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REPORT – STABILITY INDEX

BURUNDI, ROUND 2
(January - June 2023)

MEASURING PERCEPTION OF STABILITY IN BURUNDI

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INTRODUCTION

The improvement in the country's socio-political situation following several crises has triggered the return of many Burundians who were previously living in neighbouring countries as refugees, while others continue to express their desire to return. This period has been marked by the voluntary return of a considerable number of Burundian refugees (211,921 from 2017 to June 2023) to their communities of origin. The return of thousands of refugees following the government's approach of promoting returns is likely to increase tensions (JRRRP-2021) between returnee communities and residents facing a lack of resources (land, livelihoods and basic services). In addition, given that Burundi has a large number of internally displaced persons (IDPs) (76,987 in May 2023)[2], the large proportion of IDPs (92%) staying in host communities increases the pressure of the recurrent damage caused by torrential rains, flooding, strong winds, hail, etc., with its corollaries of destruction of property. It should also be noted that 10 per cent of IDPs are returnees who experienced secondary displacement after finding their homes destroyed in their place of origin. This adds further complexity to the dynamics of return to the country, involving both internally displaced populations and returnees, and posing challenges to the finding of durable solutions to their displacement.

In a bid to provide durable solutions to the returnees and IDPs, and to prevent secondary displacements, it is essential to understand the relative levels of stability in places hosting returnees and IDPs. Therefore, the International Organization for Migration (IOM) in collaboration with the Government of Burundi (GoB) and other partners, conducted the second round of data collection (Round 2) on the Stability Index (SI) in June 2023 to assess the stability of areas of return and displacement in Burundi. The SI seeks to understand what factors influence the stability of a locality, which can inform priority programmatic interventions along the Humanitarian-Development-Peace Nexus to build resilience, prevent future forced displacement and lay the foundations for the sustainable return of returnees.

1. OVERVIEW

The Stability Index includes data collected through interviews with key informants at the local level in the target provinces affected by internal displacement and return movements of Burundian refugees from neighbouring countries. Key informants, IDP and returnee leaders, community workers and Red Cross volunteers, were interviewed at each location by surveyors in June 2023.

The key informant method has the advantage of allowing coverage of many hills. Several key informants were interviewed in each hill[3], allowing IOM to validate the information.

In total, 363 places of return and/or displacement evaluated in the first round were also assessed during the second round in the same provinces of Cankuzo, Cibitoke, Kirundo, Makamba, Muyinga, Rumonge, Rutana and Ruyigi to allow the observation of changes over time. Using the results of the DTM baseline assessments and the mapping of returnees provided by UNHCR, hills were selected in order to identify areas where large numbers of IDPs and returnees are located. The recurrence of weather-related hazards due to climate change and the large number of returnees were a key factor in the selection of hills (localities).

Figure 1. Displacement numbers in 2023

Information gathering from a key informant.
Ruyigi Province, Bweru commune © IOM June 2023

[1] Document - Presence of returnees by province - 30 June 2023 (unhcr.org)
[2] DTM: Baseline Evaluation - May 2023
[3] A hill is administrative level 3 (the lowest level in Burundi) and the administrative authority at this level is the hill leader

2. METHODOLOGY

2.1 Calculation of the Stability Index

The Stability Index is an IOM tool whose methodology is adapted according to the context to estimate a single stability score for each hill assessed. For the Burundian context, the indicators chosen in collaboration with our various partners focus on three key themes essential to assessing the stability of a locality and to what extent a durable solution has been achieved: livelihoods and basic services; social cohesion; and damage caused by weather-related hazards due to climate change.

Indicators are grouped to create sub-indices to facilitate comparison of locations by theme (see Annex 7.6 for more information on the indicators included in this analysis). These indicators, taken together, highlight whether a locality is favourable for the long-term integration of IDPs or the reintegration of returnees. Four 'anchor questions' on perceived stability in the community (future community intentions, trends in resilience to weather-related hazards due to climate change, trends in overall deterioration of access to basic services and trends in social cohesion) are used to validate the relationship between the stability score and community sentiment. A comprehensive analysis showing the determinants of hillside stability is described in the following sections to guide decision-making.

The calculation of the Stability Index begins with the design of the survey: this data collection tool was developed with substantial input from experts in the field, including IOM, GoB, and partner organizations. It comprises a set of questions assessing conditions in a locality that 1) were determined to be potential indicators of stability; and 2) were possible to rank from worst to best case scenarios. The questions were divided into four categories: 1) anchor/perception questions on stability, 2) scale 1: livelihoods and access to basic services, 3) scale 2: social cohesion and 4) scale 3: level of damage from weather-related hazards.

The Stability Index uses a multi-criteria analysis to demonstrate the impact of different indicators on each other and the proportional influence of a given indicator on a data set through its standard deviation.

Before the index is calculated, the responses are ordinally ranked from worst to best scenario and these classes are normalised. Then, the multi-criteria analysis is performed on all indicators, except for the "anchor questions". The determined weight of each variable according to its variability is combined with the ordered data of each locality to generate its overall stability score (see more details about the stability index calculation in the Annex 7.1).

In addition to the stability score, three separate sub-indices are calculated by applying the same method to variables from each of the three survey themes separately.

2.2. Selection of hills and key informants

The selection of localities was based on the high number of returnees in the eight targeted large return provinces according to the information shared by UNHCR and the DTM baseline data on IDPs.

The choice of key informants was based on the recommendations of the validation workshop during which participants identified the profile of people with knowledge of different aspects of the community.

Thus, five key informants were chosen for each hill, including the hill leader, a member of the returnee community, a member of the displaced community, a member of the host community and a community leader who could be a community health worker or a Burundi Red Cross volunteer.

2.3 Partnerships

The adaptation of the Stability Index to the Burundian context is the result of a joint effort by IOM, the Ministry of Interior, Community Development and Public Security through the Directorate General of Repatriation, Resettlement and Reintegration and the Directorate General of Civil Protection and Disaster Management. Additionally, the Ministry of Solidarity was involved through the General Directorate of Sustainable Resettlement and Reintegration of Disaster Victims and the Ministry of Agriculture and Livestock played a role through the General Directorate of Environmental, Agricultural and Livestock Planning. Collaboration extended to the Governors of the target areas, the National Institute of Statistics of Burundi, the Geographic Institute of Burundi. Furthermore, NGOs such as American Friends Service Committee (AFSC), Danish Refugee Council (DRC), "Association des Femmes Rapatriées du Burundi" (AFRABU), "Icirore C'Amahoro" (ICCA), Burundi Red Cross (BRC), UNHCR (which provides information on returnees), and other United Nations agencies were also involved in this comprehensive effort. Before the launch of the first round, IOM had been in contact with all the aforementioned key partners to identify potential indicators that could explain the stability of areas with returnees and IDPs. These collaborative efforts were further consolidated during the restitution workshop of the first round, held on April 18, 2023, in Bujumbura.

This workshop also played a crucial role in incorporating a few questions on the recommendation of partners, specifically aimed at targeting the analysis of data collected during a different climatic season than Round 1. This approach is designed to better guide stakeholders in their interventions, taking into account seasonal variations.

2.4 Limitations

The detailed breakdown of returnees by specific hills was not accessible in the official UNHCR dataset. Instead, the hills were selected from the database BRC's volunteers on IDPs and returnees. This may have introduced bias into the analysis as the number of returnees may have been over - or underestimated outside of an official database file. It is important to note that the Stability Index is based on key informants' perceptions and reports of conditions in their communities and does not purport to provide an objective measure of this complex subject. While key informants are expected to have better knowledge of their locality, their views on hill stability may differ from those of some community members.

3. OVERVIEW OF STABILITY SCORES

3.1 Key results of the Stability Index

In June 2023[4], the average Stability Index score for the 363 hills in the eight provinces assessed was 52/100. Both the average SI score and the sub-index scores are lower than the respective scores from round 1. This decline in the SI can be attributed to a number of factors including the recurrence of violent winds and torrential rains between January and June 2023, and the rising rate of inflation, which is higher than last year at the same time[5]. The low score on scale 3 in comparison to the other two scales corroborates this fact.

The SI score of all provinces fall within a similar range, specifically between 49 and 56. Cankuzo (56) and Rutana (55) have a higher SI score than the country average. On the other hand, Rumonge (49), where the highest number of internally displaced people was recorded, and Kirundo (49), where a considerable number of returnees (33,513) was recorded, are the least stable, with a lower average stability score.

A comparative analysis of the sub-indices for each theme (Figure 5) shows that, the average for the social cohesion sub-index (scale 2) is the highest thematic SI score (71), suggesting that social cohesion remains less of a challenge in the assessed provinces. However, there was a decrease compared to the first-round result (78), possibly due to the introduction of other indicators more relevant to the Burundi context such as the frequency of land disputes and witchcraft suspicion cases.

The average score for damage caused by weather-related hazards due to climate change (scale 3) remains the lowest (43). This low score on scale 3 is consistent with emergency monitoring data according to which Rumonge and Kirundo are among the provinces that have suffered considerable damage as a result of weather-related hazards over the last six months. On the one hand, violent winds and torrential rains adversely impacted the livelihoods in Rumonge province and on the other hand, floods and hail damaged the fields of thousands of households in Kirundo province.

In terms of livelihoods and access to basic services (scale 1), the average score (54) is relatively higher than the SI national average. The increased score on this scale does not mean an entirely favorable humanitarian situation.

We observed noteworthy variations in influential indicators between rounds 1 and 2 of the stability index exercise. While round 1 highlighted significant influence of the indicators related to natural hazards, livelihoods, and access to basic services, round 2 underscores a substantial impact from all three themes.

It should also be noted that some indicators, although having a minimal impact (low weight) in determining the stability score, nevertheless provide information on the challenges in terms of displacement-related vulnerabilities.

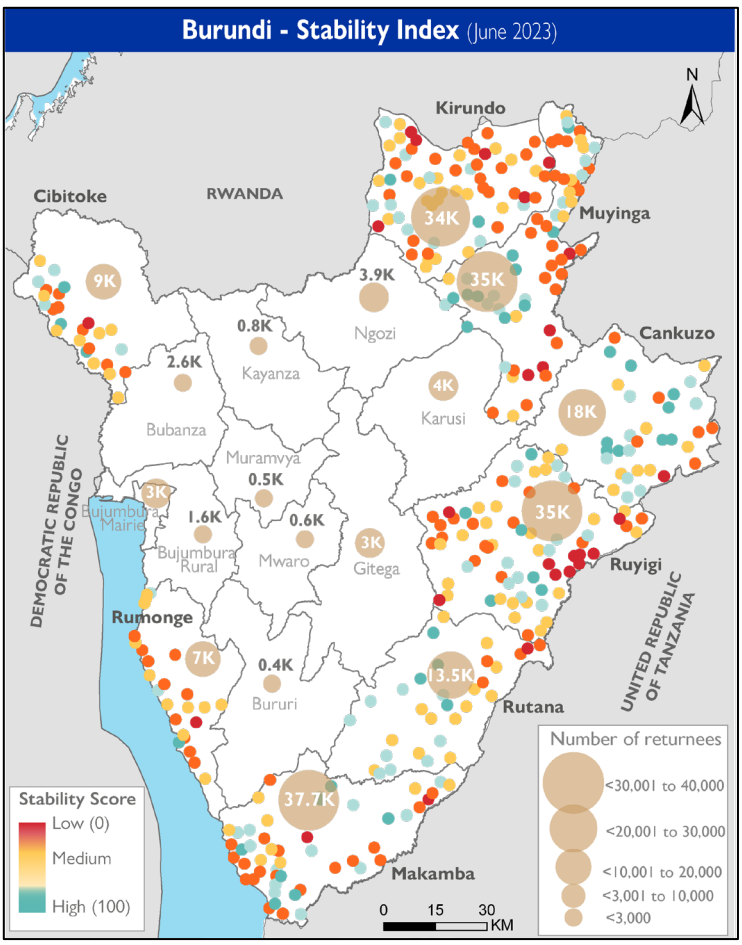
The descriptive analysis has highlighted such minimal impact indicators related to the lack of access of basic needs for most of the localities. For instance, the following five indicators when strategically integrated into a programmatic intervention, significantly contribute to improving hillside stability. This highlights the potential impact of less-weighted indicators when incorporated thoughtfully in interventions aimed at stabilizing hillside conditions.

[4] The data collection took place in June 2023 but the indicators measured the changes between January and June 2023
[5] Document – Inflation rate Evolution (brb.bi)

This also stresses the fact that different IDP & returnee households have different barriers to ending their displacement and therefore, all IDPs needs are important. These indicators are:

- Access to quality housing
- Registration of land with land services
- Access to electricity
- Access to potable water
- Improved access to natural resources, particularly arable land.

