

## INTRODUCTION

The Tillabéri region in the Southwestern Niger has been facing growing insecurity since 2016 with an escalation of VEO (Violent Extremism Organization) attacks against soldiers, state officials and local leaders. Thousands of people from several departments in the region, were forced to move to flee the threats, ultimatums, and abuses of non-state armed groups (NSAG), to the towns.

The department of Kollo, which is one of the 13 departments of Tillabéri, has not yet reached dangerously high levels of VEO activity or recruitment, albeit it has experienced episodes of insecurity in some communes since 2021. Conducting a stability survey at this stage is an opportunity to implement preventive measures before a resurgence of VEO activities.

Therefore, the stability index in the department of Kollo will provide correct information not only to protect the lives and livelihoods of its citizens, but also to secure an essential economic route to the capital Niamey.

The Stability Index aims to determine the factors that influence the state of stability of a place, which can inform priority programmatic interventions along the humanitarian, peace, and development nexus, in order to build resilience and stability and prevent future forced displacements

This report presents the results of the stability index assessments in Kollo, in the Tillabéri region.

## 1. METHODOLOGY

The **Stability Index** combines 35 key indicators of stability to estimate a single Stability Score for each surveyed locality. These indicators relate to three key themes crucial to stability: **safety and security, livelihoods and basic services, and social cohesion**. Indicators for each of these themes are grouped to create sub-indexes to facilitate the comparison of localities by theme. (see *Appendix for further information on the indicators included in this analysis*).

These indicators, taken in aggregate, highlight areas that are conducive to durable solutions for internal displacement. Three “anchor questions” about the perception of stability in the community (feeling of stability, future intentions of the community, trends of the situation) are used to validate the relationship between the Stability Score and community sentiment. (see *Appendix for further information about how anchor questions are used for index validation*).

The Stability Index uses Principal Component Analysis to assess the impact of each indicator on the variability in the data. (see *Appendix for further information on Stability Index calculations*). The Stability Index and sub-indexes index range from 0 (poor conditions for stability) to 100 (good conditions for stability).

### 1.1 Data collection overview

The Stability Index includes data collected through interviews with key informants at the local level in the department of Kollo, in settings affected by displacement and instability. Key informants, including mayors, community leaders, and aid workers were interviewed in each location by enumerators in August 2022.

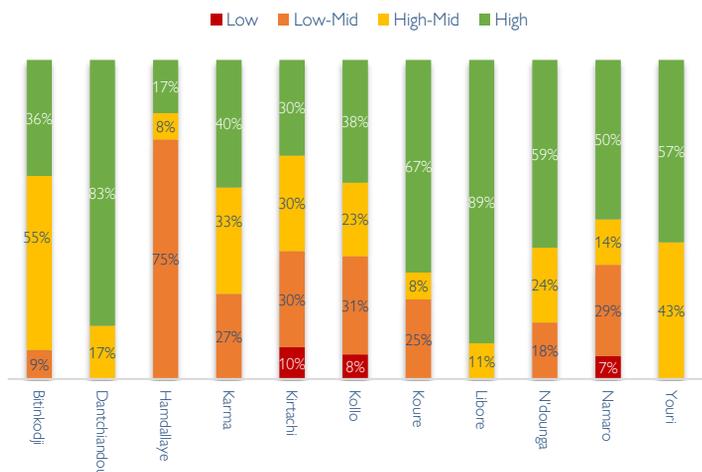
The key informant method has the advantage of rapidly collecting information on a large number of localities. Several key informants were interviewed in each locality, allowing IOM to cross-validate the information. However, the main limitation of this data collection methodology lies in the fact that only a few informants report the opinion of the entire locality.

A total of **133 localities** were surveyed in the department of Kollo. Data collection locations were selected through a mapping exercise to identify accessible areas as well as areas where displaced people are located. (see *Appendix for further information on the locality selection process*).

