

Research Methodology Note

Cattle Migration, Cattle Raiding, Food Security and Livelihoods, Pibor County
South Sudan
Research Cycle ID: SSD1701c

March 2018
v.3

REACH Informing
more effective
humanitarian action

1. Background & Rationale

The political crisis and conflict in South Sudan has been ongoing since 2013. The dynamic and multi-faceted nature of the South Sudanese displacement crisis has created significant challenges for humanitarian information management. Accessibility and security issues within South Sudan have impeded systematic data collection efforts, limiting the effectiveness of humanitarian planning and implementation, whilst displacement across South Sudan remains highly dynamic, with 1.9 million South Sudanese internally displaced and 2 million seeking refuge in neighboring countries.¹ As the crisis continues to evolve, it is becoming increasingly important to fill information gaps in a systematic manner to promote a more effective humanitarian response.

One of the least understood parts of South Sudan is Pibor County in Jonglei State. REACH has only collected data once in the area, the most recent IPC highlighted Pibor as one of the more concerning counties, and since the October 2017 SMART survey, there has been no systematic data collection. Recent reports serve as evidence that cattle raiding, for example the 2017 Duk cattle raids, has clearly become worse, more frequent, and far-ranging, but it is not clear why.² Furthermore, changing seasonal patterns and the environment is likely driving the increase in frequency and intensity of cattle raiding. As found in a previous assessment in Yirol West county, cattle raiding is often used as coping strategy. Further, the assessment was indicative that cattle raiding is likely to become more intense, frequent, and involve an atomized/dissolution of homogeneous tribal structures, in which clans or families that previously protect one another start to turn on one another in order to survive.³

The results, while preliminary, from a recent assessment in Kapoeta town were highly successful in mapping out the routes of cattle migration, the spread of cholera, and the dynamics of how people and animal migration operated in the region and facilitated the spread of cholera and other cholera like diseases in 2017.⁴ There are several very large implications of the study, which will require follow up work in Pibor and Juba:

- Many diseased cattle have been taken from Kapoeta East to Pibor by Jie and Murle cattle raiders, potentially spreading the disease further.
- Cattle raiding between Murle in Pibor and Dinka in Bor has been increasing in frequency and intensity in the last year, and has the potential to spread disease further
- There is a very large migration of Cattle from Southern Central Equatoria that is being brought north to Bor South County, which is likely to cause disruption of current livelihoods patterns both during the migration, and after these cattle are brought into Jonglei and Lakes States. The increased number of cattle in Bor South County may lead to a higher frequency of cattle raiding in Jonglei.

¹ OCHA South Sudan, Humanitarian Bulletin Issue 01, 18 January 2018.

² <https://radiotamazuj.org/en/news/article/over-40-killed-in-jonglei-state-cattle-raid-official>

³ REACH, Yirol West County Food Security and Livelihoods Brief, January 2018

⁴ REACH, Kapoeta Cattle Migration and Cholera Brief, March 2018

To understand the dynamics between cattle migration, FSL and cattle raiding a rapid assessment in Pibor county will be carried out from March 21st through 30th in multiple locations in Pibor County. Through FGDs and KIIs the assessment team will focus on cattle migration patterns in Pibor and surrounding regions, and linkage between food security and livelihoods and cattle raiding.

2. Research Objectives

- Provide an understanding of cattle camp locations and cattle migration routes in Pibor County, and how those patterns have changed over time.
- To understand the role of cattle raiding in Murle society, and how cattle raiding routes, the frequency and intensity of raids, and how they have changed over time in light of changes in seasonal patterns and the environment, particularly the level of food security and access to livelihoods.

3. Research Questions

1. What are primary cattle migration routes used by HHs in Pibor, and have these changed over the years?
2. What are the primary livelihoods for HHs in Pibor, and have these changed over the years?
3. How is cattle raiding perceived in Murle society, and what are the key drivers behind raids?
4. How has cattle raiding changed over the years, particularly regarding the frequency, intensity and distance from Murle homeland?
5. How does the transfer of cattle, particularly through raiding, expose the Murle community to various disease, including cholera-like diseases in Jie, Kapoeta, and RVF in Lakes?