Figure 2. Map of the stability score of the hills in the provinces of high return of the returnees



This map is for illustration purposes only. The boundaries and names shown, and the designations used on this map do not imply official endorsement or acceptance by the International Organization for Migration.

Figure 3. Average scores by province and scale (the scores are on a range of 0 to 100)

Province	Number of IDPs*	SI Score	Services	Social cohesion	Weather-related hazards
Cankuzo	9,757	56	58	66	52
Rutana	1,162	55	57	69	49
Makamba	5,804	53	59	65	44
Muyinga	7,545	52	51	78	45
Cibitoke	10,879	52	57	64	43
Ruyigi	2,451	50	52	72	41
Rumonge	12,534	49	52	70	40
Kirundo	2,681	49	52	76	39
Average	6,602	52	54	71	43

* Data from the May 2023 Baseline Assessment

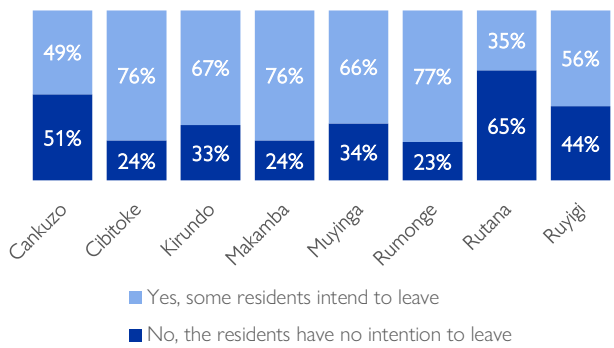
3.2 Perception of communities

The first section of the questionnaire focuses on the perceptions of communities by key informants on the changes of resilience (see Annex 7.2) and stability in the hills assessed. The Stability Index score and sub-indices for the different themes are compared with the responses to the 'anchor questions' related to the perception of communities as agreed by the stakeholders at the validation workshop. This comparison indicates that despite the decrease in the Stability Index score in many localities, community members perceive improvements in their livelihoods and access to services, social cohesion and community resilience to weather-related hazards due to climate change.

3.2.1 Future intentions of the population (in the next six months)

Around two-thirds of the hills surveyed (63%) indicated that there would be inhabitants expecting to move seasonally in search of work to meet their families' needs. Thus, the feeling that some inhabitants would move is very high in the provinces of Rumonge, Makamba and Cibitoke, while the majority of hills in Rutana and Cankuzo reported that their inhabitants had no intention of leaving the hill, which corroborates with their high stability scores (Figure 5).

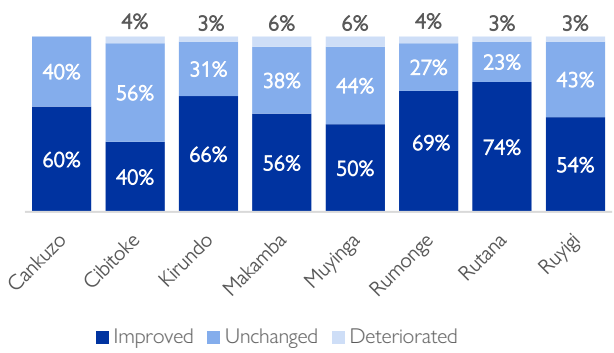
Figure 4. Future intentions (in the next six months)



3.2.2 Perception on access to basic services

Regarding the evolution of access to basic services over the last six months, and in general terms, the key informants interviewed indicated that the majority of hills (58%) have seen an improvement in access to services, with the exception of Cibitoke, where improved access to basic services was observed by only four out of 10 hills (40%).

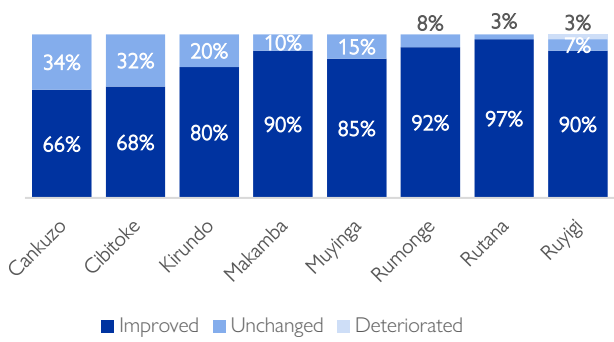
Figure 5. Developments in access to services



3.2.3 Perception on social cohesion

In terms of social cohesion, the majority of surveyed hills (84%) have shown positive or stable trends, indicating progress in community bonds. However, Ruyigi province stands out with a 3 per cent decline in social cohesion. This data underscores the need for targeted interventions in specific regions. The results hold significant implications for humanitarian planning and response, emphasizing the importance of building upon positive trends and addressing challenges in Ruyigi province.

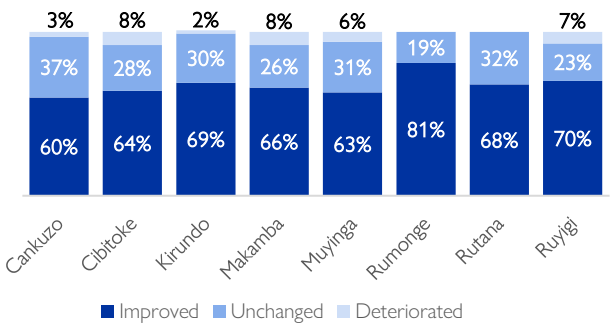
Figure 6. Evolution of social cohesion



3.2.4 Perception on resilience to weather-related hazards due to climate change

The graph indicates changes in resilience to weather-related hazards across surveyed hills. It shows a positive trend, with 67 per cent of hills experiencing improved resilience. Notably, a minority of hills (5%), primarily in the provinces of Cibitoke, Makamba, Muyinga, and Ruyigi, reported deteriorating resilience. This highlights the necessity for targeted interventions in these regions to address their specific challenges. Further analysis is needed to better understand these findings and their implications for tailored humanitarian responses.

Figure 7. Changes in resilience to weather-related hazards*



* Percentages may add up to 99 or 101 per cent due to rounding.

3.3 Relationship between perception and Stability score

Figure 9 shows the top twenty hills with the highest stability scores and the bottom twenty hills with the lowest scores. It highlights the convergence between the perception of stability and the results obtained by measuring the key indicators of stability dynamics in the hills. Thus, the figure shows the stability score, the scores of the three sub-indices and the stability perception score for each hill. The perception questions on the feeling of resilience and the possibility that people might leave the hill are closely related to the Stability Index scores: most of the hills with the highest score, often reported that their inhabitants had no plans to leave their hill, while those with the lowest score reported that some of their inhabitants had plans to leave their hill.

In examining changes in community sentiment from January to June 2023, it's noteworthy that the social cohesion score improved in **83** per cent of the surveyed hills. Simultaneously, **67** per cent of the hills reported enhanced resilience to weather-related hazards, and **59** per cent indicated improved access to basic services (Figure 8).

These statistics highlight the complex nature of the situation, emphasizing the necessity for a comprehensive analysis of each hill's unique challenges and opportunities. A thorough examination of key informant responses is crucial for understanding the underlying dynamics, particularly their connection to stability scores. This in-depth understanding will guide the development of tailored strategies and humanitarian responses to address the specific needs of each are.

Figure 8. Sense of deterioration between January and June 2023

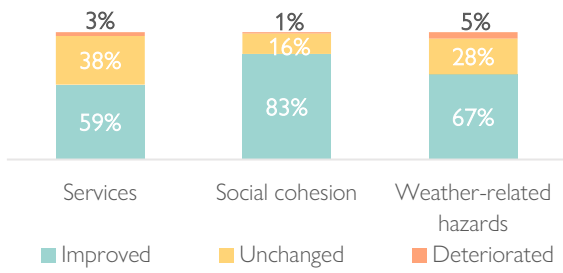


Figure 9. Scores per hill

The results are shown from the most stable to the least stable hill

	Province	Commune	Colline	IS Score	Services	Social cohesion	Weather-related hazards	Community intention	Perception of resilience	Perceived state of access to services	Perception of social cohesion
				100 → 1				10 → 1 PERCEPTION			
Localities with the highest score	Muyinga	Butihinda	Kamaramagambo	86	74	100	91	10	10	10	10
	Rutana	Musongati	Buhinga	78	87	80	70	10	10	10	10
	Muyinga	Butihinda	Kobero	77	89	83	65	0	0	10	10
	Rutana	Musongati	Shanga	75	70	83	76	10	10	10	10
	Cankuzo	Cankuzo	Cankuzo	72	79	83	63	10	10	10	10
	Muyinga	Gasorwe	Jani	71	66	74	74	0	10	5	10
	Makamba	Makamba	Kizingoma	70	65	100	66	10	10	10	10
	Makamba	Mabanda	Nyamugari	70	65	77	72	10	5	5	10
	Cibitoke	Rugombo	Rusiga	70	74	52	73	10	10	10	10
	Makamba	Nyanza-Lac	Rangi	70	71	74	68	10	10	10	10
	Rumonge	Rumonge	Birimba	70	71	94	62	10	10	10	10
	Muyinga	Gashoho	Gishambusha	70	66	80	70	0	10	5	10
	Makamba	Mabanda	Budaketwa	69	63	80	70	10	10	5	10
	Makamba	Kayogoro	Sampeke	68	60	89	69	0	10	5	10
	Cankuzo	Mishiha	Rukwega	68	64	95	63	10	5	5	5
	Muyinga	Muyinga	Muyinga	68	75	80	58	10	10	10	10
	Cankuzo	Kigamba	Shinge	68	61	80	70	10	10	5	10
	Ruyigi	Kinyinya	Nyamigina	67	68	100	57	10	10	10	10
	Ruyigi	Bweru	Nyamugari	67	71	80	60	0	10	10	10
	Cankuzo	Kigamba	Gitanga	67	58	95	66	10	10	10	10
Localities with the lowest score	Rumonge	Buyengero	Kirama	38	38	52	33	10	5	5	10
	Makamba	Mabanda	Karinzi	37	45	47	28	0	0	5	10
	Kirundo	Bwambarangwe	Budahunga	37	45	40	29	10	10	10	10
	Ruyigi	Gisuru	Gacokwe	37	41	80	20	0	5	5	10
	Muyinga	Muyinga	Mwurire	36	36	74	25	0	5	10	5
	Ruyigi	Gisuru	Kireka	35	35	55	30	0	10	5	10
	Kirundo	Bwambarangwe	Rusara	35	41	57	23	0	5	5	5
	Cibitoke	Murwi	Masha	34	51	39	18	0	0	5	10
	Makamba	Kayogoro	Buhema	34	50	48	16	0	5	5	10
	Kirundo	Bugabira	Gaturanda	33	34	74	21	0	5	10	5
	Rutana	Giharo	Murara	33	31	69	23	10	5	5	10
	Ruyigi	Butaganzwa2	Mugege	32	33	63	21	0	5	5	10
	Muyinga	Buhinyuza	Nyarunazi	30	41	52	14	0	5	5	5
	Kirundo	Ntega	Gisitwe	29	48	35	11	0	5	5	5
	Kirundo	Busoni	Kivo	29	36	60	13	0	5	5	10
	Ruyigi	Gisuru	Nyarumanga	27	27	46	22	10	0	10	0
	Muyinga	Buhinyuza	Gitaramuka	26	36	48	10	0	5	5	5
	Ruyigi	Gisuru	Nyabitaka	23	37	29	10	0	0	0	0
	Muyinga	Buhinyuza	Buhinyuza	20	16	40	16	0	5	5	10
	Ruyigi	Gisuru	Muvumu	19	19	58	7	0	5	0	10

4. ANALYSIS OF THE MAIN INDICATORS INFLUENCING THE STABILITY SCORE

The Stability Index uses a mathematical method of multi-criteria analysis to understand the impact of each indicator on the variability of the data set. This method assigns greater weight to indicators with higher variability.

By exploring these key indicators, it is possible to identify important factors that may affect the perception of stability in a locality. For a more detailed overview of each indicator measured, see the Annex 7.6.

4.1 Main indicators

Figure 10 provides an overview of the 10 most influential indicators in descending order of weight. The results show that there are at least three influential indicators in each of the three themes.

In the **scale 1**, market situation, access to market structures, access to healthcare and coverage of the minimum health care package by health structures are the four most influential indicators. This shows that focusing on these indicators can yield the most significant impact on improving access to services and livelihoods in the surveyed areas.