Number of Localities Surveyed per Commune

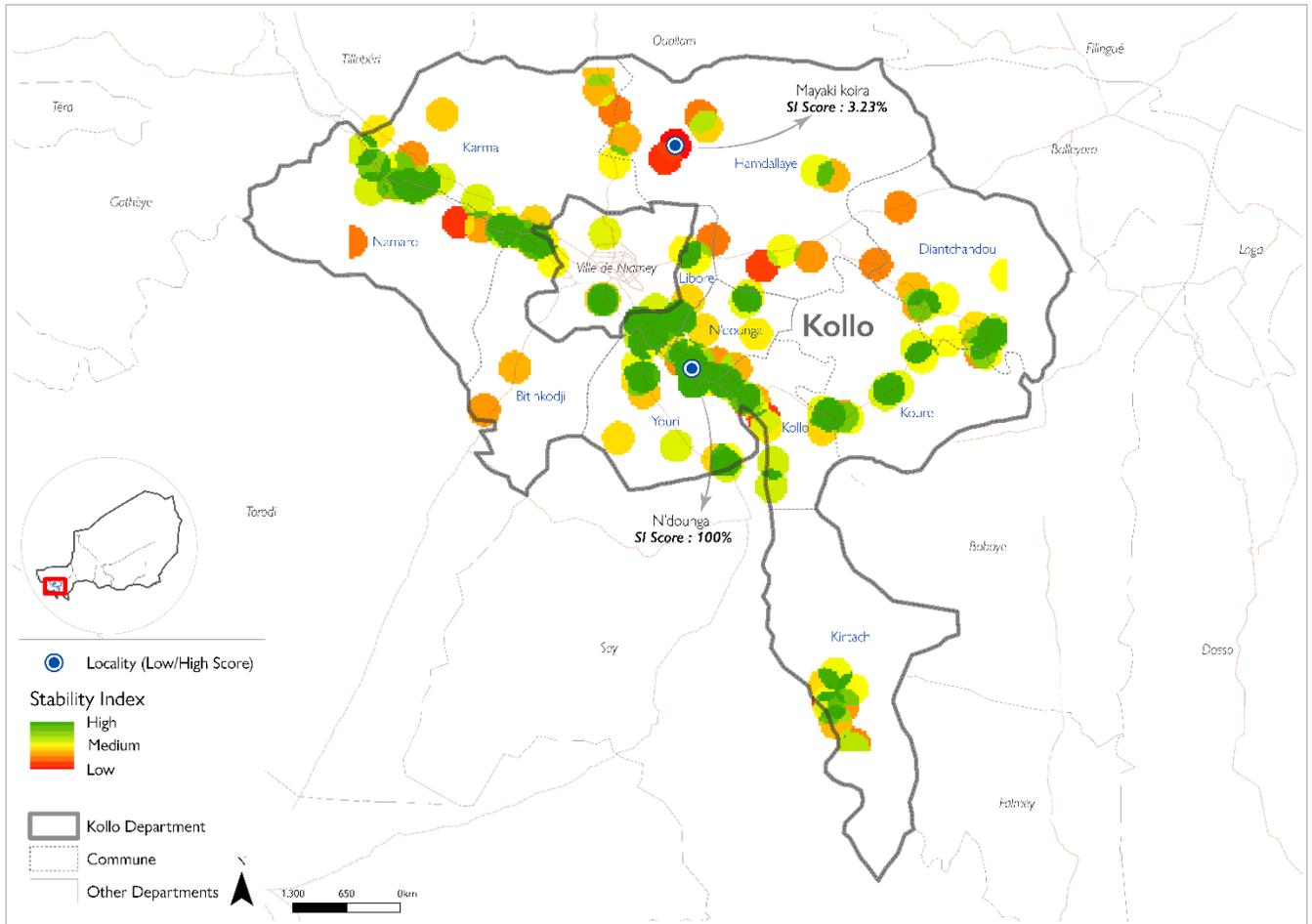
1	Bitinkodji	11 Locations
2	Dantchiandou	6 Locations
3	Hamdallaye	12 Locations
4	Karma	15 Locations
5	Kirtachi	10 Locations
6	Kollo	13 Locations
7	Koure	12 Locations
8	Libore	9 Locations
9	N'dounga	17 Locations
10	Namaro	14 Locations
11	Youri	14 Locations

Fig. 1: Number of Localities Surveyed Per Department



Categories were determined based on quartile. For instance, localities scoring in the “low” category were among lowest-scoring 25% of localities surveyed in the Kollo department. “High” localities scored among the top 25% of localities.

## 2. STABILITY SCORES ANALYSIS



The depiction and use of boundaries, geographic names, and related data shown on maps and included in this report are not warranted to be error free nor do they imply judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries by the IOM.

### 2.1 Stability Scores Analysis (by scale and locality)

The average **Stability Index** score of the 133 locations assessed in Kollo department is **64/100**.

The communes of Liboré (77), Dantchandou (77), and Youri (74) have an average **stability score** higher than the general average. On the other hand, the communes of Kirtachi (50) and Hamdallaye (41) have a lower average stability score than the general average.

The **security situation** in the department of Kollo is relatively calm with an average score of 80/100, because of a low presence of armed groups.

In terms of **livelihoods and access to services**, the communes of Kirtachi (41%) and Hamdallaye (42%) have moderately low scores compared to the other communes.

The evaluation of **social cohesion** shows low scores, particularly in localities of the communes of Kirtachi (25%), Kouré (28%), Dantchandou (41%), Karma (42%), Kollo (46%) and N 'Dounga (49%), with a very low **average score** of 47/100.

Fig. 2: Average SI and Sub-Index Scores per Commune

Scores range between 1 and 100

	SI Score	Services	Security	Cohesion
Libore	77	71	92	75
Dantchiandou	77	64	94	41
Youri	74	65	95	51
N'dounga	69	67	88	49
Koure	68	59	96	28
Karma	65	66	62	42
Bitinkodji	63	66	67	49
Kollo	61	61	76	46
Namaro	60	66	73	54
Kirtachi	50	41	83	25
Hamdallaye	41	42	64	57
<b>Average</b>	<b>64</b>	<b>61</b>	<b>80</b>	<b>47</b>

### 3. LOCALITY ANALYSIS

#### Comparative analysis of localities with highest and lowest SI scores

The table below shows localities with the highest and lowest scores for Stability, scores for the three sub-indexes, stability “anchor questions”, and the five most influential variables. As expected, the anchor questions, particularly the Feeling of Stability and Feeling of Community are strongly correlated with scores on the stability index – Most localities with the highest scores were likely to **feel safe and stable**, while most of the lowest rated locations were likely to **feel unsafe and unstable**.

The results reveal that the localities in Kollo department located closer to the borders of the region of Niamey and the region of Tillabéri were less likely to have a positive score , particularly in the communes of Hamdallaye, Kirtachi, Namaro and Kollo. On the other hand, it turns out that the localities with higher stability scores are located on the edges of the main roads.

Fig. 3: Comparison of localities with highest and lowest SI scores in Kollo Department

