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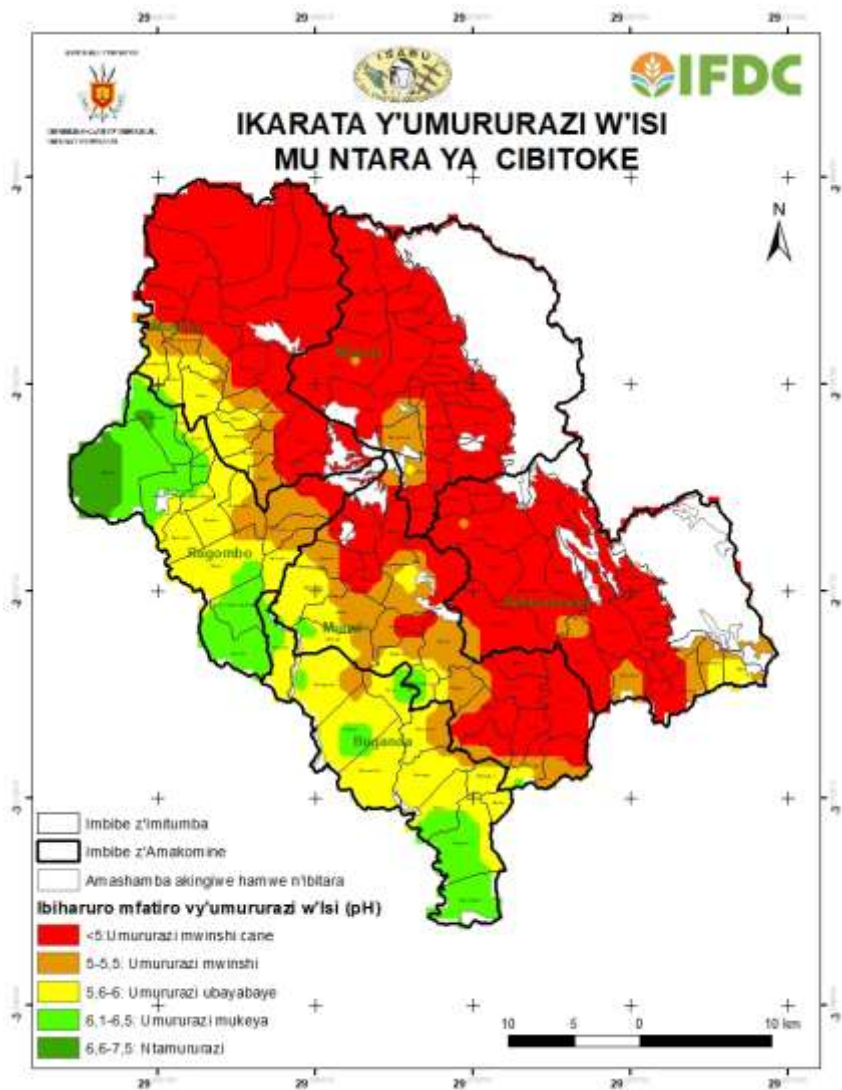


UBUSHIKIRANGANJI BW'IBIDUKIKIJE,
UBURIMYI N'UBWOROZI



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

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 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'uburimiye bisunge ibiharuro vya none.

Amakarata 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 (ibigigarira 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'ivyunyuny 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'ivyunyuny 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 nabo mu gisata kijejwe gufumbira isi ndimwa mu bushikirangaji bw'ibidukikije, uburimiye n'ubworozi 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 munzu nsuzumiro (Laboratoire). Mu nama yo kuyemezwa, 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