From the **scale 3**, the key influential indicators are the setting up adaptation mechanisms to increase community resilience, the scarcity of natural resources, particularly water, and the proximity of the community committees for disaster risk reduction. These indicators highlight the crucial areas that require attention to mitigate the impacts of climate change-related weather hazards.

Finally, the **scale 2** indicators present in the top 10 most influential variables are the frequency of cases of land disputes, the frequency of incidents of theft and the frequency of cases of witchcraft. These indicators emphasize the need to address and strengthen social cohesion within the surveyed communities.

This indicates that programming could have the greatest impact if it focuses on the relevant indicators linked to the three themes, with access to livelihoods and basic services having the most significant impact, followed by the risks of weather-related hazards and social cohesion. A more detailed analysis of the possible courses of action can be found in section 5.1 of the report.

4.2 Highly influential indicators by scale

The calculated weights provide a structured classification of indicators by their respective scales, offering a systematic approach to prioritization (Figure 11).

Figure 10. The most 10 influential indicators (in descending order of weight)

The indicators are displayed from most to least important

SERVICES AND LIVELIHOODS	SOCIAL COHESION	DAMAGE DUE TO WEATHER-RELATED HAZARDS
Market situation		
Setting up adaptation mechanisms to increase community resilience		
Access to market		
Scarcity of water		
Frequency of land disputes		
Access to healthcare		
Coverage of the minimum care package by health facilities		
Proximity of community committees for disaster risk reduction		
Frequency of theft incidents		
Frequency of witchcraft suspicion cases		

This structured approach presents distinct advantages.

For example, the top five indicators within the livelihoods and access to services scale have been identified as the most influential, contributing 14 per cent to the Hillside Stability Index. This underscores the potential for targeted efforts to have a significant impact on improving hillside stability, optimizing resource allocation and interventions.

The following set of indicators, related to the weather-related hazards damage scale, collectively hold a 13 per cent influence on hill stability, providing guidance in addressing climate-related challenges and enhancing resilience.

Similarly, the indicators within the social cohesion scale contribute 11 per cent to hill stability, emphasizing the significance of social cohesion in the broader stability context. This suggests that interventions aimed at strengthening community bonds can be pivotal in enhancing overall hillside stability.

This structured prioritization based on the top five indicators within each scale provides a methodical approach to address the most influential factors contributing to hillside stability.

Figure 11. The first five influential indicators by scale

SERVICES & LIVELIHOODS

1. Market situation
2. Market access
3. Access to healthcare
4. Coverage of the minimum care package by health facilities
5. Access to fishing areas

WEATHER-RELATED HAZARDS

1. Setting up adaptation mechanisms to increase community resilience
2. Scarcity of water
3. Proximity of the community disaster risk reduction committees
4. Access to health facilities
5. Lack of wood

SOCIAL COHESION

1. Frequency of land disputes
2. Frequency of theft incidents
3. Frequency of witchcraft suspicion cases
4. Cooperation and support between community members
5. Participation in public affairs

4.3 Analysis of the key indicators of the Stability Index

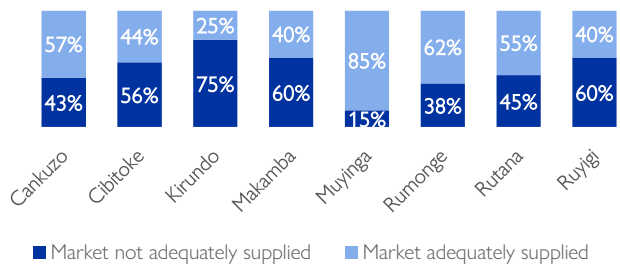
This section focuses on a comprehensive analysis of the pivotal indicators within the Stability Index. These indicators serve as critical determinants in the assessment of community stability and resilience. We will conduct an in-depth exploration of the primary factors influencing these aspects, drawing insights from the 10 key indicators previously outlined in **Section 4.1**. This analysis will offer valuable insights to enhance our understanding of the challenges and opportunities present within the communities under evaluation.

4.3.1 Market situation

Scale of livelihoods and access to basic services

The key informants estimated that most of existing markets in the provinces of Muyinga, Rumonge, Cankuzo and Rutana are supplied regularly. On the other hand, the majority of hills in the provinces of Kirundo (75%), Makamba (60%), Ruyigi (60%) and Cibitoke (56%) do not have enough items in their markets.

Figure 12. Market situation

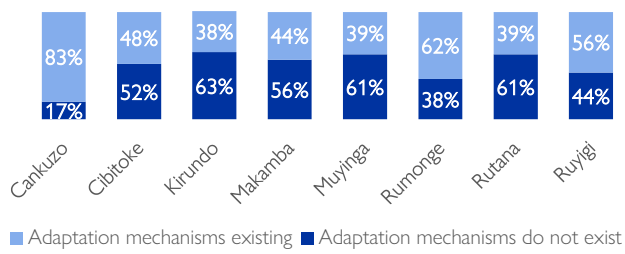


4.3.2 Setting up adaptation mechanisms to increase community resilience

Scale of damage caused by weather-related hazards

Coping mechanisms include an operational emergency plan, the availability of recovery funds and the construction of weather-resistant buildings. Apart from the hills of Cankuzo, key informants in the other provinces reported that a considerable proportion of the hills have not yet put in place the operational emergency plan that would enable community members to become more resilient.

Figure 13. Setting up adaptation mechanisms to increase community resilience *

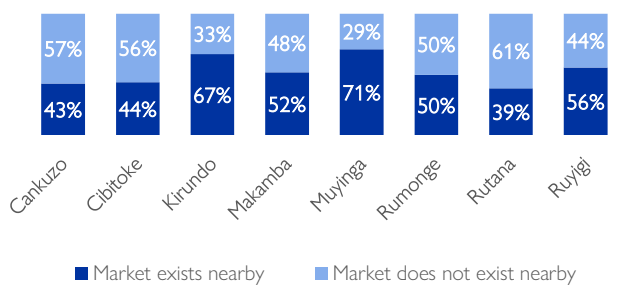


4.3.3 Access to markets

Scale of livelihoods and access to basic services

It was found that markets were not systematically set up on all hills. A large proportion of the hills are supplied by markets in neighbouring hills. The distance covered to reach the market where most of necessary items are found was considered long by the majority of key informants in the provinces of Muyinga (71%), Kirundo (67%), Ruyigi (56%) and Makamba (52%).

Figure 14. Access to market

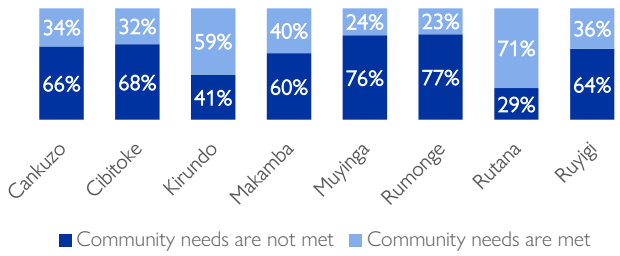


4.3.4 Scarcity of water

Scale of damage caused by weather-related hazards

In the majority of provinces, key informants felt that the demand for water exceeded the supply of available water in their environment. With the exception of Kirundo and Rutana, over 60 per cent of the hills in the other provinces reported water shortages.

Figure 15. Scarcity of water

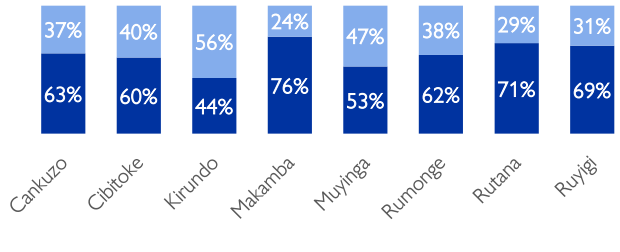


4.3.5 Frequency of land disputes

Scale of social cohesion

This new indicator, introduced in this second exercise, was one of the key determinants of stability. Apart from Kirundo province, where just under half of the hills (44%) indicated that there were several cases of land disputes in their communities, the majority of hills in the other provinces reported recurrent instances of land conflicts. Further efforts should be made to raise awareness of land registration in order to reduce these cases of land disputes, which can jeopardize social cohesion.

Figure 16. Frequency of land disputes



* Percentages may add up to 99 or 101 per cent due to rounding.

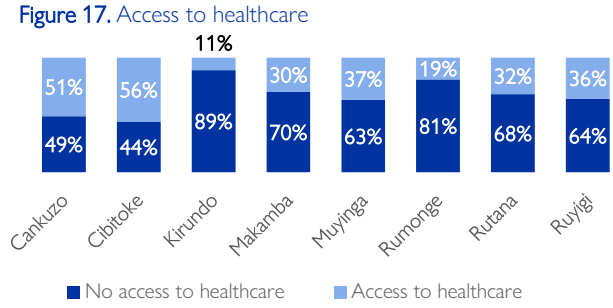
4.3 Analysis of the key indicators of the Stability Index (continued)

4.3.6 Access to healthcare

Scale of livelihoods and access to basic services

In the majority of hills (68%), key informants affirmed that there were members of their community who had fallen sick in the last six months and were unable to access the healthcare they needed. However, the majority of the hills in Cibitoke (56%) and Cankuzo (51%) reported that healthcare is accessible to the majority of community members.

Figure 17. Access to healthcare

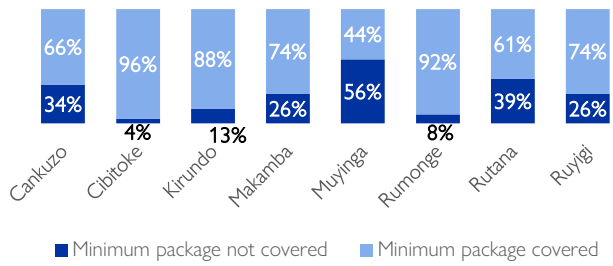


4.3.7 Coverage of the minimum healthcare package by health facilities

Scale of livelihoods and access to basic services

With regards to the coverage of the minimum care package by health facilities, in the majority of hills (72%) which have reported health facilities, key informants affirmed that the latter were able to provide the primary curative care package for simple cases of illness. These health facilities also provide preventive care (family planning, vaccination, pre- and post-natal consultation), essential obstetric and neonatal care as well as monitoring of nutritional status. We should also note that just over half of the hills assessed (52%) do not have a health centre.

Figure 18. Coverage of minimum care package by health centres *

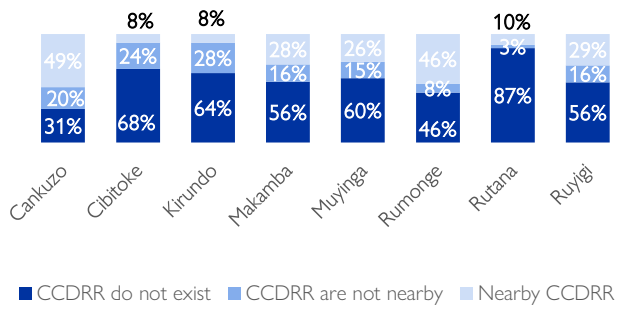


4.3.8 Proximity of Community Committees for Disaster Risk Reduction(CCDRR)

Scale of damage caused by weather-related hazards

Community Committees for Disaster Risk Reduction (CCDRR) have the role of raising community awareness of potential risks, and of preventing and responding to disasters within their community. Although CCRRCs have been set up in the majority of hills, they are still struggling to be effective in the community. Consequentially, the key informants interviewed in the majority of surveyed hills (58%) were unaware of the existence of CCDRR.

Figure 19. Proximity of CCDRR *

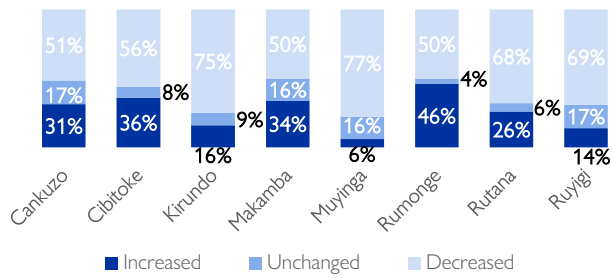


4.3.9 Frequency of theft incidents

Scale of social cohesion

The key informants in the majority of the assessed hills (65%) reported that the situation regarding theft of personal effects and livestock had improved in the last six months. However, a considerable proportion of hills in Rumonge province (46%) reported an increase in theft incidents compared to the previous six months.