		100 (Best)   1   10 (Best)   0 (Worst)											
Location		SI	Sub-Scores			Key Questions			Key Variables				
Commune	Locality	SI Score	Service Score	Security Score	Cohesion score	Felling Stability	Feeling Community	Felling Situation	Daily Public Life	Freedom of movement	Incident Trend Activities	Public Sector Situation	Market Situation
Localities with Lowest SI Scores	Hamdallaye	Mayaki koira	3.23	0.26	45.89	27.08							
	Kirtachi	Kirtachi	13.28	43.39	23.69	70.71							
	Hamdallaye	Laweye	14.79	12.81	53.62	51.71							
	Namaro	Phetel	15.99	38.1	57.82	52.54							
	Kollo	Sekoukou	17.88	45.28	35.11	78.38							
	Hamdallaye	Fataboki tondobon	19.33	18.11	60.85	61.79							
	Namaro	Kofou	35.18	46.86	72.94	28.88							
	Hamdallaye	Kossey	35.27	36.18	60.25	86.66							
	Karma	Gabou koira	35.27	39.32	44.67	45.81							
	Hamdallaye	Labou toutouloua	36.12	28.42	74.86	52.84							
	Kollo	Seberi	36.26	60.44	51.17	43.43							
	Kirtachi	Campatya peulh	38.73	19.25	91.06	35.37							
	Hamdallaye	Fandou beri	39.3	50.76	54.22	33.07							
	Hamdallaye	Dantchandou tegui	39.83	46.28	60.25	37.16							
	Namaro	Hotto koira	42.27	66.13	39.23	33.04							
	Koure	Gabi kane	42.86	36.25	99.4	27.99							
	Karma	Guigare	43.14	48.66	44.67	30.33							
	N'dounga	Goungou bon	43.27	39.64	78.44	32.11							
	Kouré	Sakey fondo	43.9	49.65	60.25	28.02							
	N'dounga	Gneyze gourey	44.22	56.6	85.68	87.52							
Hamdallaye	Falanke kaina	44.41	43.12	60.85	56.81								
Kirtachi	Windi griwa peulh	44.9	32.98	91.67	5.94								
Localities with Highest SI Scores	N'dounga	Mboda	80.83	65.95	99.4	21.22							
	Koure	Illela koure	80.92	75.86	99.4	33.07							
	Kollo	Sakey koira tegui	80.97	68.22	91.67	22.1							
	Namaro	Hondey sorkay do	81.34	68.04	99.4	74.8							
	Youri	Youri mansare	82.78	80.47	99.4	83.46							
	Namaro	Dambouberi	82.84	84.81	99.4	54.96							
	Karma	Tchagarey	83.11	94.47	41.87	46.09							
	Koure	Campement de peulh	83.68	68.55	99.4	31.3							
	Koure	Koure	84.05	76.53	92.15	32.18							
	Youri	Damari 1	84.06	67.85	99.4	56.17							
	N'dounga	Gala dabara	85.24	74.79	91.67	22.1							
	Dantchiandou	Campement touareg	85.63	74.66	83.75	32.18							
	Namaro	Bounboukasa	85.85	73.36	99.4	74.8							
	Karma	Tagabati	85.88	92.35	59.28	39.49							
	Libore	Kouarakoukou	86.33	83.95	91	30.33							
	Youri	Diakindi	86.99	86.38	91.06	78.91							
	Karma	Karma	87.01	78.02	91.67	46.09							
	Namaro	Kanflay	87.26	76.15	99.4	74.8							
	Kollo	Windé korkoye	87.66	79.95	91.67	22.1							
	Libore	Libore (malaley)	87.8	82.21	83.75	85.77							
Libore	Goungou (Libore)	88.65	90.12	91.06	55.17								
Kollo	Dagarizarma	88.95	87.6	91.06	22.1								
Dantchiandou	Diantchandou	89.94	83.35	91.67	22.1								
N'dounga	Moli	91.12	89.9	83.26	22.1								
Kollo	Kollo zarma	91.14	84.27	99.4	22.1								
Namaro	Hondey tegui	91.25	92.04	99.4	30.33								
Youri	Boumba	91.31	88.55	99.4	81.68								
Kollo	Sakeykoirazeno	94.37	88.27	100	22.1								
N'dounga	N'dounga	100	100	100	32.18								

## 4. Analysis of Main Indicators Influencing the Stability Index

The Stability Index uses Principal Component Analysis to understand the impact of each indicator on the variability in the dataset. Indicators with the largest weight have the most influence in determining the Stability Score. Exploring these key indicators helps identify important factors that can impact the perception of stability in a locality. The 9(nine) most influential stability indicators in Kollo department are listed in the table on the left. (For a more detailed overview of what each indicator measures, see *Appendix*.)

### 4.1 Top Indicators in the department of Kollo

	SERVICES	SOCIAL COHESION	SECURITY
1		Daily Public Life	
2		Resident Freedom Movement	
3		Incident Trend Activities	
4		Public Sector Situation	
5		Market Situation	
6		Housing Access	
7		Primary School Situation	
8		Incident Trend Petty Crimes	
9		Access Electricity	

Fig. 4 : Most influential indicators in the department Kollo

This analysis provides insight into possible programmatic and policy responses that need to be implemented in the target communities in order to improve the perception of stability. The most influential indicators in the department of Kollo are predominantly in the areas of **Livelihood and Services** and **Safety and security**.

- **Social cohesion** indicator appear to be the most influential in the dataset for Kollo Department. Notably, the top influential indicator is **“Daily public life”**.

- **Security** indicators are the second most influential group of indicators: **Resident freedom of movement, Incident trend activities and Incident Petty Crimes**.

- **Livelihood and basic services** indicators represent half of the top 9 most influential indicators, with **“Public Sector Situation”** and **“Market Situation”** in the top five. the second group of most influential indicators: **“Destruction and access to habitat, “the presence of public sector employees”, and “access to health center” and “functional medical services.”**

In view of the previous analyses, it is crucial to underline that programming can have an impact through these 3 essential indicators.

### 2. Freedom of Movement and Stability

*Safety and security*

This is the second most influential indicator for the department of Kollo and it plays a key role in the perception of stability among key informants. About 88% of the localities assessed, reported no restrictions on freedom of movement, while only 2% reported that restrictions were in place with some impact on their lives.

### 4.2 Analysis of Key Stability Index Indicators

#### 1. Daily Public Life and Stability

*Social Cohesion*

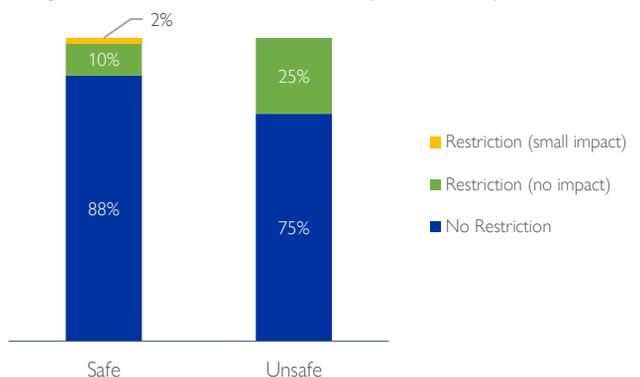
As the most influential indicator, the correlation between **daily public life** and the **perception of stability** is illustrated by the graph below. 95% of localities are considered safe and stable. the daily life was described as normal and lively without worry.

