,5%) vy`isi ndimwa vy`intara ya Ngozi bifise icunyunyu ca rukomezangingo kiri ku rugero ruri hasi cane;
- Ibice 100 kw`ijana (100%) vy`isi ndimwa vy`intara ya Ngozi bifise icunyunyu ca rukomezangingo kiri ku rugero ruri hasi canke hasi cane.

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

Urugero	Uburinganire (ha)	Ibice kw'ijana (%)
ruri hasi cane	91203,6	66,5
ruri hasi	45930,8	33,5
rubayabaye	46,5	0,0
Vyose hamwe	137180,8	100,0

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

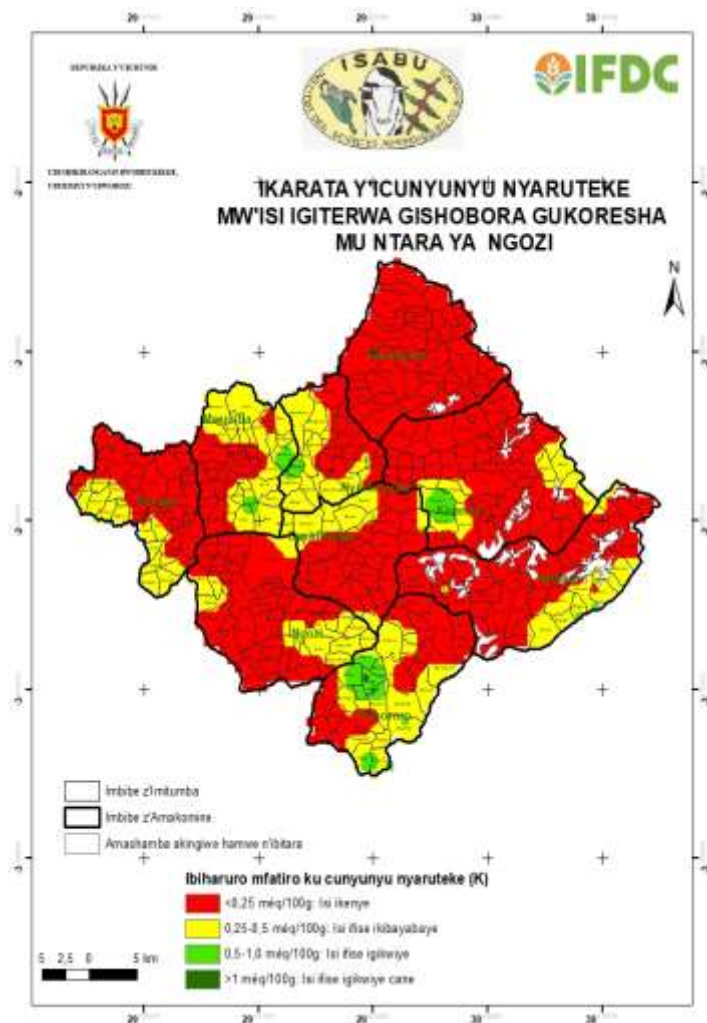
6.2. Ivyashitsweko

- Ibice 27 kw`ijana (27 %) vy'isi ndimwa vy`intara ya Ngozi bifise icunyunyu nyaruteke kiri ku rugero rubayabaye ;
- Ibice 70 kw`ijana (70 %) vy'isi ndimwa vy`intara ya Ngozi bifise icunyunyu nyaruteke kiri ku rugero ruri hasi.

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

Urugero	Uburinganire (ha)	Ibice kw'ijana (%)
ruri hasi	96095,9	70,1
rubayabaye	37505,6	27,4
rukwiye	3478,6	2,5
rukwiye cane	46,5	0,0
Vyose hamwe	137126,6	100,0

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



7. INSIGURO

Isi ndimwa y'intara ya Ngozi ifise ingorane y'umururazi (pH), urugero ruto rw'icunyunyu rukomezangingo (P) na nyaruteke (K), icunyunyu nyarubabi (N) kiri ku rugero rubayabaye. Icunyunyu rukomezangingo kiri ku rugero ruto mw'isi ndimwa nka zose (100%).

8. GUSOZERA

Ivyunyunyu nyarubabi, rukomezangingo na nyaruteke bitegerezwa kwongerezwa mw'isi ndimwa y'intara yose ya Ngozi. Gukoresha ishwaraga 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 ikoresha.

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%			