Figure 20. Frequency of theft incidents *

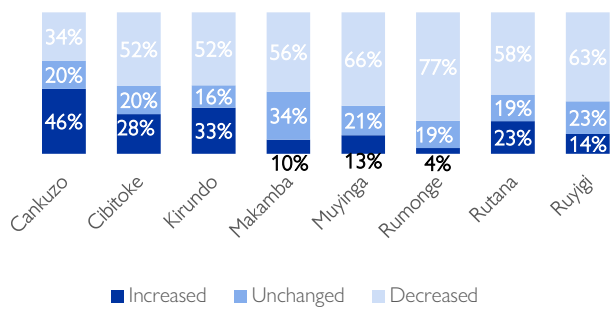


4.3.10 Frequency of witchcraft suspicions

Scale of social cohesion

This new indicator introduced as a measure of social cohesion, sheds light on community trust and unity. In 58 per cent of the surveyed hills, there has been a decrease in suspicions of witchcraft over the last six months, suggesting improved social cohesion and reduced tension within the community. However, 21 per cent of hills have reported an upsurge in such suspicions, which may signal heightened tension or mistrust. These findings underline the importance of understanding and addressing social dynamics within communities to promote stability and resilience.

Figure 21. Frequency of witchcraft suspicions *



* Percentages may add up to 99 or 101 per cent due to rounding.

5. PROGRAMMING IMPLICATIONS

5.1 Areas of intervention

In the context of Burundi, programme areas could incorporate those aspects considered to have the greatest impact on the perception of stability in the hills.

For example, if the provinces of Kirundo and Rumonge, where the Stability Index score is rather low, were to benefit from an intervention integrating the following areas: access to drinking water, increased availability of food items, improved access to land as a natural resource, then the majority of their hills would see an improvement in their Stability Index score.

In addition, the exposure of hillsides to weather-related hazards should be taken into account in order to include activities that contribute to community resilience, such as equipping and monitoring community committees for disaster risk reduction (CCDRR) to make them more effective in the community.

Finally, the strengthening of populations to cope with weather-related hazards and the deterioration of overall access to services should be taken into account in partners' programmes, particularly in places where the presence of displaced persons or returnees could undermine the already limited capacity to deliver services. Although the social cohesion situation is relatively better when compared to the scales of livelihoods and access to basic services, as well as Damage Due to Weather-Related Hazards, additional interventions for prevention and resolution of inter-community tensions as well as for peace-building could be implemented in some hills. The priority hills in this respect are:

- Bumba (Commune of Gisagara)
- Nyabitaka (Commune of Gisuru)
- Manege (Commune of Murwi)
- Rugeregere (Commune of Rugombo)
- Gasenyi (Commune of Bweru)
- Mburi (Comme of Gisagara)
- Gasanda (Commune of Ruyigi)
- Bunyerere (Commune of Gisagara)

Beyond addressing the key indicators described above, interventions could target other areas of low impact on stability. These, combined together in an intervention, would contribute significantly to improving the Hillside Stability Index (see section 3.1).

5.2 Strategy for the choice of intervention areas

Interventions should be based on geographical and contextual proximity to develop positive effects. The specificities of the local context must be taken into account to foster the development of a sustainable environment in neighbouring localities, as a positive leverage effect of interventions. A grouping of localities with a low Stability Index in the same municipality could be twinned with a grouping of geographically close localities with the same stability characteristics. These twinned clusters may benefit from a programme to supply medicines to health centres, for example, in order to achieve a "domino effect", while ensuring that returnees and IDPs have the same rights and equal access to services as the host populations in the beneficiary commune.
Annex 7.4 shows pairs of communes where this type of intervention is possible.

5.3 Identification of key variables for effective intervention

The ability of populations to remain in their place of habitual residence over the coming months is linked to the increased risk of weather-related hazards and the socio-economic situation impacting 86 per cent of the hills. In line with the nexus approach, interventions should either focus on ensuring that people can stay in place in the long term, or provide longer-term development interventions in hills where risk from weather-related hazards due to climate change is minimal (Cankuzo commune for instance). Alternatively, interventions should prioritise service and livelihoods scale indicators that have a strong influence on stability in localities with significant risk of weather-related hazards due to climate change (Gisuru commune as an example).

Example of the Nexus Approach on convergence communes

As a first step, a nexus intervention could focus on a commune with a low-to-medium SI score (33-75), hosting returnee populations and/or IDPs.

Giteranyi, which hosts more than 20,000 returnees and 5,444 IDPs (DTM May 2023), has 60 per cent of hills where the resilience situation is estimated to have improved and where the population would not need to leave in the coming months due to the risk of weather-related hazards. In the event of intervention in this commune, Butihinda with similar levels of stability could benefit from effective synergy of intervention given its proximity (see Annex 7.4).

5.4 Programming priorities based on comparative Analysis of hill stability scores:

Comparative analysis between the hills with the highest and lowest stability scores (Annex 7.5) can provide useful information on programming priorities.

For example, in locations with very low stability scores, programming should focus on interventions such as addressing **deteriorating access to natural resources, accessibility of health services, disaster risk reduction and management of land disputes.** In contrast, in hills with high stability scores, programming should focus on development and durable solutions for returnees, IDPs or communities hosting displaced people, such as **livelihoods promotion and access to basic services.**

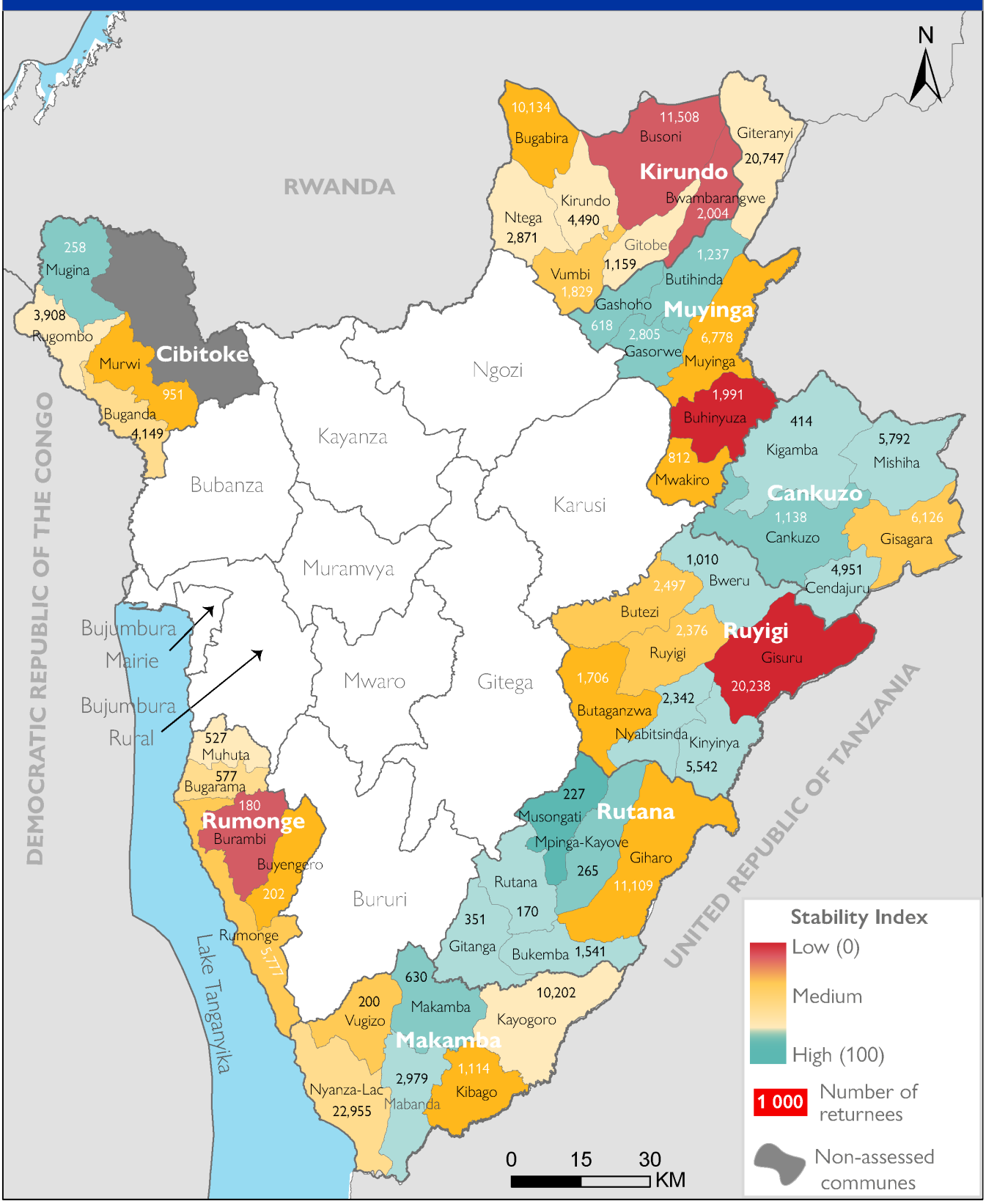
Stability Index – Burundi, Round 2

Cankuzo, Cibitoke, Kirundo, Makamba, Muyinga, Rumonge, Rutana, Ruyigi | June 2023

IOM UN MIGRATION

December 2023

Stability Index: Average score per commune



This map is for illustration purposes only. The boundaries and names shown, and the designations used on this map do not imply official endorsement or acceptance by the International Organization for Migration.

6. CONCLUSION

The analysis presented in this report provides a better understanding of the main indicators influencing the Stability Index score of a particular area. It provides information on priority programmatic interventions along the Humanitarian-Development-Peace Nexus in order to strengthen the resilience and stability of communities and prevent future displacements.

The results of this second cycle of the Stability Index implemented in Burundi with the participation of all stakeholders reveal a number of indicators that have a greater impact on stability, the majority of which relate to resilience to weather-related hazards, livelihoods and access to basic services. Addressing these key indicators in humanitarian or development interventions would contribute to the stability of most hills hosting returnees and IDPs.

Furthermore, given that the most influential indicators are found across all three themes, efforts should therefore focus on developing and promoting policies and programs that have an impact on access to basic services and livelihoods, community resilience to weather-related hazards, and the promotion of social cohesion. An integrated approach is essential to addressing the multifaceted aspects of community stability

Comparative Analysis of Disparities between Round 1 and Round 2 : Implications for Humanitarian and Development Actors

The Stability Index, as explored in this report, is a crucial tool for guiding humanitarian and development actors in their efforts to enhance community resilience and stability, ultimately preventing future displacements. This index provides a comprehensive view of the main indicators influencing stability in specific areas, enabling us to prioritize programmatic interventions effectively.

Comparative Analysis of Influential Indicators:

In our assessment of the Stability Index, we observed distinct shifts in influential indicators between Rounds 1 and 2. Round 1 emphasized indicators related to natural hazards, livelihoods, and access to basic services. In contrast, Round 2 revealed a more balanced contribution from all three themes: Services and Livelihoods, Social Cohesion, and Damage Due to Weather-Related Hazards. Understanding these shifts is essential for adapting interventions to changing community needs.

Discrepancy between Community Perceptions and Stability Scores:

Another noteworthy finding is the contrast between community perceptions and stability scores in the two rounds. In Round 1, these aspects were somewhat aligned, while Round 2 exhibited a disconnect. This discrepancy raises critical questions that warrant further exploration.

Implications and Recommendations:

To address these findings, we propose in-depth analyses to comprehend the reasons behind the shift in influential indicators. This understanding will enable us to tailor interventions more effectively, aligning them with evolving community needs. Furthermore, the mismatch between community perceptions and stability scores is a matter that requires attention and further investigation. We encourage all stakeholders to engage in dialogue and analysis to bridge this gap.

Round 1 Evolutionary Indicators
- Changes in access to natural resources
- Ability to adapt to natural hazard risks
- Increased risk from natural hazards
- Changes in access to basic services
- Development of social cohesion

Consistent R1 to R2 Indicators
- Access to healthcare
- Coverage of the minimum package of care by health facilities situation
- Proximity of community committees for disaster risk reduction
- Scarcity of water
- Market situation

New indicators from Round 2
- Setting up adaptation mechanisms to increase community resilience
- Access to market
- Frequency of theft incidents
- Frequency of witchcraft suspicion cases

Data collection and analysis activities implemented by:

IOM UN MIGRATION

With financial support:

7. ANNEXES

7.1 Stability Index Calculation

Data Conversion

Value of each data point (Y)

The survey conducted had only single-answer questions that asked the respondents to pick one option from a pre-determined list of answer. The data for the single-answer questions was converted into a numerical version. **Each response was ranked, and each rank was converted into a numeric value, ranging from 0 to 1.** The rank for each option on a question was assigned from the least favourable option to the most favourable option.