In localities that are considered unsafe and unstable, 8% reported that daily life was tense. This indicator is strongly correlated with the Feeling of stability.

Fig. 5 : Daily Life and Perception of Stability



Fig. 6 : Freedom of Movement and Perception of Stability



## 4.2 Analysis of Key Stability Index Indicators

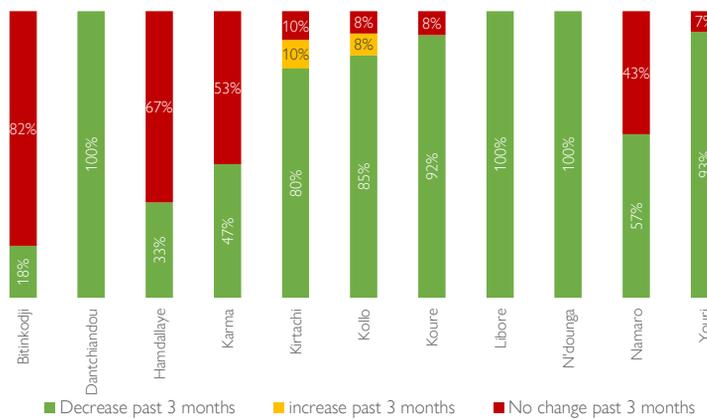
### 3. Incident Trend Activities

#### Safety and Security

The Incident trend activities indicator is the third most influential indicator.

In most localities, the impact of incidents on activities has decreased (72%) over the past three months, particularly in Youri, N 'Dounga, Liboré, and Dantchandou, where key informants reported a 100% reduction in incidents that may affect the course of activities. Moreover, there was no change in the situation in 26% of localities, respectively in Hamdallaye (75%) and Bitinkodji (73%) where the trend remained unchanged. Nevertheless, it appears that the incidents have increased over the last 3 months in only 2% of localities in the department of Kollo, particularly in Namaro (29%) and in Kollo (23%) which are the 2 localities to have presented the highest rate.

Fig. 7: Incident trends activities

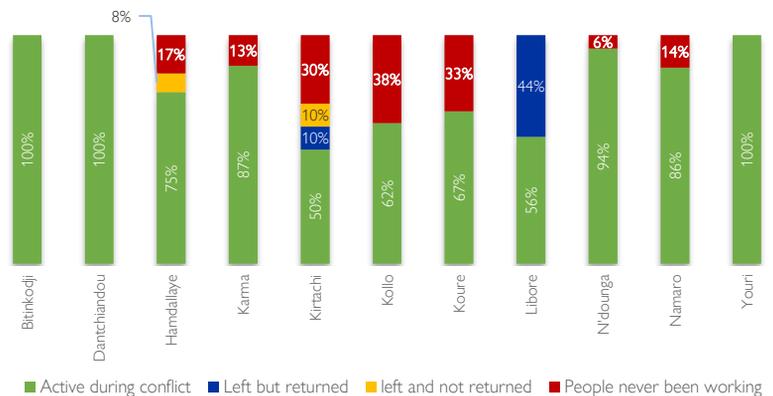


### 4. Public Sector Situation

#### Livelihood and Services

In 80% of localities of the department, public sector employees remained active during a crisis or conflict situation; against 2% of localities where they left the locality and did not return, while in 4% of cases, people working in the public sector returned after leaving the locality, in this case, Liboré is the only locality with a high proportion (44%) where public sector employees returned after leaving the locality. On the other hand, in 14% of localities, there are no people working in the public sector, such as in Kollo which stands out with a proportion of 38%.

Fig. 8: Public Sector Situation

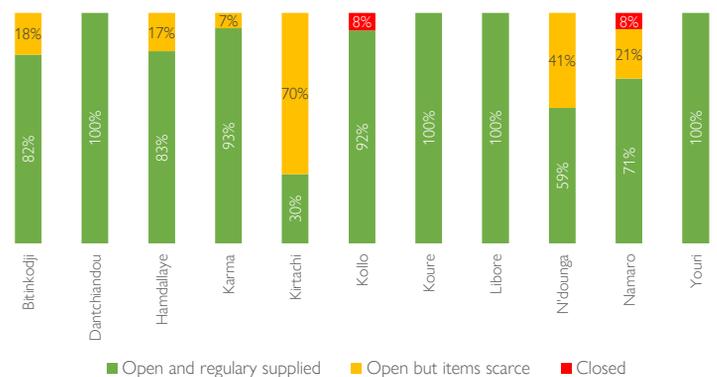


### 5. Market Situation

#### Livelihood and Services

Most localities present positive results pertaining to access and opening of local markets, as well as their regular supply. However, 17% of localities; whose markets and small businesses remain open; are affected by the shortage of items. On the other hand, in the locality of Kirtachi, although the markets are open; the percentage in shortage is 70%, followed by the locality of N 'Dounga (41%). These 2 last figures are explained by the fact that the access roads to Kirtachi are damaged, not allowing the effective delivery of items; and in N 'Dounga, most of the population are farmers. As for the localities of Namaro and Kollo, relatively the least stable in the department of Kollo, they are the ones affected at 7% and 8% respectively, by the closure of local markets.