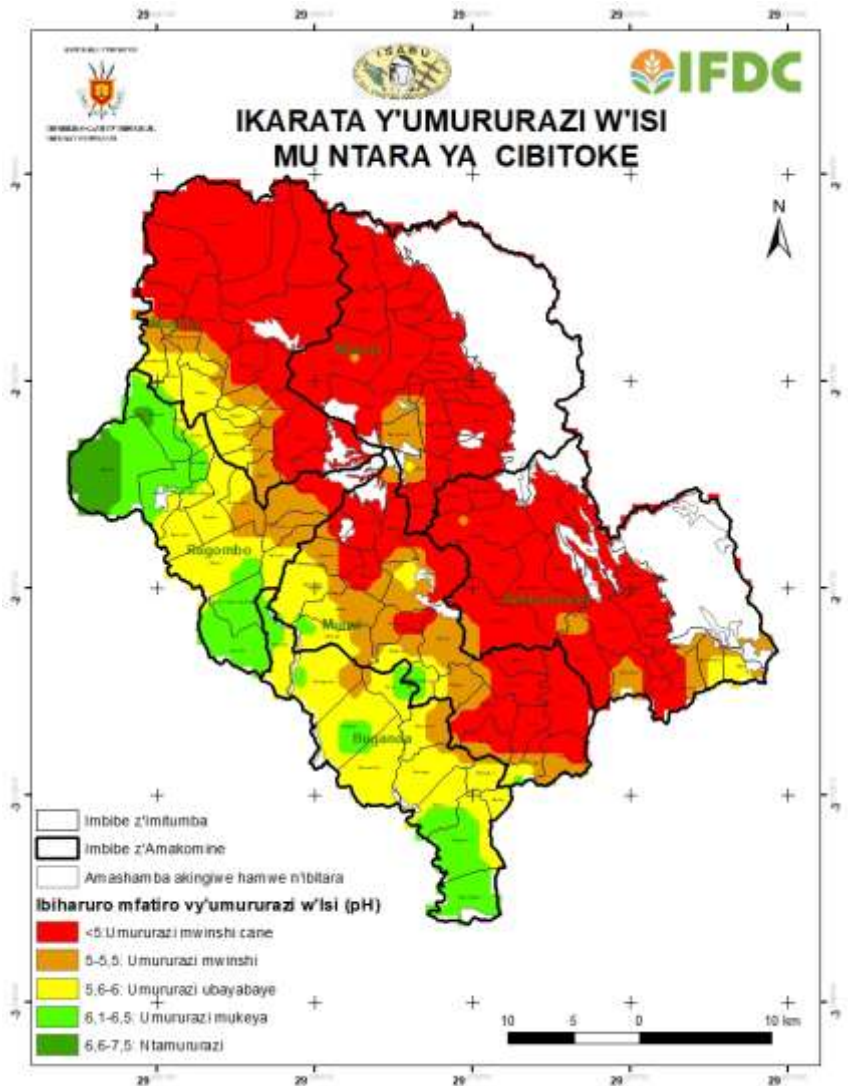
3.2. Ivyashitsweko

- Ibice birenga gato 68 kw' ijana (68 %) yy`isi ndimwa vyo mu ntara ya Cibitoke bifise umururazi mwinshi gushika kuri mwishi cane;
- Ni nkuko twovuga ko mu ntara ya Cibitoke ata si ndimwa ifise karisiyumu na manyesiyumu kurugero rwo hejuru (1, 7%);
- Amakomine ya Rugombo, agace ka Murwi hamwe na Buganda afise umururazi mikeyi ugereeranije n'ayandi makomine y'intara ya Cibitoke.

Uburunganire bw`isi ndimwa dufatiye ku rugero
rw`umururazi

Urugero rw`umururazi	Uburunganire (ha)	Ibice kw`ijana (%)
Umururazi mwinshi cane	68624	53,7
Umururazi mwinshi	18656,6	14,6
Umururazi ubayabaye	25554	20,0
Umururazi mukeya	12790,4	10,0
Ata mururazi	2216,2	1,7
Vyose hamwe	127841,3	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