For example, questions with only two answer options (such as: Yes or No) were ranked as either least favourable (1) or most favourable (2). The ranks are then converted to numeric values, where a rank of 1 means 0 and a rank of 2 means 1. This logic was extended to all the single-answer questions regardless of the number of options. If a question has three answer options, the rank for each will be converted to a numeric value of either 0 (least favourable), 0.5 (neutral) or 1 (most favourable).

Calculation of the index

Weight of each indicator (X)

The index is based on the weight for all the indicators with the exception of the anchor questions. The weight of the indicator = standard deviation of the indicator / sum of the standard deviations of all the datasets. The weight, therefore, is a value that shows how much each indicator varies compared to the other variables.

The SI value for each hill = sum of (**weight of indicator (X) * value of the indicator (Y)**) for all the non-anchor variables.

7.2 Secondary sources and definitions

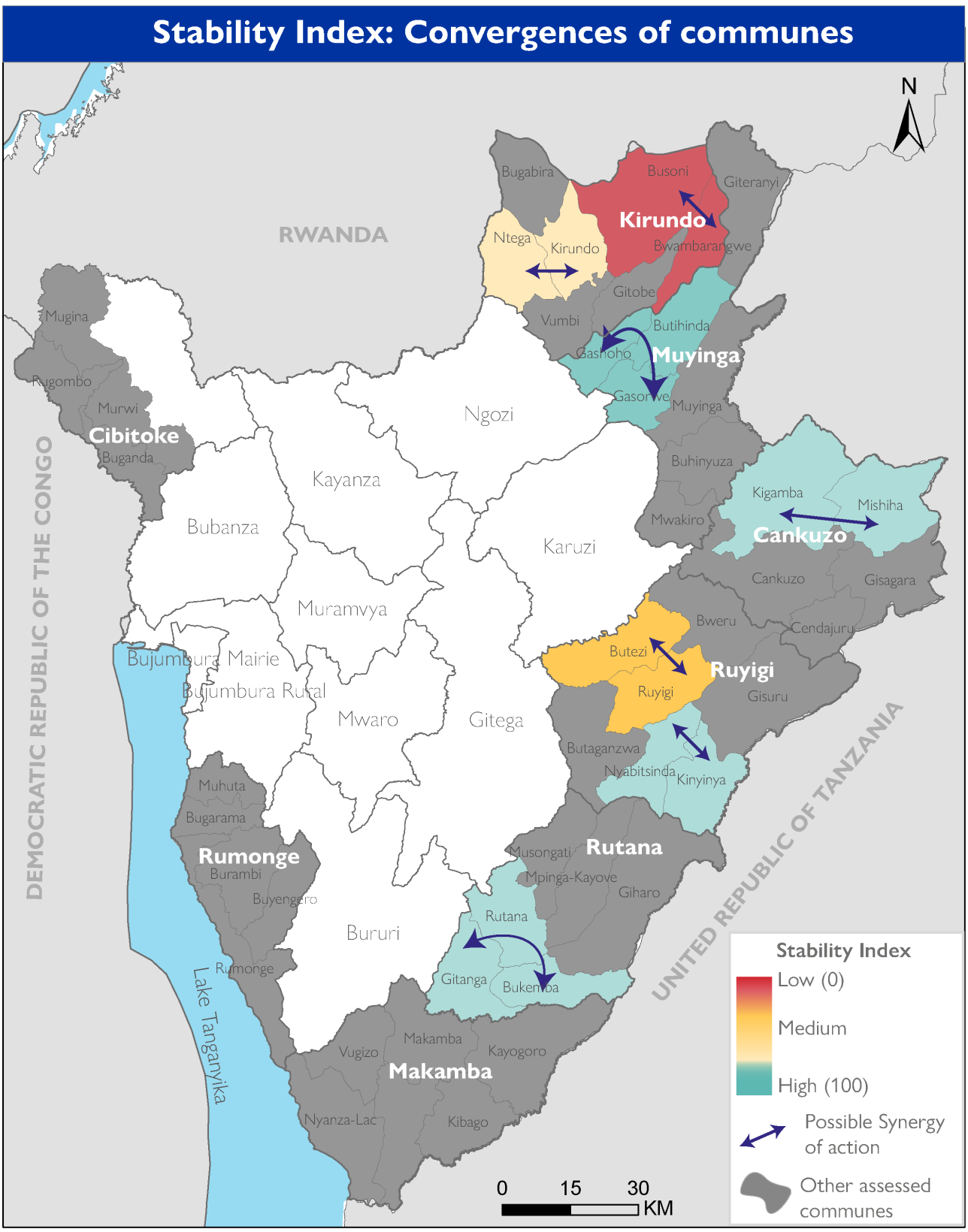
- **JRRP 2021** : 2021 Burundi Joint Refugee Return and Reintegration Plan
- **DTM**: Baseline Evaluation - May 2023
- **RESILIENCE**: capacity of communities living in areas exposed to the consequences of climate change to anticipate and adapt to the risks of weather-related hazards, and to absorb, respond to and recover from shocks and stresses in an effective and timely manner, without compromising their long-term livelihoods and livelihoods, and ultimately improving their living conditions (ARC-DToolkit_FrenchNeutral_Final_Oct2017.pdf (resiliencenexus.org)

7.3 Round 1 and Round 2 average scores by province and scale

	SI Score		Services		Social cohesion		Weather-related hazards	
Province	R2	R1	R2	R1	R2	R1	R2	R1
Cankuzo	56	58	58	55	66	74	52	56
Rutana	55	58	57	58	69	81	49	51
Makamba	53	57	59	53	65	80	44	53
Muyinga	52	57	51	59	78	81	45	48
Cibitoke	52	54	57	60	64	78	43	44
Ruyigi	50	54	52	56	72	77	41	46
Rumonge	49	54	52	51	70	82	40	48
Kirundo	49	53	52	53	76	75	39	47
Average	52	**55**	54	**55**	71	**78**	43	**49**

7.4 Maps of convergence zones

This map displays pairs of communes that are geographically close and have the same stability characteristics, where a synergy of interventions is possible.



This map is for illustration purposes only. The boundaries and names shown, and the designations used on this map do not imply official endorsement or acceptance by the International Organization for Migration.

7.5 Table of SI scores and indicator scores

Province	Commune	Hill	SI Score	Market situation	Setting up adaptation mechanisms to increase community resilience	Access to market	Scarcity of water	Frequency of land disputes	Access to healthcare	Coverage of the minimum care package by health facilities	Proximity of CCRRCs	Frequency of theft incidents	Frequency of witchcraft suspicion cases
Muyinga	Butihinda	Kamaramagambo	86	0	10	10	10	10	0	10	0	10	10
Rutana	Musongati	Buhinga	78	10	0	10	0	0	10	10	10	0	0
Muyinga	Butihinda	Kobero	77	10	10	0	0	0	0	10	10	0	10
Rutana	Musongati	Shanga	75	10	10	0	0	0	0	10	10	0	0
Cankuzo	Cankuzo	Cankuzo	72	10	0	10	10	10	10	10	10	10	0
Muyinga	Gasorwe	Jani	71	10	10	0	0	10	10	10	10	10	10
Makamba	Makamba	Kizingoma	70	0	10	10	0	0	0	10	0	0	0
Makamba	Mabanda	Nyamugari	70	10	10	10	0	10	0	10	5	0	5
Cibitoke	Rugombo	Rusiga	70	0	10	10	10	0	0	10	5	10	5
Makamba	Nyanza-Lac	Rangi	70	10	10	0	0	0	0	0	10	0	0
Rumonge	Rumonge	Birimba	70	10	10	0	0	0	10	10	10	5	5
Muyinga	Gashoho	Gishambusha	70	0	0	0	0	0	0	0	0	5	5
Makamba	Mabanda	Budatekwa	69	0	0	10	0	0	0	10	0	10	10
Makamba	Kayogoro	Sampeke	68	10	10	10	10	0	10	10	0	10	10
Cankuzo	Mishiha	Rukwega	68	10	10	10	0	10	10	10	0	10	0
Muyinga	Muyinga	Muyinga	68	0	10	0	10	0	10	10	5	10	5
Cankuzo	Kigamba	Shinge	68	0	0	0	0	10	0	10	5	10	10
Ruyigi	Kinyinya	Nyamigina	67	0	0	10	10	0	0	10	0	0	0
Ruyigi	Bweru	Nyamugari	67	0	0	10	0	10	0	10	0	0	0
Cankuzo	Kigamba	Gitanga	67	0	10	10	0	10	10	10	10	10	10
Makamba	Nyanza-Lac	Kabonga	67	10	10	10	0	10	10	10	10	10	10
Cibitoke	Buganda	Gasenyi-Centre	67	10	10	0	0	10	10	10	10	10	10
Muyinga	Butihinda	Butihinda	66	10	0	10	10	10	10	10	10	10	10
Makamba	Nyanza-Lac	Biniganyi	66	0	10	0	10	10	0	10	0	10	0
Muyinga	Giteranyi	Ruzo	66	10	10	10	0	0	10	10	10	0	10
Kirundo	Gitobe	Butahana	66	0	10	10	10	10	0	0	0	10	10
Muyinga	Gasorwe	Rusimbuko	66	10	0	0	0	0	0	10	5	10	10
Rutana	Mpinga-Kayove	Kiguhu	66	0	0	10	0	10	0	0	0	0	5
Cankuzo	Mishiha	Kibimba	66	10	10	10	0	0	10	10	0	0	10
Cankuzo	Cankuzo	Muterero	66	10	0	0	0	10	0	10	10	10	10
Ruyigi	Nyabitsinda	Gatare-Gasenyi	66	10	10	0	10	0	0	10	5	10	10
Kirundo	Ntega	Mugendo	65	10	10	10	0	0	0	10	10	0	10
Cankuzo	Cankuzo	Kabeza	65	0	10	10	0	0	10	0	10	10	10
Ruyigi	Butezi	Sorero	65	0	10	10	0	10	0	10	0	10	10
Muyinga	Gasorwe	Kiremba	65	0	0	0	10	10	0	10	5	10	10
Ruyigi	Ruyigi	Gisoro	65	10	10	0	0	10	10	10	10	10	10
Ruyigi	Kinyinya	Musumba	65	0	10	10	0	0	10	10	10	10	10
Cankuzo	Gisagara	Gitwenge	65	0	10	0	0	10	0	10	5	5	10
Muyinga	Gasorwe	Bwasare	65	0	0	10	0	0	0	10	0	10	0
Rutana	Mpinga-Kayove	Ngarama	65	0	0	10	0	10	0	0	0	0	5
Cibitoke	Mugina	Mugina	64	0	10	0	10	10	0	10	5	10	10
Makamba	Makamba	Makamba II	64	10	0	0	10	10	10	10	10	0	10
Cankuzo	Gisagara	Gisagara	64	0	10	0	10	10	0	10	0	10	5
Makamba	Nyanza-Lac	Gasaba	64	0	10	0	10	0	0	0	0	10	10
Makamba	Mabanda	Mabanda	63	0	10	10	0	10	0	10	0	10	10
Ruyigi	Butezi	Munyinya	63	0	0	0	0	0	0	0	0	10	10
Makamba	Mabanda	Ruvuga	63	10	10	10	0	0	10	10	10	0	5
Cankuzo	Cankuzo	Muyaga	63	0	10	0	10	10	0	0	0	10	10
Muyinga	Giteranyi	Rubenga	63	0	0	0	0	0	0	0	0	10	10
Cibitoke	Mugina	Rugajo	63	0	0	10	0	10	0	10	0	5	5
Ruyigi	Bweru	Nkanda	63	0	0	10	10	0	0	0	5	5	5
Rutana	Bukemba	Kabanga	63	10	0	10	0	0	10	10	0	0	0
Cibitoke	Murwi	Buhayira	63	10	10	0	10	0	0	10	0	10	10
Cankuzo	Cendajuru	Kiruhura	62	0	10	10	10	0	0	10	10	0	10
Kirundo	Kirundo	Runyonza	62	10	10	0	0	0	0	10	0	10	10
Muyinga	Giteranyi	Kinyami	62	10	0	10	0	0	0	10	10	10	10
Muyinga	Gashoho	Gitwa	62	10	0	10	10	10	0	10	0	10	10
Muyinga	Giteranyi	Kinanira	62	10	10	10	0	0	0	10	10	10	10
Cankuzo	Mishiha	Mwiruzi	61	10	0	0	0	10	10	10	0	10	10
Muyinga	Giteranyi	Rukusha	61	0	0	10	0	0	0	0	5	5	5
Cankuzo	Cankuzo	Musenyi	61	0	10	0	0	0	0	10	5	5	0
Makamba	Nyanza-Lac	Kazirabageni	61	10	10	0	10	10	0	10	5	10	10
Rutana	Rutana	Gasakuza	61	10	10	10	0	10	0	10	0	0	5
Ruyigi	Kinyinya	Kigangabuko	61	0	0	0	0	10	0	10	0	0	0
Muyinga	Muyinga	Kinyota	61	0	0	0	0	10	0	10	0	0	0
Makamba	Makamba	Makamba I	61	0	0	0	10	10	0	10	0	10	0
Makamba	Kayogoro	Nyantakara	60	0	0	0	10	10	0	10	5	10	10
Kirundo	Gitobe	Kivumu	60	0	0	10	0	0	0	10	10	0	10
Cankuzo	Mishiha	Rutsindu	60	10	10	10	10	10	10	10	10	10	10
Ruyigi	Nyabitsinda	Nyagitika	60	0	10	0	10	10	0	10	0	10	10