Fig. 9 : Market situation

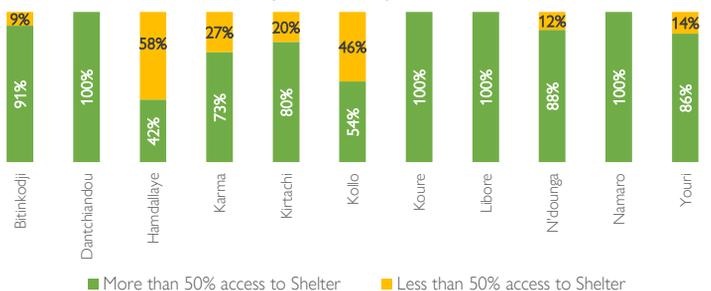


### 6. Housing Access

#### Livelihood and Services

In all the localities assessed, key informants indicated that people have access to housing in general (83%). However, some communes present alarming figures for this indicator. In this case, 58% of the localities of Hamdallaye are affected by inaccessibility to housing. As for the communes of Kollo (46%) and Karma (27%)

Fig. 10 : Housing access



## 4.3 Analysis of Anchor Questions

The focus in the first section of the questionnaire is on the key informants' perception on stability in the assessed localities. For this second section, "Anchor questions" are used to validate stability Index findings against self-reported perceptions in the community. Key informants were asked three main questions to assess the perception of stability in their community. These questions concern the indicators related to "Feeling of stability", "Future intention of the population" and "Changes in perception over the last 6 months"

### Feeling of stability

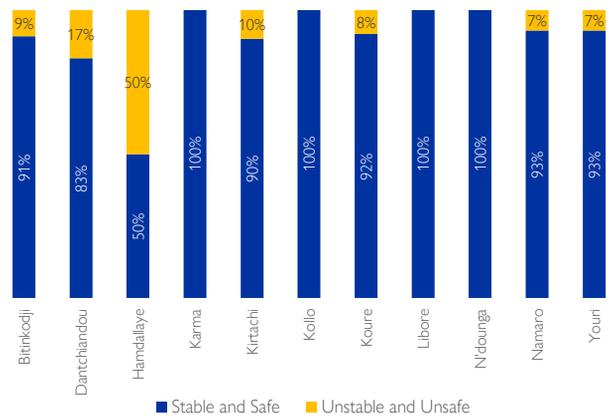
*Does the locality feel safe or unsafe?*

Most of key informants in the assessed communities reported that their locations (91%) feel safe and stable while 9% reported their locations were unsafe.

Among the localities feeling safe; Karma, Kollo, Libore and N'dounga had a score of 100%. On the other hand, the localities feeling unsafe are Bitinkodji, Kirtachi, Kouré, Namaro and Youri, which would represent 9% of the localities assessed.

The localities of Hamdallaye however show equally divided results. On the one hand, 50% feel safe and on the other hand 50% feel unsafe; This being the largest percentage recorded as unsafe. The above may indicate that a safe and stable climate was widely observed in the department of Kollo at the time of the stability index assessments.

Fig. 11 : Feelings of safety

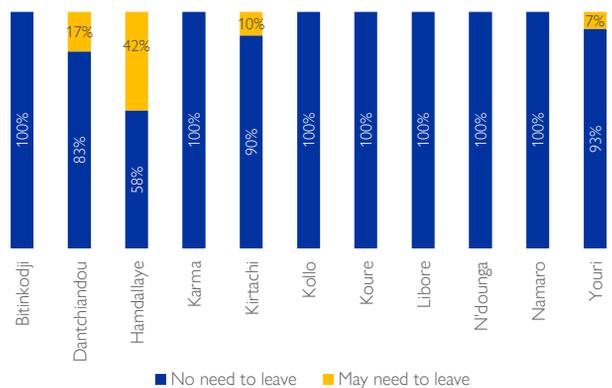


### Future intentions of the population

*Do people in the locality feel that they need to leave soon due to safety concerns?*

The responses provided by key informants about "the intention to leave" were correlated with their statements on 'the feeling of safety'. Among the localities that expressed the feeling of unsafety, almost all expressed the need to leave again, 50% of localities in Hamdallaye who reported the feeling of (58%) unsafety, also indicated that they might need to leave soon (around 42%). Roughly, 7% of the population in the department of Kollo would need to leave soon because of safety concerns.

Fig. 12 : Intention to leave the locality

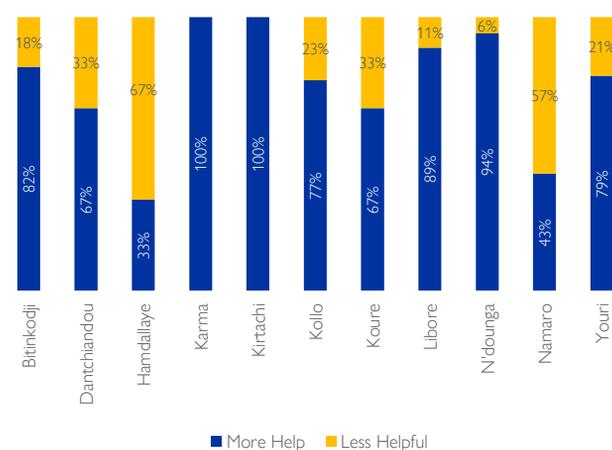


### Changes in perception over the last 6 months

Regarding opinions on the changes in perception over the last 6 months, the answers correlated slightly with the previous results on the feeling of stability and the future intentions of the population. Indeed, in most localities that presented positive results on the feeling of stability (91%) and future intentions (93%); key informants remain optimistic about the state of the community than six months ago (75%).

However, it should be noted that the locality of Hamdallaye presents more pessimistic figures regarding these 3 specific indicators on the feeling of stability (50%), the future intentions of the population (42%) and finally on changes in perception over the last 6 months (67%). Surprisingly in Namaro locality where key informants showed no intention to leave (100%); Also reported feeling less optimistic about the state of the community than six months ago (57%).

Fig. 13 : Perception of the situation





## 6. CONCLUSION

The results of the Stability Index carried out in the **11 communes** of the department of Kollo in the region of Tillabéri provide several key indicators that have a direct impact on perceptions of stability of the department. As noted in the introduction to this report, it is important to note that these findings will inform programmatic interventions that can improve perceptions of stability at both the local and cluster level; with a long-term impact on strengthening social cohesion among communities.

