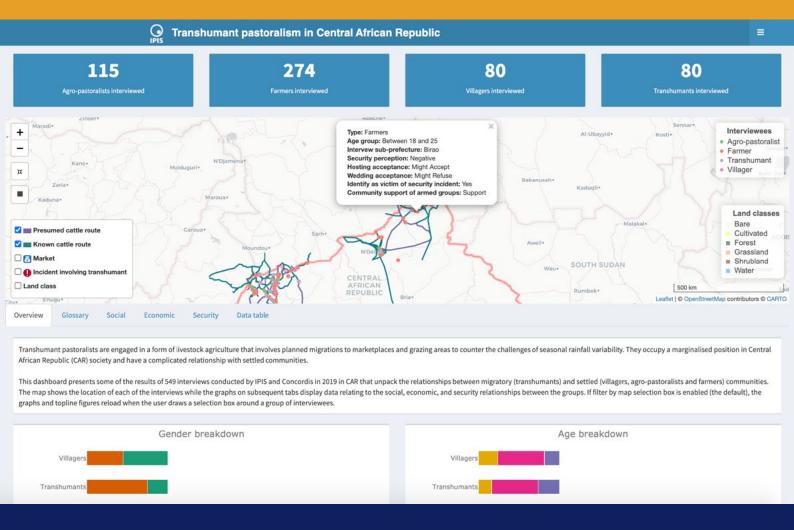
Promoting peaceful and safe seasonal migration in Northern Central African Republic



Pastoralism dashboard overview











1. INTRODUCTION

This document provides background information and explains the functionality of the IPIS dashboard on transhumant pastoralism in the Central African Republic (CAR). The dashboard was developed as an interactive supplement for an upcoming report on the subject matter, enabling users to filter the data and see it visualised on a map and in graphs. Using these visualisations, users are able to explore the interdependencies and tensions between **transhumant pastoralists**, who engage in planned migrations with their livestock to counter the challenge posed by seasonal rainfall variability, and **settled populations** (agro-pastoralists, farmers and villagers) who are not engaged in migratory lifestyles. The main pool of data is derived from 549 interviews conducted with members of different communities by IPIS and Concordis in 2019.

The document includes a section on the data feeding into the dashboard, a catalogue of each type of dashboard component, and explanations of how users can subset data with different combinations of tickbox filters and a selection box filter.

2. DATA

2.1. Interviewees

Interviewee data is the backbone of all elements on the dashboard. 549 interviews were carried out in the field in 2019, covering a diverse range of subjects including livelihood, perceptions of other communities, and experience of security incidents. The dashboard separates interviewees into four different communities, with these falling under the meta-groups of settled or migratory communities. These are:

Settled communities:

- Agro-pastoralists: livestock farmers who stay in one place, usually because the size of their cattle herd is small enough to survive on surrounding local grazing and water throughout the year. For the purpose of this dashboard, the definition of agro-pastoralists applied to all pastoralists who have the Central African nationality.
- Farmers: arable farmers who live from the products they farm and sellVillagers: individuals who do not breed livestock or farm land. Includes public servants, butchers, students, carpenters, etc.

Migratory community:

 Transhumants: pastoralists that engage in planned migrations to seek grazing, water and markets for their cattle. Encompasses both interviewees who crossed international borders into CAR as part of their migration during the dry season and those that only travel within CAR territory. These migrations mean that they are not part of the settled population. For the purpose of this dashboard, the definition of transhumants applied to all pastoralists who have another nationality than the Central African.

2.2. Additional data

On the map, users can toggle additional data layers on and off to provide further context to the lives of transhumant pastoralists. These layers include market and cattle route layers, which were compiled by IPIS, and two layers from external sources:

Incidents involving transhumants: These incidents refer to violent or security incidents taking place in 2019 but are not limited to those reported by interviewees. Additional data comes from the Armed Conflict Location & Event Data Project (ACLED).

Land classes: This shows different land types and comes from FAO UN (2008) but was originally derived from Globcover satellite imagery (2005). It was clipped to spatially match the interviewee study areas and simplified to reduce the number of classes.

3. DASHBOARD COMPONENTS

The dashboard is comprised of key figures boxes showing the total interviewees for each community, a map, tabs with graphs and background information, and filters to subset the data being visualised. Figure 2 explains the different elements and options available on the dashboard. Users can filter the data spatially using a map selection box and / or using other criteria such as gender or age. All graphs and key figures boxes (positioned above the map) reload every time a filter is adjusted. Users can also click on interviewees on the map and incidents involving transhumants to see a pop-up of information corresponding to that specific point.