7.5 Table of SI scores and indicator scores (continued)

Province	Commune	Hill	SI Score	Market situation	Setting up adaptation mechanisms to increase community resilience	Access to market	Scarcity of water	Frequency of land disputes	Access to healthcare	Coverage of the minimum care package by health facilities	Proximity of CCRRCs	Frequency of theft incidents	Frequency of witchcraft suspicion cases
Ruyigi	Gisuru	Nyabitare	60	0	10	10	10	0	0	10	10	10	10
Rumonge	Muhuta	Gabaniro	60	10	10	0	0	10	0	10	5	10	10
Kirundo	Ntega	Sasa	60	0	0	10	0	10	0	0	0	10	5
Kirundo	Bugabira	Kiri	60	10	0	10	0	10	0	10	0	10	5
Makamba	Nyanza-Lac	Buheka	60	0	0	10	0	0	0	0	0	0	0
Rutana	Mpinga-Kayove	Buranga	60	0	0	10	0	10	0	0	0	10	10
Rutana	Giharo	Muzye	60	0	0	10	0	10	0	10	0	10	5
Kirundo	Ntega	Ntega	60	0	10	0	0	10	10	0	10	5	5
Rutana	Bukemba	Rubanga	59	0	10	0	10	10	0	0	0	10	10
Makamba	Nyanza-Lac	Ruvyagira	59	0	10	0	10	0	10	0	0	10	10
Kirundo	Bwambarangwe	Mukenke I	59	0	10	0	10	10	10	10	0	5	10
Makamba	Nyanza-Lac	Nyabigina	59	0	10	0	10	0	0	0	0	10	10
Cankuzo	Cendajuru	Rukoyoyo	59	0	0	0	0	0	0	10	0	0	0
Ruyigi	Nyabitsinda	Bihembe	59	10	10	10	0	10	0	10	0	10	10
Kirundo	Vumbi	Gasura	59	0	0	10	0	0	0	10	10	10	10
Cankuzo	Cankuzo	Kabuga	59	10	10	10	10	10	0	10	5	10	10
Makamba	Makamba	Ruremba	59	10	0	0	0	0	0	10	0	10	0
Muyinga	Gashoho	Muzingi	59	10	10	10	0	0	10	10	0	0	0
Ruyigi	Kinyinya	Karindo	59	0	0	10	0	10	0	10	10	10	10
Muyinga	Gasorwe	Karira	59	0	10	0	0	10	0	10	5	10	10
Muyinga	Giteranyi	Mugano	59	0	10	10	0	0	10	0	5	10	5
Ruyigi	Bweru	Rubavu	59	10	10	10	0	10	0	0	10	10	10
Kirundo	Ntega	Rushubije	59	10	10	10	0	0	10	10	5	10	10
Ruyigi	Butaganzwa	Batye	58	10	10	0	0	0	10	0	10	10	10
Cibitoke	Rugombo	Mparambo I	58	10	0	10	0	0	0	0	0	0	0
Ruyigi	Nyabitsinda	Kirungu	58	0	0	0	0	0	0	0	0	10	10
Makamba	Kibago	Bukeye	58	0	0	0	10	10	0	10	0	10	5
Rutana	Bukemba	Butare	58	0	10	10	10	0	10	10	0	0	10
Rutana	Gitanga	Kinzanza	58	0	10	0	10	10	0	10	0	10	10
Makamba	Kayogoro	Gatabo	58	0	10	10	10	0	0	10	0	0	0
Rutana	Gitanga	Nyagisambwe	57	0	0	10	0	0	0	10	0	5	5
Rumonge	Rumonge	Kagongo	57	0	0	0	0	0	0	0	0	0	0
Muyinga	Gasorwe	Gasuru	57	0	0	0	0	0	0	0	0	5	0
Ruyigi	Bweru	Ruvyagira	57	10	0	10	0	0	10	10	0	10	10
Rutana	Rutana	Musenyi	57	0	10	0	0	10	0	10	5	10	5
Kirundo	Ntega	Nyemera	57	0	0	10	0	10	10	10	0	10	10
Kirundo	Bugabira	Nyabikenke	57	10	0	0	0	10	10	10	0	0	0
Ruyigi	Gisuru	Gisuru	57	10	0	0	10	10	10	10	5	10	10
Cibitoke	Rugombo	Rukanaii	57	0	0	0	0	0	0	0	0	10	10
Cankuzo	Kigamba	Humure I	57	0	0	0	0	0	0	0	0	10	10
Kirundo	Busoni	Gisenyi	57	10	0	0	10	0	0	10	0	10	10
Ruyigi	Gisuru	Kigamba	56	0	10	0	10	0	0	10	0	10	5
Muyinga	Giteranyi	Gasenyi	56	10	0	10	10	0	0	0	0	10	10
Makamba	Nyanza-Lac	Mukimba	56	0	0	0	0	0	0	0	0	10	0
Muyinga	Gasorwe	Higiro	56	0	10	0	10	0	0	0	0	10	0
Muyinga	Buhinyuza	Jarama	56	0	10	0	0	0	10	10	5	0	0
Cankuzo	Cendajuru	Misugi	56	0	0	0	0	0	0	0	0	5	10
Muyinga	Giteranyi	Kijumbura	56	0	10	10	10	0	10	10	5	5	5
Muyinga	Giteranyi	Kabogo	56	0	10	0	0	0	10	10	0	0	0
Rutana	Giharo	Shembe	56	0	10	10	10	10	10	10	0	10	10
Ruyigi	Ruyigi	Sanzu	55	10	0	0	10	0	0	10	10	10	5
Kirundo	Busoni	Gatare	55	0	0	10	0	0	0	10	0	10	10
Cankuzo	Mishiha	Mishiha	55	0	0	10	10	0	0	10	10	10	10
Cankuzo	Cankuzo	Kavumu	55	10	0	0	10	0	0	10	10	10	10
Rutana	Mpinga-Kayove	Nyakazu	55	10	0	0	10	0	0	10	10	10	10
Kirundo	Gitobe	Nyenzi	55	0	10	0	0	0	0	10	0	0	10
Rumonge	Buyengero	Mudende	55	10	10	10	0	0	10	10	5	5	5
Ruyigi	Butaganzwa	Muriza	55	10	10	10	0	0	10	10	10	0	0
Kirundo	Kirundo	Runanira I&II	55	10	0	0	0	0	0	10	0	0	5
Muyinga	Giteranyi	Giteranyi	55	0	0	0	0	10	0	10	0	10	0
Ruyigi	Kinyinya	Nyamunazi	55	0	0	10	10	10	0	10	0	10	0
Ruyigi	Bweru	Gasenyi	55	0	0	0	10	10	0	10	0	10	0
Makamba	Kayogoro	Buga	55	0	0	0	10	0	0	10	10	10	10
Kirundo	Kirundo	Kanyinya	55	0	10	0	0	0	10	0	0	10	0
Cankuzo	Cendajuru	Kibande	54	10	0	0	10	0	0	10	0	10	10
Rumonge	Rumonge	Minago	54	0	10	0	0	0	0	10	0	5	0
Kirundo	Gitobe	Bigombo	54	10	0	0	10	10	0	10	0	5	5
Cibitoke	Mugina	Rubirizi	54	10	10	0	0	10	0	10	10	5	10
Muyinga	Gashoho	Nkohwa	54	0	0	10	0	0	0	10	0	0	0

7.5 Table of SI scores and indicator scores (continued)

Province	Commune	Hill	SI Score	Market situation	Setting up adaptation mechanisms to increase community resilience	Access to market	Scarcity of water	Frequency of land disputes	Access to healthcare	Coverage of the minimum care package by health facilities	Proximity of CCRRCs	Frequency of theft incidents	Frequency of witchcraft suspicion cases
Rumonge	Muhuta	Mubone	54	0	10	0	0	0	10	10	0	0	0
Rutana	Musongati	Kagunga	54	0	0	0	0	10	0	10	0	0	5
Rutana	Mpinga-Kayove	Nyakabanda	54	10	10	0	10	10	0	10	10	0	0
Cankuzo	Cendajuru	Gisoro	54	10	10	0	0	10	0	0	10	10	10
Muyinga	Giteranyi	Mukoni	54	10	0	0	0	10	10	0	0	10	10
Rutana	Giharo	Butezi	54	10	0	10	0	10	0	0	10	10	10
Ruyigi	Bweru	Caga	54	0	0	0	0	10	0	10	0	10	10
Rumonge	Rumonge	Kizuka	54	0	10	0	10	10	10	10	10	0	10
Ruyigi	Kinyinya	Kinyinya	54	10	10	0	10	10	10	10	10	10	10
Cankuzo	Gisagara	Camazi	54	10	10	0	10	10	0	10	0	10	10
Ruyigi	Butaganzwa	Rubambagire	54	0	10	10	0	0	0	10	0	5	5
Rumonge	Bugarama	Magara	53	10	0	0	0	10	10	0	10	5	0
Cibitoke	Rugombo	Cibitoke	53	0	10	0	0	0	10	0	10	5	10
Kirundo	Kirundo	Murama	53	10	10	0	0	0	0	10	0	10	0
Ruyigi	Gisuru	Butarangira	53	10	10	10	0	0	0	10	5	0	10
Muyinga	Muyinga	Mukoni	53	10	10	0	0	0	0	10	10	10	5
Kirundo	Vumbi	Vumbi	53	10	10	10	10	0	10	0	10	10	10
Ruyigi	Nyabitsinda	Nyarumuri	53	10	0	10	0	0	10	10	10	10	10
Kirundo	Kirundo	Kavomo	53	0	10	0	10	10	0	10	0	10	10
Ruyigi	Bweru	Busoro	53	0	0	0	10	10	0	0	0	10	10
Kirundo	Busoni	Nyagisozi	53	10	10	0	0	10	0	10	10	10	10
Ruyigi	Kinyinya	Vumwe	53	0	0	0	0	0	0	0	0	10	5
Kirundo	Busoni	Marembo	53	0	0	10	0	0	0	10	0	0	10
Ruyigi	Gisuru	Rusange	53	10	0	10	0	0	0	10	0	10	10
Ruyigi	Kinyinya	Nyamusasa	53	0	0	10	10	0	10	10	10	10	10
Ruyigi	Butaganzwa	Rugata	53	10	10	10	0	10	0	10	0	0	10
Ruyigi	Butezi	Rubaragaza	53	0	0	10	0	10	10	10	0	10	5
Rumonge	Rumonge	Gashasha	53	10	10	10	0	10	10	10	0	10	10
Rutana	Bukemba	Bukemba	53	0	0	0	0	0	10	10	0	0	10
Kirundo	Kirundo	Yaranda	53	10	0	10	0	0	0	0	0	5	10
Muyinga	Giteranyi	Gakoni	52	0	10	10	10	0	0	10	0	10	10
Kirundo	Bugabira	Rubuga	52	0	10	10	0	0	0	0	0	10	10
Rutana	Gitanga	Nyamabuye	52	10	0	0	10	0	0	10	0	10	10
Rumonge	Muhuta	Gitaza	52	10	10	0	10	0	0	10	10	10	10
Makamba	Vugizo	Gitaba	52	10	0	0	0	0	0	0	10	10	10
Ruyigi	Kinyinya	Ruveri	52	10	10	0	0	0	10	10	0	10	0
Cibitoke	Rugombo	Mparambo I	52	10	10	10	10	0	10	10	0	5	5
Makamba	Kayogoro	Mugeni	52	0	10	0	10	0	10	10	5	10	10
Rutana	Rutana	Butambara	52	10	10	10	10	0	0	0	5	10	10
Makamba	Nyanza-Lac	Mukubano	52	0	10	0	0	0	0	10	10	0	0
Rutana	Bukemba	Gihofi	52	10	10	10	10	0	0	10	0	10	10
Rumonge	Rumonge	Gihwanya	52	10	0	0	0	10	10	10	0	10	10
Kirundo	Ntega	Mihigo	51	0	0	10	0	10	0	10	0	0	0
Cibitoke	Buganda	Ndava-Village	51	0	0	0	0	10	0	10	0	10	10
Muyinga	Giteranyi	Tura	51	0	0	0	0	0	0	10	0	10	0
Cankuzo	Kigamba	Rusagara	51	0	0	0	0	0	0	10	0	0	0
Kirundo	Bugabira	Kiyonza	51	10	10	10	10	10	0	0	5	10	10
Ruyigi	Ruyigi	Nyagutoha	51	10	10	10	10	0	10	0	0	10	10
Cankuzo	Cendajuru	Gitaramuka	51	0	10	0	10	0	0	10	10	10	10
Cibitoke	Buganda	Nyamitanga	51	0	10	0	10	0	0	10	10	10	10
Cibitoke	Murwi	Mugimbu	51	0	10	0	0	0	10	10	10	10	10
Kirundo	Bwambarangwe	Buhoro	51	10	10	10	0	0	10	10	10	10	0
Ruyigi	Butaganzwa	Rugongo	51	0	0	0	0	0	10	0	10	10	0
Ruyigi	Gisuru	Musha	50	0	0	0	0	0	10	0	5	10	5
Cibitoke	Buganda	Kaburantwa	50	0	10	0	10	10	0	10	5	10	0
Ruyigi	Ruyigi	Kigamba	50	10	10	10	10	0	0	10	10	0	0
Makamba	Nyanza-Lac	Mukungu	50	0	10	10	10	0	10	10	0	0	0
Makamba	Nyanza-Lac	Kabo	50	10	0	0	10	10	0	0	0	10	10
Makamba	Nyanza-Lac	Muyange	50	10	0	0	10	10	0	0	0	10	10
Cankuzo	Gisagara	Nyuro	50	10	10	0	10	10	0	0	0	10	10
Kirundo	Vumbi	Rugeri	50	10	0	0	0	0	10	0	0	10	10
Rumonge	Bugarama	Magara II	50	0	0	10	10	0	10	10	5	10	0
Muyinga	Mwakiro	Bonero	50	10	0	0	0	0	0	10	0	10	10
Cankuzo	Cendajuru	Twinkwavu	50	0	0	0	0	0	0	10	0	10	5
Makamba	Vugizo	Karonge	50	0	0	0	10	0	0	10	0	10	5
Kirundo	Ntega	Kinyovu	50	10	0	10	10	0	0	10	0	10	10
Rutana	Giharo	Nkurye	49	10	0	0	0	10	10	10	0	10	10
Rutana	Giharo	Nkanka	49	10	10	0	0	0	10	10	10	10	0
Rutana	Giharo	Kabingo	49	10	10	0	10	0	0	0	5	10	10
Rutana	Giharo	Musenyi	49	0	0	10	10	0	10	10	0	10	10
Rumonge	Buyengero	Kinama	49	10	0	10	0	0	0	10	0	10	10