Following the order of impact, perceptions of stability were influenced mostly by the following **9 indicators**: *Daily public life, resident freedom movement, incident trend activities, public sector situation, market situation, housing access, primary school situation, incident trend petty crimes, and finally access to electricity*; of which the 3 first were the TOP indicators ( **Daily public life, freedom of movement and incident trend activities**), belonging to the thematic indicators on **Social cohesion** and the **Security and Safety**.

At the end of the evaluation of this SI in the department of Kollo, the findings allow us to draw some conclusions:

- The average score of the stability index of **133 localities** evaluated in the department of Kollo is **64/100**. The localities with the lowest Stability Index score were mostly located closer to the borders of the Niamey region and the Tillabéri region, in particular the communes of **Hamdallaye, Kirtachi, Namaro and Kollo**. On the other hand, it turns out that the localities with higher stability scores are located on the edges of the main roads, such as the commune of **N'dounga, Dantchandou, Liboré, Youri, Karma, Kouré**.

The results also reveal certain correlations and links between the key indicators and the perception of stability; we can cite :

- The key indicator under the theme "**social cohesion**" and under "**security and safety**" which are closely linked with the perception of stability especially in localities where access to **basic services Livelihoods** present positive scores.

- A high correlation between **the first 2 anchor questions**; but a slight correlation with the last anchor question on change in Perception over the last 6 months (*See Appendix II for Indicators highly correlated with key validation questions*); in fact, the perception of some localities has remained invariable.

### 6.1 Recommendations

Recommendations can be induced for the stability Index's findings to inform and guide programmatic planification, in order to encourage and support durable solutions in the Department of Kollo.

- **Programming along the Humanitarian-Development Nexus** :

Analyzing the differences between localities with the highest and lowest scores on Stability Index can provide useful insights into programme priorities. Localities with stability scores may require more immediate assistance,

localities with higher stability scores, development may be more relevant to further strengthen resilience that expand to surrounding communities. For example, in with very low stability scores, programming should focus interventions such as ;

- Improving the **access to public services as markets** by rehabilitating roads, alongside government partnership. (the case of the commune of Kirtachi)
- Providing **access to shelter/habitat**, including improving the condition of existing habitats in Hamdallaye, Kollo and Karma.
- **Focus intervention on fields with the most impact on stability** :

Programmatic fields should focus on aspects that having the most impact on the stability perception, including these :

- Incident trend in petty crimes
- Incident trend on activities
- The daily public life
- The public sector situation and the primary education.

In the communes of the department of Kollo where the Stability Index relatively is rather low, programmes, should urgently focus on **Social cohesion** and **general access to services** in order to achieve an acceptable level of stability and should be also considered into conflict sensitive programing, especially in locations farthest from main roads, as this may strain already limited capacity to deliver services.

### 6.2 Challenges encountered during the data collection activity

It is important to highlight the obstacles and challenges we encountered during the data collection process :

- Difficulty of access to localities due to natural disasters ;
- The movement of enumerators delayed by the rainy season, which led to the extension of the data collection period;
- The breakdown of vehicles used for transportation of enumerators during the data collection ;
- The absence of mobile network in some localities, making it difficult to send data in time;
- Unavailability of military escorts to secure investigators' access to certain localities ;
- Unavailability of some local authorities to receive the field team for the permission to launch the data collection activities in their areas.

## APPENDIX I

### A. Selection of Localities

The selection of localities was as broad as possible in areas affected by displacement and/or returns in the department of Kollo. A list of localities to be surveyed was created based on data collected by IOM on displacement/returns and other existing data systems (census, administrative lists, etc.). The objective was to have a large enough number of localities in department level to ensure a solid foundation for statistical analysis. A total of 133 locations in all 11 communes in the department of Kollo, were covered. A locality is the administrative level 4 (lowest possible level). The level has a representation, whether formal (State) or informal (Chef de village).

### B. Stability Index Calculation

The Stability Index calculation begins with survey design: this tool was developed with substantive input from community stabilization and HDPN experts. It includes a set of questions assessing the conditions in a locality that were determined to be 1) potential indicators of stability and 2) possible to rank in terms of their stability implications. Questions were divided into four categories: anchor questions (perceptions about stability), safety and security, social cohesion, and access to basic services.

Before index calculation, responses were ranked ordinally from best to worst case scenario. Then, Principle Component Analysis (PCA) was run using all indicators *except for the “anchor questions”*, which are used instead to validate index results. The **weight** for each variable, determined via PCA, was combined with the ranked survey-responses for each locality to generate its overall **Stability Score**.

### C. Sub-Index Calculation

In addition to the Stability Score, three separate **sub-indexes** were generated using the variables from each of the three themes in the survey: Security, Social Cohesion, Services. The sub-indexes were calculated by separately combining the **weights** from the Stability Index calculation with the variables for each theme, and then rescaled between 1-100. **The overall Stability Index is not an average of these three sub-indexes.** The sub-indexes facilitate the identification of localities that may need specific attention in one of these sectors.

### D. Stability Index Validation

The Stability Index and the sub-indexes are **validated against the key questions on the perception of stability.** This ensures that there is a statistically significant relationship between the Stability Scores and the perception of stability. The relationship was validated via logistic regressions which indicate that a locality's Stability Index score has a statistically significant,

positive correlation with both the community's feeling of stability and their feelings of whether they will need to leave soon. However, there is no discernable relationship between Stability Score and the perception about whether the situation is improving or getting worse.

### E. Principal Component Analysis

The Stability Index is calculated using a dimensionality reduction technique called Principal Component Analysis (PCA), which **essentially condenses the information from over 30 variables into a single, easily comparable Stability Score.** PCA gives more weight to the factors that have a greater impact on the variability in the data, meaning that those factors make up a larger proportion of the Stability Score.