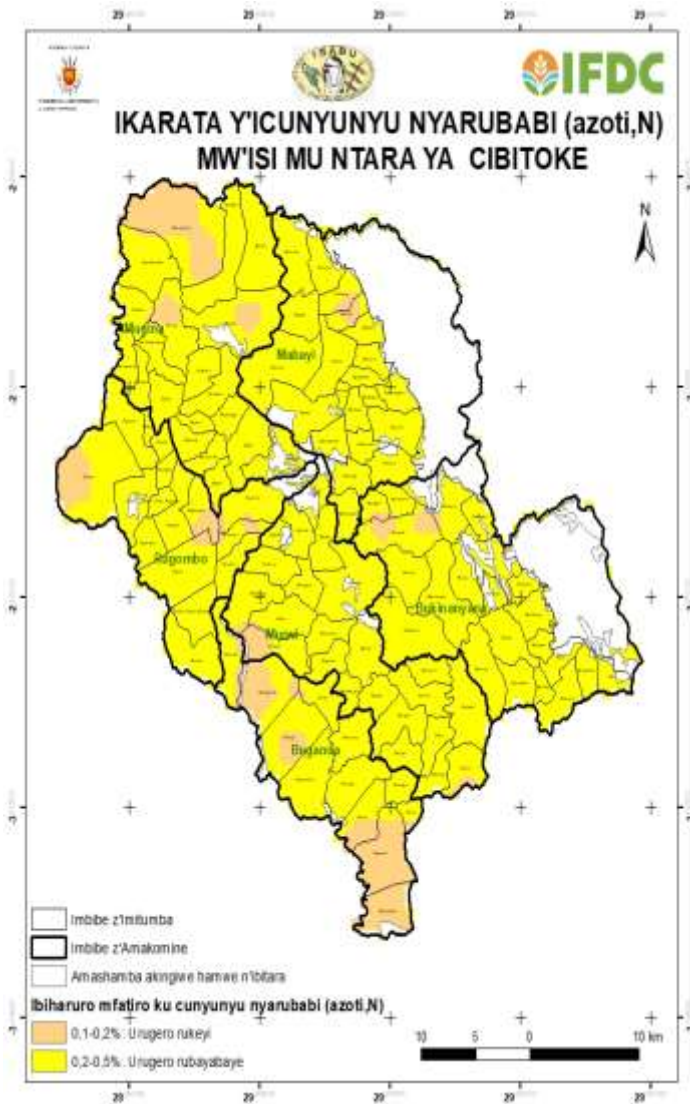
4.2. Ivyashitsweko

- Ibice birenga gato 89 kw`ijana (89,4%) vy'isi ndimwa bifise urugero rubayabaye ku cunyunyu nyarubabi;
- Ibice 10,6 kw`ijana (10,6%) vy'isi ndimwa bifise urugero rukeyi ku cunyunyu nyarubabi.

Uburunganire bw'isi ndimwa dufatiye ku rugero rw'icunyunyu nyarubabi

Urugero rw'icunyunyu nyarubabi	Uburunganire (ha)	Ibice kw'ijana (%)
Rukeyi	13525,3	10,6
Rubayabaye	114255,5	89,4
Vyose hamwe	127780,8	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(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

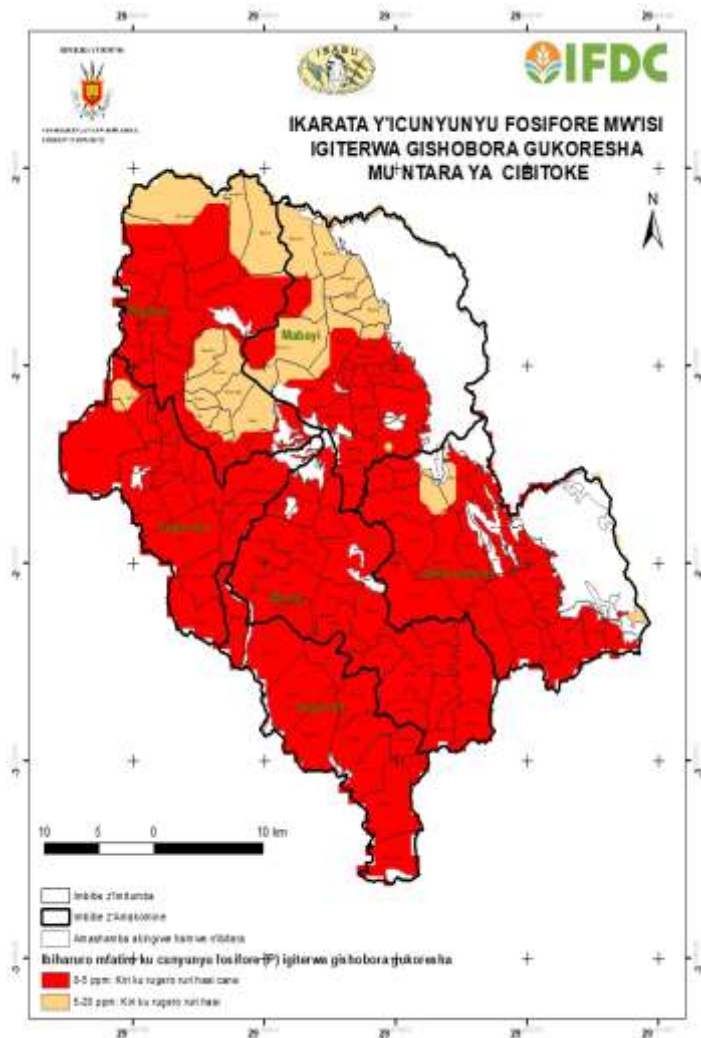
5.2. Ivyashitsweko

- Ibice birenga gato 84 kw`ijana (84%) vy`isi ndimwa vy`intara ya Cibitoke bifise icunyunyu rukomezangingo (P) kiri ku rugero ruri hasi cane ;
- Ibice birenga gato 15 kw`ijana (15 %) vy`isi ndimwa vy`intara ya Cibitoke bifise icunyunyu rukomezangingo (P) kiri ku rugero ruri hasi.

