



## Project 2

# UMUSHINGA WO GUKWIRAKWIZA AMAZI MEZA MU MIRENGE YA CYANIKA NA RUGARAMA

### Tel de contact

03650236

08522116

08540315

03194133

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**Izina ry'umushinga:** Umushinga wo gukwirakwiza amazi meza mu mirenge ya Cyanika na Rugarama

### **Umwirondoro wa nyir'umushinga**

Ubudehe bw'umurenge wa Cyanika na Rugarama

### **Akarere umushinga uzakoreramo**

Imirenge ya Cyanika na Rugarama ibarizwa mu Karere ka Burera, Intara y'Amajyaruguru, ikaba inatariye pariki y'ibirunga.

Cyanika : utugari 6, imidugudu 52, abaturage 34 387

Rugarama : utugari 4, imidigudu 34, abaturage 21 395

Indi mishinga uhari : UNICEF, MOUCECORE, MUTOBO BASSE

### Amateka y'Akarere

Kuva kera imirenge ya Cyanika na Rugarama yanzwe no kutagira amazi meza. Abaturage bakora urugendo rw'ibirometero bigera kuri 18 bavoma amazi y'ibirohwa mu biyaga bya Burera na Ruhondo.

### Ibikorwa remezo bihaboneka

Umuhanda wa kaburimbo

Amasoko ya Rugarama na Nyagahinga

Centre 6 z'ubucuruzi zikomeye

Amavuriro 2

### **Isobanurampamvu y'umushinga**

Uyu mushinga wahiswemo kubera ibibazo byagaragaye mu karere :

- Kwangiza pariki y'ibirunga bwitwaje gushaka amazi
- Indwara ziterwa n'ibura ry'amazi : inzoka zo mu nda, amibe, amacinya, kolera, n'izindi ziterwa n'umwanda.
- Gukora urugendo rurerure bajya gushaka amazi: ibirometero 18 kugenda no kugaruka.

### Ingaruka ziterwa n'ibibazo

- Impfu z'abana ziterwa n'impiswi
- Ababyeyi bahora kwa muganga bajya kuvuza bigatuma badakora imirimo yo kwiteza imbere
- Umubare w'abaturage barwaye amibe ugenda urushaho kwiyongera, bikadindiza iterambere rusange ry'akarere
- Abana batiga neza kubera gukora urugendo rurerure bajya kuvoma
- Abaturage bata imirimo ibateza imbere bakirirwa bagiye gushaka amazi

- Impanuka mu mihanda no mu mazi (ibiyaga) z'abajya kuvoma mu biyaga bya Burera na Ruhondo.

### Impamvu umushinga wahiswemo

Tumaze kubona ibibazo by'indwara ziterwa n'amazi mabi n'urugendo rurerure byakuruye ubukene mu baturage, kwangiza pariki bitwaje gushaka amazi, dusuzumye uburyo imishinga ya Mutobo basse n'iya ruguru, MOUCECORE yubatse ibigega bifata amazi y'imvura ariko ikibazo cy'amazi meza ntigikemurwe kubera umubare w'abaturage batuye akarere ari benshi.

Twasanze uyu mushinga ari ngombwa kubera ko uzageza ku baturage 15% badafite amazi meza batuye mu tugari dukoze kuri pariki y'ibirunga hifashishijwe umuyoboro w'amazi mushya washamikira kuri Mutobo ya ruguru no kubaka ibigega bifata amazi y'imvura mu midugudu itazashobora kugerwaho n'uriya muyoboro mu baturage bagera kuri 5%.

Mu mishinga yari isanzwe nka UNICEF , MOUCECORE, MUTOBO BASSE yagize icyo ikora, ariko kubera ubwinshi bw'abaturage batuye iyo mirenge ya Cyanika na Rugarama amazi yabaye make:

- Abaturage babonye amazi ya UNICEF bangana na 20% by'abaturage batuye iyo mirenge  $\frac{(34\ 387 + 21\ 395) \times 20}{100} = 11\ 156$
- Abaturage babonye amazi ya MOUCECORE bangana na 1% by'abaturage batuye iyo mirenge  $\frac{(34\ 387 + 21\ 395) \times 1}{100} = 558$
- Abaturage babonye amazi ya Mutobo basse bangana na 4% by'abaturage batuye iyo mirenge  $\frac{(34\ 387 + 21\ 395) \times 4}{100} = 2\ 231$

### **Intego z'umushinga**

Intego rusange: Kuzamura imibereho myiza y'abaturage ba Cyanika na Rugarama babona amazi meza.