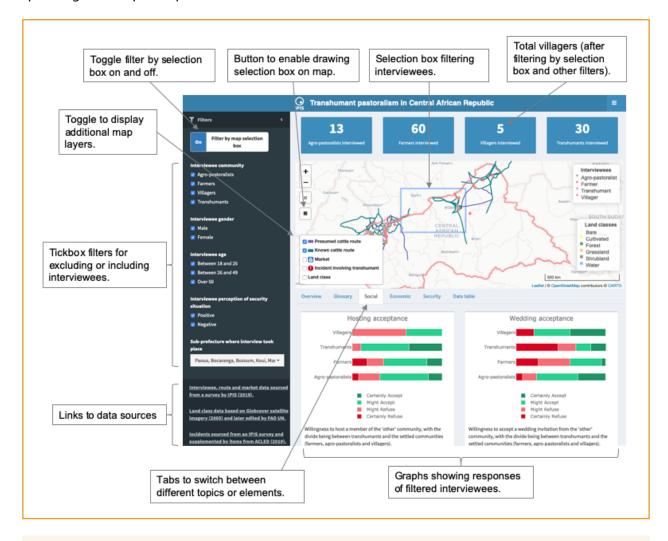


Figure 1: Annotated screenshot of the dashboard. The data has been filtered by the map selection box.

3.1. Tickbox filters

The tickbox filters are found in the sidebar on the left. They enable the user to filter interviewees by their community, gender, age, perception of security situation and the sub-prefecture where the interview took place.

Any interviewees falling into categories that are unticked will disappear from the map and will not contribute towards the key figures and graphs.

3.2. Selection box filter

The selection box filter enables users to draw a box on the map to spatially filter interviewees. To do this, the filter by map selection box must be toggled to the 'On' position, which is the default. If it is in the 'Off' position, the data is only filtered according to the tickbox filters. If a selection has been made previously, the box will reappear once the switch is returned to 'On' and the data will be filtered accordingly.

To draw a box, click on the square symbol (■) on the map and then click and drag to create the box. The key figures boxes and graphs will then reload, only including data from any interviewees contained within this box. If any tickbox filters are unticked, these settings will also be taken into account. The example shown in Figure 2 filters the data to all female villagers contained within the selection box - note that only 'Villagers' and 'Female' are ticked on the Interviewee community and Interviewee gender filters, and that interviewees outside the selection box on the map are excluded.

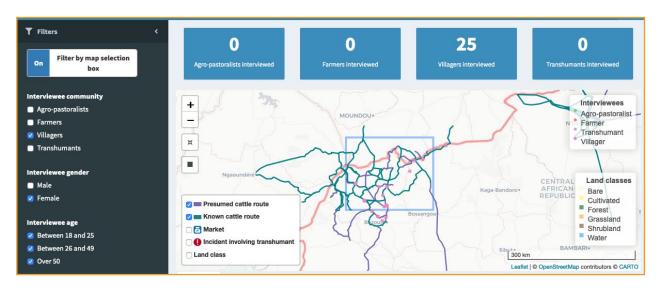


Figure 2: Example of tickbox filters and filter by map selection box working together.

3.3. Tabs

The tabs below the map allow the user to switch between different topics or elements, most of which include graphs showing the filtered data. For reference, here is what is featured on each tab:

Overview: Introduction to the research and graphs breaking down interviewee communities by gender and age.

Glossary: Explanations of what is meant by each different community type.

Social: This tab seeks to illustrate some of the social relationships between settled and migratory communities. Two graphs showing the percentage split of responses from each community to the questions 'How willing would you be to host a member of the 'other' community?' and 'How willing would you be to accept a wedding invitation from the 'other' community?'. In this case 'other' is differentiated by settled vs. migratory, so if the questions are put to a Villager their 'other' would be Transhumants, while a Transhumant would consider any member of the three settled communities to be 'other'.

Economic: The idea of this tab is to illustrate some of the economic interdependencies between transhumants and settled communities. Transhumants sell beef to members of settled communities and buy vegetables and other products from them. The tab features graphs showing the split of each community to the questions 'How important is selling beef for your livelihood?' and 'How important is selling vegetables for your livelihood?'. It also presents the percentage split of responses from the settled communities to 'How frequently do you buy meat?' and 'How frequently do you sell vegetables?'. Users can roll over the percentage bars to see the actual numbers.

Security: This tab features a graph showing the percentage split of responses from each community when asked if they identified as a victim of a security abuse. Many interviewees did not answer this question so were marked as Unknown. The second graph breaks down some of the main security abuses reported by interviewees, again separated by community. The final graph is a percentage split of what each interviewee believed their community's relationship is with armed groups operating in the vicinity. It is important to note that their personal relationship with or attitude towards armed groups may differ.

Data table: Users can browse or download a table of the full data set which like the other dashboard elements is filtered by the map selection box and the tickbox filters. The table shows each interviewee, their demographic information and their responses to the questions used to create the graphs on previous tabs.

4. REFERENCES

Armed Conflict Location & Event Data Project (ACLED). (2020). Conflict event dashboard. Retrieved 4/5/2020 from https://acleddata.com/dashboard/#/dashboard

FAO UN. (2008). Land cover of Central African Republic - Globcover regional. Shape file retrieved 6/7/2020 from http://www.fao.org/geonetwork/srv/fr/metadata.show?currTab=simple&id=37171

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