While each of the indicators assessed is clearly important for informing programming along the humanitarian-development-peace nexus, **PCA is particularly useful for demonstrating the impact of different indicators on one another, and the proportional influence of a given indicator on a given dataset.** For example, while the availability of electricity and access to health care are both individually important factors, they also heavily influence one another (this is called collinearity). PCA helps to see beyond the collinearity and drives at influence in a more coherent way, which is critical to understanding complex phenomena like the nature and conditions of return.

### F. Cluster Generation

To facilitate the analysis of groups of localities, **clusters** were created using the K Nearest Neighbors (KNN) machine learning algorithm, weighted by geographic distance. KNN allows for the identification of groups of localities that are the most similar across all of the provided inputs. The inputs included the first five dimensions from the Principle Component Analysis results generated during the Stability Index calculation, as well as the geographic distance between the latitude-longitude points of each locality.

### G. Limitations

Some localities that were not accessible during the data collection period were not assessed due to security or logistical reasons. This may have introduced bias as data points from some of the least secure locations were excluded from the analysis. This limits the generalizability of the Stability Index findings in extremely insecure localities. It is important to note that the Stability Index is based on informants' perceptions of stability and reports of the conditions in their locality and does not claim to provide an objective measure of this complex topic. Key informants are not randomly selected and may have different opinions about the stability in their locality than some of their neighbors.

## APPENDIX II : Indicators highly correlated with key validation questions

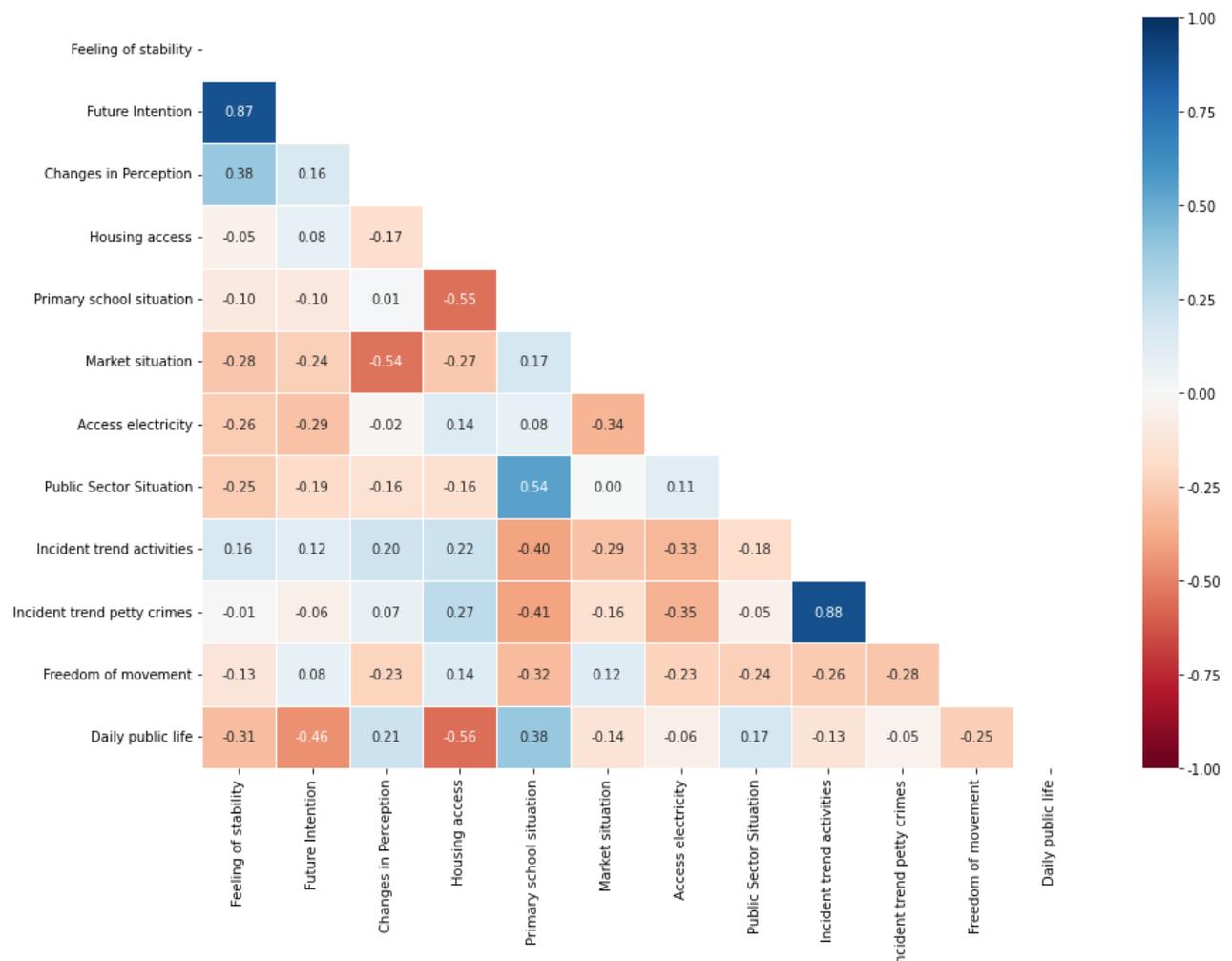
This appendix aims to presents the main variables most correlated with the key questions to determine the stability and security of a locality.

Correlation measures the relationship between a pair of variables, assessing their tendency to improve together (positive correlation) or to degrade (negative correlation), or without any relationship (and therefore no correlation). The correlation coefficients (denoted  $r$ ) range from -1 to 1, where -1 represents a perfect negative correlation; 1 represents a perfect positive correlation and 0 indicates no correlation.

The further away the correlation coefficient is from zero, the stronger the relationship between the two variables.