### Intego zihariye

- Kugeza amazi meza akomoka kuri Mutobo ya ruguru ku baturage 15% batuye mu midugudu ya Nyagisenyi, Bisura, Gakore, Karisimbi, Bahimba, Kaziguro, Gashunguro, Mbonabose, Kanyabaranzi, Musave, Kabira, Gasiza na Ryabiteyi.
- Kubaka ibigega bifata amazi y'imvura bigafasha abaturage 5% batuye mu midugudu ya Karisimbi, Bahimba, Gashunguro (igice cya ruguru), Kaziguro (igice cya ruguru), Mugarama, Mugeshi, Kabero, Bisura na Gakenke.
- Gufata neza amavomo n'isuku yayo

## **Abagenerwabikorwa**

Abagenerwabikorwa b'ako kanya ni abaturage batuye imirenge ya cyanika na Rugarama bangana n'ibihumbi cumi na kimwe n'ijana na mironko itanu na batandatu (11 156): abagabo 5 128, abagore 6 028

- Abahinzi bakenera amazi yo guteresha umuti w'ibirayi
- Abenzi b'ibigage
- Aborozi b'inka n'amatungo magufi
- Ibigo by'amashuri abanza
- Inzu z'ubuyobozi (utugari n'imidugudu)
- Insengero na Kiliziya
- Abacuruza amazi kuri kiosque z'amazi

Abagenerwabikorwa ba nyuma ni:

- Abaturage bose muri rusange
- Abaturanyi b'igihugu cya Uganda

## **Ingamba/Ikoranabuhanga**

Gukwirakwiza amazi ya Mutobo ya ruguru

### ***Uko bizakorwa***

Hazakorwa umuyoboro wa 2 ushamikiye ku wa mbere uturutse kuri centre ya Kanyirarebe.

Kuri iyo centre ya Kanyirarebe hazubakwa ikigega kinini kizajya kibika amazi azagaburira umuyoboro kugeza kuri centre ya Rohero ahazubakwa ikindi kigega kizajya kigaburira igice cy'umuyoboro gisigaye (Rohero –Ryabiteye).

Nyuma yo kubaka ibigega bibika amazi, hazacukurwa umuyoboro hifashishijwe abatekinisiye n'abaturage mu gikorwa cy'ubudehe. Uwo muyoboro uzakurikira umuhanda waharuwe n'abaturage uva Kanyirarebe-Ryabiteyi.

Kubaka ibigega bifata amazi y'imvura

### ***Uko bizakorwa***

Abaturage bazakoresha amazi y'imvura bangana na 5% :  $\frac{34\,387 \times 5}{100} = 1\,719$

Abaturage 1719 bagizwe n'imiryango 286. Ikigega 1 kizajya kivomwaho n'imiryango 5 (buri muryango ugizwe n'abantu 6).

Hazubakwa ibigega byose hamwe 55.

Imicungire y'amazi

- Gushyiraho komite z'amavomo n'isuku. Ku mavomo mirongo itatu azubakwa, buri kagari kazanyurwamo n'umuyoboro, kazagira komite
- Hazatorwa komite 5, buri komite irimo abantu 5.
- Ku bigega 55 bizubakwa, buri kagari karimo ibyo bigega kazagira komite icunga ibigega by'amazi y'imvura.
- Izo komite zose zizaba zishinzwe kandi n'ibijyanye n'isuku y'amavomo n'ibigega. Raporo zigatangwa ku kagari.
- Abagize izo komite bagomba guhugurirwa ibyo bazakora.
- Mu rwego rwo kwinjiza umutungo ukomoka ku mavomo, hazashyirwaho amapiganwa ya ba rwiyemezamirimo.