3. Methodology

- **Interviews with key informants operating in Pibor County.** The first step will be conducting semi-structured interviews with humanitarian actors and government officials (namely health, water, and agriculture ministers). This is intended to provide a broad picture of cattle migration, livelihoods and raiding within Pibor, and will be used to guide FGDs with communities. The target number of KIIs is five, two with INGOs and three government officials.
- **Focus Group Discussions.** A minimum of six focus group discussions (FGDs) will be held with community members in various locations in Pibor. According to KIIs on the ground, HHs in Pibor move constantly and a large portion are currently in Pibor town, allowing the team to run FGDs with multiple communities without having to travel to remote locations. FGDs will be disaggregated by location and gender. Data saturation is expected to occur around 6-8 FGDs

4. Product Typology

Type of Product	Number of Product(s)	Additional information
Cattle migration/raiding and FSL report	1	A situation overview covering cattle migration, and the linkage between cattle raiding, and food security and livelihoods

- **Sections:**
 - Introduction detailing the reason for the assessment
 - Methodology.
 - Cattle migration and Changes
 - Livelihoods and changes
 - Factors behind traditional Cattle raiding (Before the change in the frequency, intensity, and distance)

- Changes in cattle raiding and factors driving cattle raiding
- Cross cutting issues (potential for disease, possible protection concerns)
- Conclusion + Implications
- **Interspersed graphics:**
 - Cattle migration + infrastructure maps
 - Cattle raiding changes map
 - Other maps TBD based on information gathered

5. Management arrangements and work plan

Roles and responsibilities

- REACH Rapid Assessment Officer
 - Develop research design, methodology, work plan, and data analysis plan
 - Overseeing data collection and conduct the data analysis;
 - Create the product as a result of the assessment.
- Field Coordinator
 - Assist with organising, translating and facilitating FGDs;

Work plan

Month	March														April						
Day	16	17	18	19	20	21	22	23	24	25	27	28	29	30	5	6	7	8	9	10	11
Ad-hoc research submission																					
Methodology note and data analysis plan																					
Collect secondary information																					
Organising logistics of assessment																					
Data collection																					
Data analysis																					
Draft of the product																					

6. Risks & Assumptions

Risk	Mitigation Measure
Assessment locations becoming inaccessible due to security concerns, which prevents data collection and safety of staff.	Alternative locations within Pibor County will be identified as alternative assessment locations. This includes the Cattle Market and neighbourhoods of Pibor Town that are reportedly secure.
Interviewees are unwilling to participate in the assessment	Survey and interview questions will respect the wishes of participants if they do not want to be interviewed or decide against being interviewed at any stage. Respondents will be approached in a courteous and respectful manner. If individuals remain unwilling to participate, enumerators will be instructed to move on to other households, or tea/soap will be provided as incentives to participants
REACH is unable to acquire the secondary data before primary data collection starts	Instead of using the secondary data to inform the primary data, REACH will collect the primary data separately, and then compare the primary and secondary data alongside one another to fill information gaps.
Community is unwilling to be forthcoming with information to people who are not trusted by the community (both the REACH AO and FC), particularly about cattle raiding.	REACH will switch out the Rapid Assessment FC (who is not from the community) with a staff member from Pibor that ACTED has successfully employed in previous projects there. Cattle raiding questions will only be asked if the group naturally brings up raiding during the conversation or if the facilitator feels comfortable with asking. We have had success in the past asking questions regarding cattle raiding, and most communities have been very open about both partaking in raids and being victims.

7. Dissemination Plan

Once the product has been made and validated, the output will be shared on the REACH resource centre along with distribution to all of the relevant stakeholders, including FSL and WASH cluster, ICWG, FAO and VSF. Depending on the outcomes, further assessments, or a larger cattle migration, raiding and FSL research project may be considered.

8. Documentation Plan

- Methodology Note
- Analysis Plan
- Cleaned dataset and transcripts from FGDs and interviews.

9. Analysis Plan

Interviews with key informants operating in Pibor County. The first step is conducting semi-structured interviews with humanitarian actors and government officials (namely health, water, and agriculture ministers). The KIIs will be used to understand a broader picture of the dynamics in Pibor county. They will be broken into two separate but at times overlapping themes. KIIs with water and health ministers and partners will provide an understanding of the general WASH habits for the area, including access to water, latrine usage, disease outbreaks, and it will also include questions on a cattle migration and resources for cattle. The second set of KIIs will be more focused on cattle migration/raiding and its linkage to changes in livelihoods over the previous years. The primary objective is to understand how broad changes in the environment, security, access to resources, or government regulation, has led to any changes in cattle raiding or migration patterns.