As shown in the graph below, most variables highly correlated with feelings of stability and the intention to move fall under the “safety and security” pillar of the Stability Index. In general, activities related to **the trend of incidents on activities** ( $r=.16$ ), the **future intention of the community** ( $r=.87$ ), and **the changes in perception over the past 6 months** ( $r=.38$ ) are the factors most correlated with the feeling of stability. Interestingly, in the department of Kollo, the matrix shows a very strong correlation between **petty crime incidents** and **activity incidents** ( $r=.88$ ) (which can cause difficulties in engaging in various activities), **the daily public life** and **the public sector status** are also correlated with **the primary education**. These variables could therefore be key elements of stability and safety in department of Kollo and should indicating to programs that this is a key issue of concern

Fig. 14 Correlation matrix of the 9 indicators most correlated with the feeling of Stability in Kollo Department



## APPENDIX III – Survey Indicators

### ANCHOR 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 thematic indicators below to identify the most influential thematic indicators on the perception of stability.

#### Feeling of Stability in the Locality

*Does the locality feel safe and stable or unsafe and unstable?*

#### Ability to Continue Living in Locality

*Do people in the locality feel that they need to leave within the next six months?*

#### Changes in Perception in the Last 6 Months

*Do people feel more or less hopeful about the state of the community than they did six months ago?*

### SCALE 1: LIVELIHOOD & SERVICES

#### Shelter Access and Quality

*Proportions of the community that has access to shelter and conditions of shelter.*

#### Damage to Homes

*Level of damage to homes due to conflict, and whether reconstruction is underway.*

#### Primary Education

*Access to primary education and availability of schools in the locality or in neighbouring towns*

#### Health Center and Medical Care

*Access to functioning health center in the locality or in neighboring town*

#### Local Market

*Whether markets are open regularly and supplied*

#### Electricity

*Electricity access and reliability in the locality*

#### Drinking Water

*Drinking water access and availability in the locality.*

#### Farmland & Fishing Grounds

*Extent of fishing grounds and farmland being used in the locality*

#### Presence of Public Sector Employees

*Whether public sector employees are present and how they reacted to the conflict.*

#### Internet and Communications Technology

*Access and reliability of internet or phone services.*

## APPENDIX III – Survey Indicators

### SCALE 2: SOCIAL COHESION

#### Illegal Occupation of House, Land and Property

*Land, habitat or property occupied illegally (without authorization from family, neighbors, local authorities)*

#### Robbery Personal Effects

*Robbery of personal belongings reported in locality in the last 6 months*

#### Cattle Theft Reported

*Cattle theft reported in the locality in the last 6 months*

#### Daily Public Life

*Whether residents are able to carry out basic activities without worry (going to the market, letting children play outside, street vendors, etc.)*

#### Community Support

*Likelihood of cooperation between neighbors in case of problems (such as with the supply of water or food) in the locality*

#### Community Tension

*Incidents or clashes involving two groups (religious, ethnic, herders/farmers, displaced/returnee/host communities) in the locality*

#### Equal Access to Services

*Populations in the locality have equal access basic services and resources no matter their age, sex or group (ethnicity, clan, displacement status)*

#### Identity Documents

*Level of identity document possession or access in the locality*

#### Participation in Public Affairs

*Level of participation in local public and political life (civil society organizations, unions, committees, social gatherings, religious groups)*

### SCALE 3: SAFETY AND SECURITY

#### Recent Security Incidents

*Whether there have been serious security incidents in recent months*

#### Security Incidents – Resources

*Trends in the number of security incidents linked to resource tensions (cattle raiding, land conflict, etc.) over past three months.*

#### Security Incidents – Non-State Armed Groups

*Trends in the number of security incidents linked to NSAG activities (kidnapping, terrorist attacks, raids, etc.) over past three months.*

#### Petty Crime

*Trends in the number of petty crimes (theft, pickpocketing, vandalism, public intoxication, etc.) over past three months.*

#### Community Concerns About Security

*How concerned residents feel about their security (kidnapping, crime, fighting between armed groups, etc.).*

#### Police Presence

*Presence of police/gendarmerie in the locality*

#### Security Forces Presence

*Presence of security forces in the locality*

#### Non-State Armed Groups Presence

*Presence of Non-State Armed Groups in the locality*

#### Informal Militias/ Vigilante Group Presence

*Presence of informal self-defense militias and vigilante groups in the locality*

#### Freedom of Movement

*Residents' freedom of movement (to markets, to their homes, to workplaces, to farms, etc.) in the locality*

#### Formal Curfew

*Formal curfew for security reasons enforced by State*

#### Informal Curfew

*Informal curfew enforced by Non-State Armed Groups*

#### State of Emergency

*Whether the locality is under a state of emergency*

#### Legal Remedies

*Whether residents have access to legal remedies to resolve disputes*

# STABILITY INDEX – DEPARTMENT OF KOLLO

NIGER, Tillaberi

AUGUST 2022



## Fragility, Solution and Mobility working group, IOM

The Stability Index is part of a larger body of work developed by IOM country teams in Iraq, Somalia, the Lake Chad Basin, and elsewhere—that improve strategic planning and implementation of transition and recovery programs. The Fragility, Solutions, and Mobility working group is working to provide a series of technical and strategic guidance and tools, including drafting a methodological framework to allow for a malleable, context specific but standardized approach to measuring fragility in new and emerging operations. The goal is an IOM-led global minimum standard for data collection and responsible data management for measuring and understanding indicators of fragility and stability through the deployment of analytical models in displacement and conflict contexts.

IOM's Transition and Recovery Division (TRD) and the IOM Solutions and Mobility Index (SMI)'s work in this space allows for new and unique approaches aimed at consolidating and packaging existing methods, to achieve stronger outcomes and to better scale programming in fragile contexts. This approach provides a foundation from which to adapt and contextualize data-based evidence for the support of strategic planning and implementation of transition and recovery programs. Grounded in the principles of responsible data management, appropriate evidence can identify core factors of fragility, solutions, and mobility at the community level, and help identify how these factors impact the overall condition of the physical location and local community, and how these evolve over time.

Collection and Analysis Activities funded with the support of