## IMBONERAHAMWE Y'IBIKORWA

### INTEGO YIHARIYE 1: GUKWIRAKWIZA AMAZI MEZA YA MUTOBO YA RUGURU

<b>Ibikorwa</b>	<b>Ibipimo</b>	<b>Igenura</b>	<b>Inzitizi</b>
Gucukura umuyoboro	Umuyoboro 1 = Km 15 Amezi 6	Raporo z'abakuru b'imidugudu	Kumena amakoro
Kubaka ibigega	Ibigega 2 bibika amezi 2	Raporo z'ubuyobozi bw'akagari	Imihanda mibi
Gutaba amatiyo	Amatiyo 2500 Amezi 3	Raporo z'abakuru b'imidugudu	-
Kubaka amavomo	Amavomo 30 ukwezi 1	Raporo z'abakuru b'imidugudu	-

### INTEGO YIHARIYE 2 : KUBAKA IBIGEGA BIFATA AMAZI Y'IMVURA

<b>Ibikorwa</b>	<b>Ibipimo</b>	<b>Igenura</b>	<b>Inzitizi</b>
Gutunda amabuye n'umucanga	Amasiteri 1650 y'amabuye Amakamy 275 y'umucanga Ukwezi 1	Raporo y'ubuyobozi bw'Akagari	Imihanda mibi
Kuzamura ibigega	55 (1 = m3 25) amezi 3	Raporo y'ubuyobozi bw'Akagari	-
Gusakara	Ibigega 55 amabati 1100 Ukwezi 1	Raporo y'ubuyobozi bw'Akagari	-

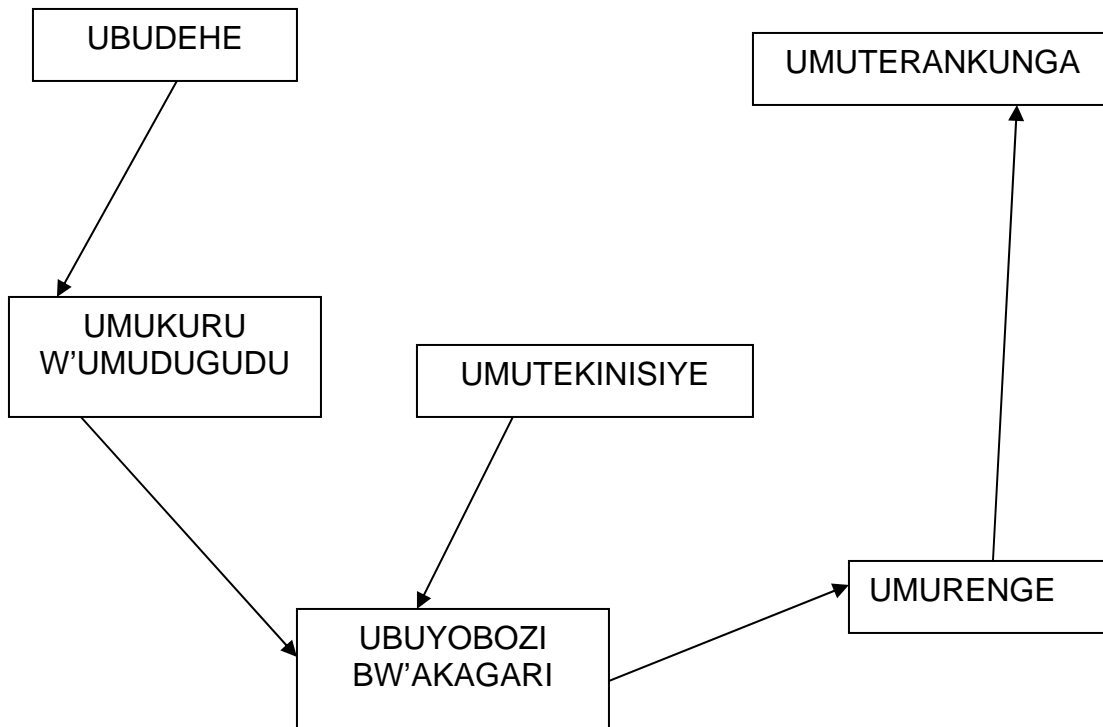
### INTEGO YIHARIYE 3 : GUFATA NEZA AMAVOMO –IBIGEGA