7.5 Table of SI scores and indicator scores (continued)

Province	Commune	Hill	SI Score	Market situation	Setting up adaptation mechanisms to increase community resilience	Access to market	Scarcity of water	Frequency of land disputes	Access to healthcare	Coverage of the minimum care package by health facilities	Proximity of CCRRCs	Frequency of theft incidents	Frequency of witchcraft suspicion cases
Cibitoke	Murwi	Ngoma	49	10	0	10	0	0	0	10	0	10	10
Kirundo	Bugabira	Nyakarama	49	10	0	0	0	0	0	10	0	10	10
Kirundo	Busoni	Kagege	49	0	0	10	0	0	0	10	0	10	10
Rumonge	Burambi	Gatobo	48	0	0	0	0	0	0	10	0	10	10
Kirundo	Kirundo	Muramba	48	10	10	10	10	0	0	10	0	0	5
Cibitoke	Buganda	Ruhagarika	48	0	0	0	0	0	0	10	0	10	10
Ruyigi	Kinyinya	Nyakibere	48	0	10	0	0	0	0	0	10	10	5
Muyinga	Giteranyi	Mika	48	0	0	10	0	10	0	0	0	0	5
Ruyigi	Butezi	Senga	48	10	10	10	10	0	0	0	5	5	5
Muyinga	Mwakiro	Mwakiro	48	0	0	10	10	0	0	0	0	10	0
Kirundo	Vumbi	Kavumu	48	10	10	10	10	0	0	0	0	10	0
Rumonge	Muhuta	Gasange	48	0	0	0	0	0	0	10	0	10	10
Kirundo	Kirundo	Cewe	48	10	10	0	10	0	0	10	0	10	10
Ruyigi	Gisuru	Mwegereza	48	0	10	10	0	0	0	10	10	5	10
Cibitoke	Rugombo	Samwe	48	0	0	0	0	0	10	10	5	10	5
Muyinga	Butihinda	Rabiro	48	0	0	0	0	0	0	10	5	10	5
Makamba	Kayogoro	Kigomagoma	48	10	10	10	0	0	0	10	5	10	10
Rumonge	Bugarama	Mugendo	48	0	10	10	0	0	10	10	0	10	10
Muyinga	Butihinda	Buhorana	48	0	0	0	0	0	0	10	0	10	10
Rumonge	Rumonge	Mugomere	48	10	0	10	0	0	0	0	0	10	10
Ruyigi	Ruyigi	Nyarunazi	48	10	0	10	0	0	0	0	0	10	10
Kirundo	Busoni	Murore	47	10	0	10	0	0	0	10	0	0	10
Muyinga	Mwakiro	Gahekenya	47	0	0	10	0	10	0	10	0	0	10
Ruyigi	Nyabitsinda	Nyabitsinda	47	0	0	10	0	0	0	10	10	10	10
Muyinga	Giteranyi	Karugunda	47	0	0	0	0	0	0	10	0	0	10
Rumonge	Burambi	Buhinyuza	47	10	0	0	0	0	0	0	0	0	10
Muyinga	Muyinga	Murama	47	10	0	10	10	0	0	10	0	10	10
Cankuzo	Gisagara	Muganza	47	0	0	0	0	10	10	10	0	0	5
Kirundo	Busoni	Burara	47	10	10	10	0	10	10	0	5	5	5
Muyinga	Buhinyuza	Ruvumu	47	0	10	10	0	10	10	0	5	0	10
Muyinga	Giteranyi	Rumandari	47	0	10	0	0	10	10	10	5	10	5
Cankuzo	Kigamba	Rujungu	47	10	0	10	0	0	0	10	10	10	5
Muyinga	Muyinga	Rugari	47	0	10	0	0	0	0	0	5	5	5
Kirundo	Vumbi	Gahe	47	0	10	10	0	0	0	10	5	0	5
Kirundo	Busoni	Rutabo	47	10	0	0	0	0	0	10	5	10	5
Makamba	Kibago	Murambi	47	0	10	0	10	10	10	0	0	10	10
Ruyigi	Kinyinya	Bugongo	47	0	10	0	10	0	10	10	0	0	10
Cibitoke	Rugombo	Kagazi	47	0	0	0	10	10	0	10	0	10	5
Makamba	Kibago	Nyakazi	47	10	0	10	10	10	0	0	0	10	10
Makamba	Vugizo	Nyarubano	46	10	0	0	0	10	10	0	0	10	10
Makamba	Nyanza-Lac	Gisenga	46	10	0	0	10	10	10	0	0	0	10
Kirundo	Bugabira	Kigoma	46	0	10	10	0	0	10	0	10	5	5
Muyinga	Giteranyi	Vumasi	46	0	10	0	10	10	10	10	0	0	10
Cibitoke	Buganda	Kansega	46	0	0	10	10	0	0	0	0	10	10
Kirundo	Gitobe	Gihinga	46	0	10	0	10	0	10	10	0	10	10
Makamba	Nyanza-Lac	Nyabutare	46	0	10	0	0	0	0	10	0	5	5
Kirundo	Vumbi	Gashingwa	46	0	0	0	0	10	0	10	0	10	10
Makamba	Nyanza-Lac	Mugerama	46	0	0	0	10	0	10	10	0	10	0
Ruyigi	Ruyigi	Bugarama	46	10	10	0	0	0	10	0	5	10	10
Cibitoke	Buganda	Gasenyi-Rural	46	0	10	0	10	0	10	10	0	10	10
Muyinga	Giteranyi	Shoza	46	0	10	0	10	0	10	10	0	10	5
Ruyigi	Butezi	Mubira	46	10	0	0	10	0	0	10	0	5	0
Kirundo	Bwambarangwe	Bunywera	46	10	10	0	0	0	0	0	10	10	10
Ruyigi	Butezi	Kirasira	45	10	0	10	10	10	0	10	0	10	10
Cankuzo	Mishiha	Munzenze	45	10	0	10	10	10	10	10	0	10	10
Ruyigi	Bweru	Kirambi	45	10	0	0	10	10	0	10	0	10	10
Rutana	Giharo	Gakungu	45	10	0	0	10	10	10	10	0	10	5
Muyinga	Mwakiro	Rukanya	45	10	0	0	0	0	0	10	0	0	0
Makamba	Nyanza-Lac	Kabondo	45	10	0	0	10	0	10	10	0	10	10
Muyinga	Butihinda	Kavumu	45	10	10	0	10	10	0	10	5	10	10
Muyinga	Muyinga	Sanzwe	45	10	10	0	0	10	0	10	0	0	10
Kirundo	Busoni	Kibonde	45	0	10	0	10	10	10	10	0	10	10
Muyinga	Giteranyi	Nonwe	45	10	10	10	10	0	0	10	5	0	10
Kirundo	Busoni	Sigu	45	0	10	10	10	0	0	0	0	10	10
Makamba	Nyanza-Lac	Rubindi	45	0	10	10	10	10	0	10	5	10	10
Kirundo	Bwambarangwe	Ruyenzi	45	0	10	0	0	10	0	10	0	10	10
Muyinga	Giteranyi	Kidasha	45	0	0	0	10	10	0	10	5	10	0
Makamba	Kayogoro	Mugeregere	44	10	0	0	0	10	0	10	0	10	10
Kirundo	Busoni	Gatete	44	10	0	0	0	10	0	10	0	10	10
Kirundo	Ntega	Buringanire	44	10	0	0	0	10	0	10	0	10	10
Ruyigi	Gisuru	Kinama	44	10	0	0	0	10	0	10	0	10	10
Kirundo	Bugabira	Rugasa	44	10	0	0	0	10	0	10	0	10	10
Muyinga	Giteranyi	Rusenyi	44	10	10	10	10	0	0	10	10	0	10
Kirundo	Busoni	Rwibikara	44	10	0	10	0	0	10	10	0	0	10
Cibitoke	Buganda	Nimba	44	10	10	0	0	0	0	10	10	10	10
Muyinga	Muyinga	Musenyi	44	10	10	0	0	0	10	10	10	5	5
Ruyigi	Bweru	Busuma	44	10	10	10	10	10	0	0	10	10	10
Makamba	Kibago	Rubimba	44	0	0	0	0	0	0	10	0	0	5
Kirundo	Vumbi	Nyagatovu	43	0	0	0	10	0	0	0	0	10	5