**Uburunganire bw'isi ndimwa dufatiye ku rugero
rw'icunyunyu rukomezangingo(P) igiterwa
gishobora gukoresha**

Urugero	Uburunganire (ha)	Ibice kw'ijana (%)
Ruri hasi cane	107624,6	84,2
Ruri hasi	20185	15,8
Vyose hamwe	127809,7	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

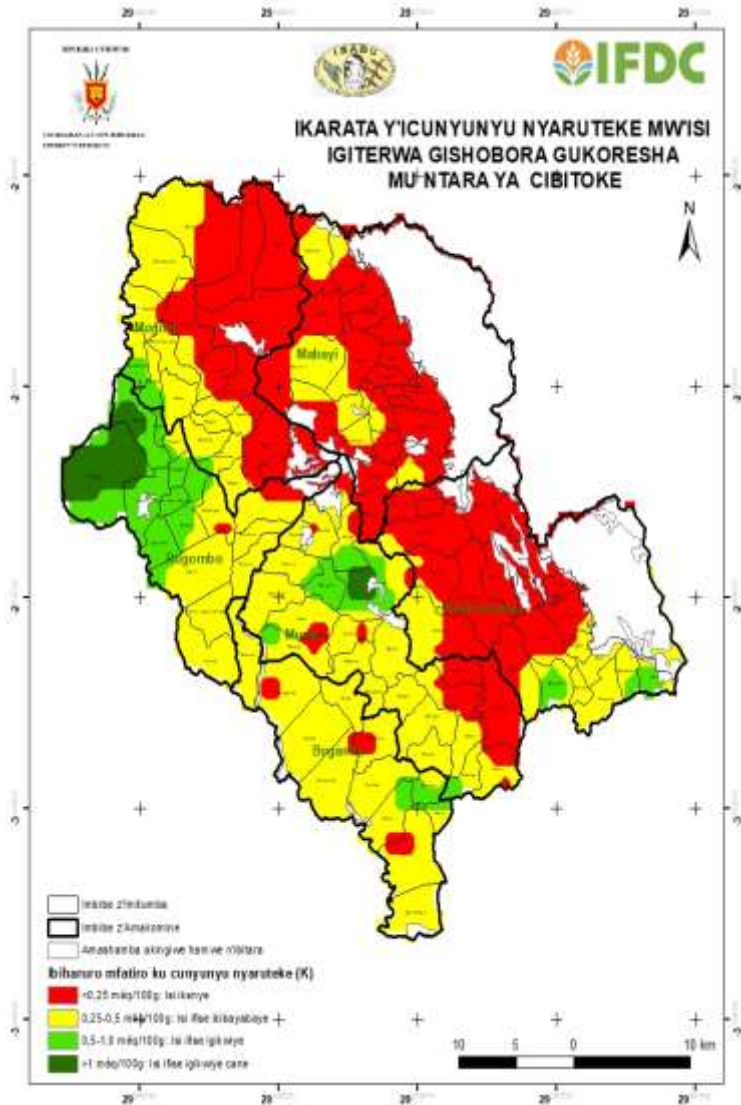
- Ibice vyababa 49 kw`ijana (49 %) vy'isi ndimwa vyo mu ntara ya Cibitoke bifise icunyunyu nyaruteke kibayabaye;
- Ibice birenga gato 39 kw`ijana (39 %) vy'isi ndimwa vyo mu ntara ya Cibitoke bifise icunyunyu nyaruteke gikeyi.

Amakomine ya Buganda, Rugombo na Mirwi zifise isi ndimwa irimwo icunyunyu nyaruteke kiri hejuru ugereranije n`ayandi makomine.

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

Urugero	Uburinganire (ha)	Ibice kw`ijana (%)
Urugero ruri hasi	49938,6	39,1
Urugero rubayabaye	62257,7	48,7
Urugero rukwiye	11741,2	9,2
Urugero rukwiye cane	3798,4	3,0
Vyose hamwe	127735,9	100,0

6.3. Ikarata y'icunyunyu nyaruteke igiterwa gishobora gukoresha



7. INSIGURO

Isi ndimwa y'intara ya Cibitoke igizwe n'ibice vyababa mironko indwi kw'ijana (70 %) bifise ingorane y'umururazi (pH).

Igice co mu kiyaya c'Imbo nta mururazi afise ugedreraniye n'ayandi makomine. Icunyunyu nyarubabi (N) kiri ku rugero rubayabaye ariko icunyunyu rukomezangingo (P) kiri ku rugero rudashemeye ku bice vyababa ijana kw'ijana (100 %).

8. GUSOZERA

Icunyunyu rukomezangingo (P) gitegerezwa kwongerezwa mw'isi ndimwa y'intara yose ya Bubanza. Ivyunyunyu nyarubabi na nyaruteke birakenewe kwongerezwa kugira ibiterwa bikure neza. 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 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
<p>Ibi biharuro bifatiye kw'ishwagara ikorerwa mu burundi. Ibipimo vyayo ni: CaO:27% gushika kuri 30%; MgO:20% gushika kuri 21%</p>			