<b>Ibikorwa</b>	<b>Ibipimo</b>	<b>Igenura</b>	<b>Inzitizi</b>
Gutora komite z'amavomo, n'ibigega	Komite 5 z'amavomo Komite 3 z'ibigega (ukwezi 1)	Raporo z'ubuyobozi bw'utugari	-
Gushyiraho komite ncungamatungo	Komite 5 z'amavomo Komite 3 z'ibigega Buri myaka 2	Raporo z'ubuyobozi bw'utugari	-
Gushyira gahunda y'isuku n'isukura (ipiganwa na ba rwiyemezamirimo)	Ba rwiyemezamirimo 2, mu mwaka 1	Raporo ya komite zicunga amazi	Kwica amasezerano
Gukusanya umusanzu	Ijerikani 1 = 10F kureba m3 zagurishijwe	Raporo ya komite y'amavomo	Kunyonga compteur y'amazi Kurigisa umutungo (Frw)
Gusukura ibigega	1 mu kwezi	Raporo ya komite y'ibigega bifata amazi y'imvura	Ibura ry'imiti ishyirwa mu mazi

## GAHUNDA Y'IKURIKIRANWA N'ISUZUMA RY'UMUSHINGA

Igikorwa	Amakuru akenewe	Igihe	Ubishinzwe		
			Gukusanya	Gusesengura	Guhuza
<b>Intego 1</b> 1. Gucukura umuyoboro 2. kubaka ibigega bibika amazi 3. Gutaba amatiyo 4. kubaka amavomo	<ul style="list-style-type: none"> <li>• Kumenya imiterere y'aho umuyoboro uzanyura</li> <li>• Kumenya umubare w'ibikenewe (ibikoresho)</li> <li>• Umubare w'amatiyo yatabwe</li> <li>• Kumenya ibikoresho byakoreshejwe</li> </ul>	Iyumweru 2  Buri muni  Buri muni  Buri muni	Umutekinisiye  Abakuru b'imidugudu + komite z'ubudehe Abakuru b'imidugudu + komite z'ubudehe Abakuru b'imidugudu + komite z'ubudehe	Akagari  Akagari  Akagari  Akagari	Imirenge Cyanika na Rugarama Imirenge Cyanika na Rugarama Imirenge Cyanika na Rugarama Imirenge Cyanika na Rugarama
<b>Intego 2</b> 1. Gutunda amabuye n'umucanga 2. Kuzamura ibigega 3. Gusakara	<ul style="list-style-type: none"> <li>• kumenya ahari amabuye n'umucanga</li> <li>• kumenya ibiciro by'ibikoresho bikenewe (isima, fer à béton)</li> <li>• kumenya ubwoko bw'amabati azaramba</li> <li>• kumenya ahazava ibiti byo guhanika</li> </ul>	Iyumweru 1  Buri muni  Ukwezi 1 (mbere)	Umutekinisiye w'ubwubatsi Umutekinisiye  Umutekinisiye + komite y'ubudehe	Akagari  Akagari  Akagari	Imirenge ya Cyanika na Rugarama Imirenge  Imirenge
<b>Intego 3</b> 1. Gutora komite z'amavomo 2. Gushyiraho komite zicunga amazi 3. Gushyiraho gahunda y'isuku n'isukura, ipiganwa na ba rwiyemezamirimo 4. Gusuzuma ikusanwya ry'umusanzu 5. Gusyira umuti mu bigega by'amazi y'imvura	<ul style="list-style-type: none"> <li>• Ubunyangamugayo bw'abazatorwa</li> <li>• Kumenya inzobere mu micungire y'amazi</li> <li>• Kumenya ba rwiyemezamirimo bafite uburambe</li> <li>• Kumenya ibiciro by'amazi bidahinduka</li> <li>• Kumenya ahazagurirwa imiti, ibiciro n'ubuziranenge bwayo</li> </ul>	Buri muni  Ukwezi 1 (mbere) Ukwezi 1 (mbere)  Buri muni  Buri muni	Komite y'ubudehe  Komite y'mavomo  Komite y'amavomo n'isuku  Komite zicunga amazi Komite y'ibigega by'amazi y'imvura	Akagari  Akagari  Akagari  Akagari  Akagari	Imirenge  Imirenge  Imirenge  Umurenge umurenge