7.5 Table of SI scores and indicator scores (continued)

Province	Commune	Hill	SI Score	Market situation	Setting up adaptation mechanisms to increase community resilience	Access to market	Scarcity of water	Frequency of land disputes	Access to healthcare	Coverage of the minimum care package by health facilities	Proximity of CCRRCs	Frequency of theft incidents	Frequency of witchcraft suspicion cases
Rutana	Giharo	Nyabakara	43	10	10	0	0	0	10	0	10	10	10
Cankuzo	Gisagara	Gisoko	43	10	10	0	0	10	10	0	0	10	10
Makamba	Nyanza-Lac	Kiderege	43	10	10	10	0	0	0	0	10	10	10
Kirundo	Busoni	Kumana	43	10	10	0	0	0	10	0	10	10	10
Rutana	Giharo	Giharo	43	10	10	0	0	10	0	0	10	10	10
Cibitoke	Rugombo	Munyika II	43	10	10	0	0	0	10	0	10	10	10
Kirundo	Kirundo	Ceru	43	0	10	0	0	10	0	0	0	10	10
Ruyigi	Ruyigi	Ruyigi Rural	43	10	10	10	0	0	0	10	5	5	0
Kirundo	Gitobe	Shore	43	10	0	10	0	10	10	10	0	0	10
Rumonge	Rumonge	Rutumo	43	0	0	0	10	10	10	10	0	10	10
Ruyigi	Gisuru	Kabuyenge	43	10	10	10	10	0	10	10	0	10	10
Kirundo	Bugabira	Ruhehe	43	10	10	10	10	10	10	0	0	0	10
Cankuzo	Mishiha	Kaniha	43	0	0	0	0	0	0	0	0	5	10
Muyinga	Muyinga	Munagano	42	10	0	0	0	0	0	10	0	5	0
Ruyigi	Gisuru	Ndemeka	42	0	0	10	0	0	0	10	0	0	0
Muyinga	Muyinga	Gasasa	42	0	0	10	0	0	0	10	0	5	0
Rumonge	Rumonge	Muturirwa	42	0	0	10	0	0	0	10	5	0	0
Muyinga	Buhinyuza	Karehe	42	10	0	10	10	0	0	10	0	10	10
Muyinga	Muyinga	Kinazi	42	0	0	0	10	0	0	10	0	10	10
Ruyigi	Ruyigi	Kirambi	42	0	0	0	10	0	0	10	10	0	10
Rumonge	Rumonge	Mibanda	42	0	0	0	0	0	0	10	10	0	10
Ruyigi	Butezi	Rugoti	41	10	0	10	0	0	0	10	0	10	10
Rutana	Giharo	Nyamateke	41	0	10	0	10	10	10	10	10	5	5
Makamba	Nyanza-Lac	Mugumure	41	0	10	10	10	10	0	10	10	10	5
Rumonge	Rumonge	Gatete	41	0	10	10	10	10	10	0	10	0	5
Makamba	Mabanda	Musenyi	41	0	10	10	10	10	0	10	10	5	5
Ruyigi	Butaganzwa	Nyange	41	0	0	0	10	10	0	10	5	5	5
Cankuzo	Gisagara	Mburi	41	10	10	10	0	10	10	10	5	10	0
Makamba	Nyanza-Lac	Mvugo	41	10	0	0	0	0	0	0	0	10	5
Kirundo	Busoni	Ruheha	41	10	0	10	0	10	0	0	5	10	0
Kirundo	Busoni	Nyabisindu	41	10	0	0	0	0	0	0	0	10	10
Cankuzo	Gisagara	Bumba	40	10	0	0	10	10	10	0	0	10	10
Makamba	Nyanza-Lac	Mwimbiro	40	10	10	10	10	10	0	0	0	10	0
Rumonge	Rumonge	Mwange	40	10	0	10	10	10	0	10	5	0	5
Ruyigi	Ruyigi	Gasanda	40	0	10	0	10	0	10	10	10	10	10
Cibitoke	Murwi	Manege	40	10	10	10	10	0	10	10	10	10	0
Makamba	Nyanza-Lac	Bukeye	40	10	0	10	10	0	0	10	0	10	0
Muyinga	Giteranyi	Murama	40	10	0	10	10	0	0	10	0	0	10
Muyinga	Buhinyuza	Gasave	40	10	0	0	10	0	0	10	10	10	5
Makamba	Kibago	Nyarubanga	40	10	0	10	10	0	10	10	0	10	0
Rumonge	Rumonge	Mutambara	40	10	0	0	10	0	0	10	0	0	0
Cibitoke	Rugombo	Rugeregere	40	10	0	10	10	10	10	10	5	10	0
Ruyigi	Butaganzwa	Biyorwa	40	10	10	10	10	10	10	10	10	10	10
Ruyigi	Butezi	Gashurushuru	39	10	10	0	0	0	10	10	10	5	5
Muyinga	Giteranyi	Rugese	39	0	10	10	0	0	0	0	0	0	0
Kirundo	Busoni	Munazi	39	10	0	0	0	0	0	10	5	5	10
Rumonge	Burambi	Gitongwe	39	0	0	10	0	0	0	10	0	10	10
Makamba	Nyanza-Lac	Mukerezi	39	10	0	0	0	0	0	0	0	5	5
Ruyigi	Butezi	Nkongwe	38	10	0	10	0	0	10	10	0	10	10
Kirundo	Bugabira	Kigina	38	10	10	0	0	0	0	0	5	10	5
Cankuzo	Gisagara	Bunyerere	38	0	10	10	0	0	10	10	0	0	0
Ruyigi	Gisuru	Rukobe	38	10	10	10	10	10	0	10	0	10	10
Ruyigi	Gisuru	Munyinya	38	0	10	10	10	0	10	10	5	10	5
Ruyigi	Gisuru	Kinanira	38	0	10	0	10	0	0	10	0	5	10
Rumonge	Buyengero	Kirama	38	0	10	0	10	0	0	10	0	0	0
Makamba	Mabanda	Karinzi	37	0	10	0	10	0	0	10	0	0	5
Kirundo	Bwambarangwe	Budahunga	37	0	0	0	10	10	0	10	0	5	10
Ruyigi	Gisuru	Gacokwe	37	10	10	0	10	0	0	0	10	5	5
Muyinga	Muyinga	Mwurire	36	0	10	0	10	0	0	0	5	10	0
Ruyigi	Gisuru	Kireka	35	10	0	0	10	0	10	10	5	10	5
Kirundo	Bwambarangwe	Rusara	35	0	0	10	0	0	0	10	5	10	10
Cibitoke	Murwi	Masha	34	10	0	10	0	0	10	0	0	10	10
Makamba	Kayogoro	Buhema	34	10	10	0	0	0	0	10	5	10	10
Kirundo	Bugabira	Gaturanda	33	10	0	0	0	0	0	10	5	10	0
Rutana	Giharo	Murara	33	10	0	0	0	10	10	10	0	10	5
Ruyigi	Butaganzwa	Mugege	32	0	0	10	10	10	10	0	0	10	5
Muyinga	Buhinyuza	Nyarunazi	30	10	0	0	0	10	0	10	0	10	10
Kirundo	Ntega	Gisitwe	29	10	0	0	0	10	10	10	10	10	10
Kirundo	Busoni	Kivo	29	0	0	10	0	0	0	10	10	5	5
Ruyigi	Gisuru	Nyarumanga	27	10	10	10	0	10	10	0	0	5	5
Muyinga	Buhinyuza	Gitaramuka	26	10	0	0	0	10	0	10	0	5	5
Ruyigi	Gisuru	Nyabitaka	23	10	10	10	0	0	0	0	0	5	5
Muyinga	Buhinyuza	Buhinyuza	20	10	10	0	0	0	0	0	0	10	10
Ruyigi	Gisuru	Muvumu	19	0	10	10	0	0	0	10	10	0	5

7.6 Survey Indicators

ANCHORING QUESTIONS: PERCEPTION OF STABILITY

These key indicators were used to measure the perception of stability in each locality. The key indicators were then tested against each of the following thematic indicators to identify the most influential thematic indicators on the perception of stability.

Ability to continue living on the hill

If the people on the hill feel they have to leave in the next six months

Changes in perception of resilience in the last 6 months

Community perception of changes in resilience to weather-related hazards than six months ago

Changes in perceived access to services in the last 6 months

Community perception of the evolution of access to services than six months ago

Changes in the perception of social cohesion in the last 6 months

Community perception of the evolution of social cohesion than six months ago

SCALE 1: LIVELIHOODS AND ACCESS TO BASIC SERVICES

Access to quality housing

Proportion of households with access to a permanent shelter

Level of housing destruction

Proportion of dwellings destroyed due to weather-related hazards in the last 2 years

Availability of health facilities

Existence of a health structure on the hill or on a neighbouring hill

Access to health facilities

If community members who needed treatment in the last six months were able to do so

Access to the minimum package of care provided at the health centre

If health centres are able to deliver the curative and preventive healthcare required at their level

Access to the health insurance card

Capacity of households to obtain health insurance cards

Access to safe drinking water

Access to drinking water and availability on the hill

Access to basic schooling

Access to basic education and availability of schools on the hill or nearby

Access to the market

If markets exist nearby

Market situation

If markets are regularly supplied

Access to electricity

Proportion of the community that have access to electricity in their households.

Ownership of agricultural land

Proportion of households with access to arable land.

Access of returnees and IDPs to arable land

If returnees and IDPs have access to arable land like members of the host community

Access to the fishing area

Existence and accessibility of fishing areas in the hill

Access to the phone network

Access to the telephone network on the hill

Access to civil status services

If civil registry services are available and provide satisfactory services

7.6 Survey Indicators (continued)

SCALE 1: LIVELIHOODS AND ACCESS TO BASIC SERVICES

Access to judicial proceedings

If the judicial bodies are available and provide satisfactory services

Access to land registration

Proportion of the community who have registered their land with the communal land services

Accessibility and effectiveness of conflict resolution mechanisms

If conflict resolution mechanisms in the community are effective

Access to civil status documents

Level of possession by community members of civil status documents (identity card, marriage certificate, birth certificate, etc.)

SCALE 2: SOCIAL COHESION

Illegal occupation of a house, land and property

Illegally occupied land, housing or property (without permission from family, neighbours, local authorities)

Frequency of land disputes

Illegally occupied land, housing or property (without permission from family, neighbours, local authorities)

Theft of personal belongings

Vol d'effets personnels et bétail signalés dans la colline au cours des 6 derniers mois

Frequency of witchcraft suspicion cases

Recurrence of cases where community members believe they have been bewitched by their neighbors

Level of mutual aid and cooperation

Level of cooperation between neighbours in case of problems (such as water or food supply) in the locality

Dispute between returnees or IDPs and the host community

Disputes involving returnees or IDPs against the host community or vice versa

Clashes involving different social groups (religious, political)

Incidents or clashes involving two groups (religious, IDPs/returnees/host communities) on the hill

Participation in public affairs (associations, political parties, cooperatives, religious groups, etc.)

Level of participation in public and political affairs (political parties, cooperatives, associations, etc.)

Equitable access to services for all categories of the community (returnees, host community, IDPs)

People on the hill have equal access to basic services and resources, regardless of their age, gender or status (returnee, IDP, host community).

SCALE 3: LEVEL OF DAMAGE CAUSED BY WEATHER-RELATED HAZARDS DUE TO CLIMATE CHANGE

Level of damage to school infrastructures

Frequency with which schools are destroyed by weather-related hazards

Student access to school facilities

Do school children have easy access to schools

Level of market damage

Frequency with which markets are destroyed by weather-related hazards

Food scarcity due to weather-related hazards

Frequency of food shortages due to weather-related hazards

Proportion of agricultural land affected by weather-related hazards

If weather-related hazards destroy crops

Level of disruption of activities due to weather-related hazards

If daily activities (ploughing, selling, studying, etc.) have been disrupted by weather-related hazards

7.6 Survey Indicators (continued)

SCALE 3: LEVEL OF DAMAGE CAUSED BY WEATHER-RELATED HAZARDS DUE TO CLIMATE CHANGE (CONTINUED)

Level of resistance of the shelters

If the community feels that the household shelters are built in a sustainable way

Destruction of latrines due to weather-related hazards

Frequency with which latrines are destroyed by weather-related hazards

Level of damage of health infrastructure

Frequency with which the health infrastructure is destroyed by weather-related hazards

Access to health infrastructure

Do patients have easy access to health facilities

Proximity of disaster risk reduction committees

Are disaster risk reduction committees active and close to the community?

Participation in simulation exercises

Level of participation of community members in simulation exercises for natural hazard response preparedness

Knowledge of the early warning system

Are community members aware of the early warning system on the hill?

Knowledge of the community gathering place

Are community members aware of the agreed community gathering place on the hill

Participation in mitigation activities

Level of participation of community members in mitigation activities to cope with weather-related hazards

Knowledge of information sources on natural hazard preparedness and response

Level of community members' knowledge of information sources on natural hazard preparedness and response

Concern about the risk of insecurity due to weather-related hazards

If community members are concerned that weather-related hazards could cause insecurity

Concern about the risk of insecurity due to weather-related hazards

If community members are concerned that weather-related hazards could cause insecurity

Existence of local hazard preparedness policies

Existence of policies implemented at local level to prepare for climate hazards

Measures taken to increase community resilience through adaptation mechanisms

Measures taken to increase community resilience through adaptation mechanisms

Community dependence on the earth as a natural resource

Whether the need for arable land is met or whether there are alternatives to fill any shortfall

Community dependence on wood as a natural resource

Whether the need for cultivable wood is met or whether there are alternatives to fill a possible deficit

Community dependence on water as a natural resource

Whether water needs are being met or whether there are alternatives to meet a possible deficit

Biodegradable waste management policy

Ways of managing biodegradable household waste

Non-biodegradable waste management policy

Ways of managing non-biodegradable waste from households