## URUHEREREKANE RWA RAPORO



## AKAMARO K'UMUSHINGA

### 1. Ku bukungu

- Kwiyongera k'umutungo mu miryango : abaturage bataga igihe bashaka amazi, icyo gihe bazagikoresha mu bikorwa byo kwiteza imbere
- Amafaranga abaturage batangaga bagura amazi ku giciro gihenze (ijerikani = 100 Frw) bazayakoresha mu bindi bikorwa by'iterambere
- Umusaruro ukomoka ku buhinzi n'ubworozi uziyongera : imyaka izavomerwa, amatungo yuhirwe kenshi mu muni
- Abaturage bazabona amafaranga akomoka ku bwubatsi n'imicungire y'umuyoboro n'ibigeza

### 2. Ku mibereho myiza y'abaturage

- Indwara ziterwa n'ibura ry'amazi zizagabanuka
- Isuku iziyongera
- Abana bataga igihe bajya kuvoma baziga neza kandi bigire ahasukuye

### 3. Ku bidukikije

Ubusugire bw'inyamaswa n'ibimera byo muri pariki y'ibirunga  
Amazi y'ibiyaga aziyongera n'umutungo kamere wabyo (amafi) utekane



#### **4. Ku bwuzuzanye n'uburinganire bw'abagabo n'abagore**

Umutekano mu ngo cyane umugore  
Umugore aziteza imbere mu yindi mirimo  
Abagore bazitabwaho mu micungire y'amavomo

#### **UBURAMBE BW'UMUSHINGA**

##### **1. Tekiniki : ibikorwa n'ikoranabuhanga**

Nyuma y'umushinga hazashyirwaho umukozi uhoraho (umutekinisiye) ukurikirana gusana ibyangiritse mu muyoboro n'ibigega.

##### **2. Imari n'umutungo**

- Nyuma y'umushinga umuyoboro uzahabwa ba rwiyemezamirimo : abavomyi bazatanga amafaranga, 30% by'amafaranga azaba ay'ubudehe; 20% muri ELECTROGAZ, 50% azaba aya rwiyemezamirimo.
- Kuzigama kuri konti z'ubudehe

##### **3. Imiyoborere n'uruhare rw'inzego n'abaturage**

- Nyuma y'umushinga hazanzwa imikorere ya za komite z'amavomo n'ibigega.
- Nyuma y'umushinga komite z'ubudehe zizakontorora ko komite z'amavomo zikora neza.
- Nyuma y'umushinga abanyamabanga nshigwabikorwa b'utugari mu nshingano zabo haziyongeraho gukurikirana ibikorwa by'ayo mazi.

## INGENGO Y'IMARI Y'UMUSHINGA

### INGENGO Y'IMARI Y'IBIKORWA

#### Intego ya 1 : Gukwirakwiza amazi meza ya Mutobo

Igikorwa	Ibikenewe	Ingano	Ikiguzi cya 1	Ikiguzi cya byose
1. Gucukura umuyoboro	• Amasuka	50	1500	75 000
	• Ibitiyo	20	1500	30 000
	• Amapiki	10	4000	40 000
	• Imitarimba	10	5000	50 000
	• Ingorofani	10	15000	150 000
	• Inyundo	10	5000	50 000
	• Komporoseri+ mazutu	1	20 000 000	20 000 000
	• Dekametero	1	4000	4 000
2. Kubaka ibigega	• Ibibanza	2	300 000	600 000
	• Amabuye (camion)	10	35 000	350 000
	• Ciment (sac)	120	13 000	1 560 000
	• Fer à béton	16.5	12 000	200 000
	• Gravier + déplacement (camion)	2	50 000	100 000
	• Umucanga +déplacement (camion)	10	25 000	250 000
	• Amatiyo	6	2 000	12 000
3. Gutaba amatiyo	• Amatiyo + déplacement (camion)	2 500	12 000	30 000 000
			4 000	1 000 000
4. kubaka amavomo	• Amatafari (camion)	2	105 000	210 000
	• Robinet	60	5 000	300 000
	• Ciment (sac)	60	13 000	780 000
	<b>IGITERANYO</b>			<b>55 761 000</b>

#### Intego ya 2 : Kubaka ibigega bifata amazi y'imvura

Igikorwa	Ibikenewe	Ingano	Ikiguzi cya 1	Ikiguzi cya byose
1. gutunda amabuye n'umucanga	• Imodoka (camion)	30	20 000	600 000
	• Imodoka (camion)	275	30 000	82 500
2. kuzamura ibigega	• Ciment (sac)	1650	13 000	21 145 000
	• Fer à béton	16.5	12 000	1 980 000
	• Robinet	55	5 000	27 500
3. gusakara	• Amabati	1100	7 500	8 250 000
	• Ibiti	1100	1 200	1 320 000
	• Imisumari (kg)	220	1 500	330 000
	<b>IGITERANYO</b>			<b>121 921 000</b>

### Intego ya 3: Gufata neza amavomo

Igikorwa	Ibikenewe	Ingano	Ikiguzi cya 1	Ikiguzi cya byose
1. Gutora komite z'amavomo n'ibigega	• Amahugurwa	20/6j	3 000/j	360000
	• Ku mavomo			
	• Abahugurwa	12/6j	3 000/j	216000
	• Ku bigega			
	• Abahugurwa	1/12j	10 000/j	120000
	• uhugura			
2. Gushyiraho komite ncungamutungo	• Amahugurwa	20/6j	3 000/j	360000
3. Gushyiraho gahunda n'isuku n'isukura	• Igitabo cy'ipiganwa	4	40 000	160000
4. Gusukura ibigega by'amazi y'imvura	• Imiti ishyirwa mu mazi	20 silo	250	5000
	<b>IGITERANYO</b>			<b>1 221 000</b>

### IMISHAHARA, INGENDO N'IBIKORESHO

N°	Icyo ari cyo	Ingano	Ikiguzi cya 1	Ikiguzi cya byose
1.	Uzakora inyigo	1	1 000 000	1 000 000
2.	Abazacukura umuyoboro	50	(amezi 6) 180 000	9 000 000
3.	Umutekiniye uzubaka ibigega	2	1 000 000	2 000 000
4.	Gutaba amatiyo	50	(amezi 3) 90 000	4 500 000
5.	Kubaka amavomo	30	12 000	360 000
6.	Uzazamura ibigega	55	200 000	11 000 000
7.	Ingendo z'uzagura ibikoresho	3	300 000	900 000
8.	Gusakara (abakozi)	2	(ikigega) 8 000	440 000
9.	Amakayi amakaramu	84		16 800
		84		84 000
10.	Abakozi bazakoresha komporoseri	2		1 440 000
	<b>IGITERANYO</b>			<b>30 665 200</b>

## IGITERANYO CY'INGENGO Y'IMARI

<b>Icyo ari cyo</b>	<b>Umubare</b>
Ibikorwa	121 946 200
Umushahara	31 861 000
<b>IGITERANYO</b>	<b>153 807 200</b>

<b>Icyo ari cyo</b>	<b>Umubare</b>
Umwaka 1	153 807 200
Umwaka 2	
Umwaka 3	
<b>IGITERANYO</b>	

## AHO INGENGO Y'IMARI IZATURUKA

Abaturage	8 850 000
Inkunga	144 957 200
<b>IGITERANYO</b>	<b>153 807 200</b>

## INGENGABIHE Y'IBIKORWA

### INTEGO YA 1 : GUKWIRAKWIZA AMAZI MEZA YA MUTOBO YA RUGURU

Igikorwa (ukwezi	Umwaka wa 1												Umwaka wa 2
	1	2	3	4	5	6	7	8	9	10	11	12	
• Gucukura umuyoboro	x	x	x	x	x	x							
• Kubaka ibigega bibika amazi	x	x	x										
• Gutaba amatiyo							x	x	x				
• Kubaka amavomo										x			
<b>INTEGO 2 : KUBAKA IBIGEBA BIFATA AMZI Y'IMVURA</b>													
• Gutunda amabuye n'umucanga	x												
• Kuzamura ibigega		x	x	x									
• Gusakara					x								
• Gutora komite z'amavomo n'ibigega												x	
• Gutora komite ncungamutungo													x
• Gushyiraho gahunda y'isuku n'isukura (ipiganwa rya rwiyezamirimo)													x
• Gusukura ibigega by'amazi y'imvura								x				x	x

## UMWANZURO

Uyu mushinga wo kwirakwiza mazi meza no kubaka ibigega bifata amazi y'imvura uziye igihe cyane cyane ko ugiye gukemura ibibazo byinshi mu bukungu, mu mibereho myiza y'abaturage no kurengera ibidukikije.

Akaba ari umushinga uteguye neza kandi urahendutse, urashoboka kandi ukaba uzatera ingaruka nziza.