Focus Group Discussions: Cattle Migration, Livelihoods and cattle raiding. FGDs will be carried out with community members from different locations in Pibor. At the current period most HHs are currently in Pibor town, therefore, it is expected to have relatively easy access to groups from various areas in the county. This will allow the team to understand and triangulate data from various locations. The focus of the FGD questionnaire route is on cattle migration patterns including recent changes, traditional livelihoods, and the cattle raiding in the Murle society, particularly drivers of increased intensity, frequency and distance of raids. Please refer to the annex for the FGD questionnaire route.

KII Analysis Plan

Research questions	Data collection	Questionnaire Question	Questionnaire Responses	Data collection level
What are the general WASH habits for Pibor county?	KII with Water/Health ministers and partners	<ul style="list-style-type: none"> - General WASH habits for the county? - Boreholes (working and broken) - Primary sources of water - Latrine usage - Hygiene and sanitation - Washing hands? - Hygiene and sanitation products in the market? - WASH campaign initiatives 	Indicative of WASH habits in Pibor County	County level
What are the key cattle migration routes?	KII with Water/Health and FSL/Agricultural ministers and partners	<ul style="list-style-type: none"> - What are the key cattle movements? - Where are the cattle now? - Time periods cattle move? 	Indicative of cattle migration patterns in Pibor County	County level
How has cattle migration patterns changed over time and the underlining causes?	KII with Water/Health and FSL/Agricultural ministers and partners	<ul style="list-style-type: none"> - Where are the cattle now? - How do cattle camp locations change in dry v wet season? - Who do people who permanently live in Pibor town trust to take care of cattle? - How have livelihoods changed in previous years? What are 	Indicative of changes in cattle migration in Pibor County	County level

		<p>the underlying causes of the changes?</p> <ul style="list-style-type: none"> - Environment - Security - Resources 		
Has there been any recent outbreak in diseases, and are they linked to changings in livelihoods and cattle migration patterns?	KII with Water/Health and FSL/Agricultural ministers and partners	<ul style="list-style-type: none"> - Were there any outbreaks of diseases (human and/or cattle) last year? - What were the underlying causes? - Is it suspected that it was transferred from cattle to humans? - What was the level of response to the outbreak? Is there pre-existing infrastructure to react to an outbreak? 	Indicative of diseases outbreaks and capacity of local stakeholders to respond	County level
What are the key drivers in the increase in frequency, intensity and distance of cattle raiding?	KII with FSL/Agricultural ministers and partners	<ul style="list-style-type: none"> - How have communities responded to changed livelihoods? - Cattle raiding increased? - Migrating to new areas? - Has there been an increased dependence on certain livelihoods (i.e. more people relying on agriculture?) 	Indicative of cattle raiding dynamics in Pibor County	County level

FGD Analysis Plan

Research questions	Data collection method	Indicator / Variable	Questionnaire Question	Questionnaire Responses	Data collection level
What are the main towns, infrastructure locations, and cattle camp locations in Pibor county?	FGD – participatory mapping	Main locations where people live and where cattle camps are located	<p>Note the following locations in the area:</p> <ul style="list-style-type: none"> • Main Towns • Main Markets, Ports, and bridges • Official borders with other states <p>Dry and wet season cattle camps (which are the large camps and which are the small camps in each season?)</p>	<p>Mapping of locations and routes by season</p> <p>Open discussion which shall be recorded by AO</p>	Community level (indicative, not representative indicator)

<p>What are the main towns, infrastructure locations, and cattle camp locations in Pibor county?</p> <p>What are the cattle migration routes in the Pibor area?</p>	FGD – participatory mapping	Change in the location and size of camps over time	<p>Which camps were used in the past?</p> <p>Have the location of the camps changed over time? Why?</p> <p>Have camps changed in size over time? Why? What are the driving factors?</p>	<p>Mapping of locations and route</p> <p>Open discussion which shall be recorded by AO</p>	Community level (indicative, not representative indicator)
	FGD – participatory mapping	Cattle migration routes	<p>Which cattle migration routes were used last year during the wet and dry season?</p> <p>Are these routes the same or different from previous years?</p> <p>Where do they expect to move their cattle this year?</p> <p>Have many small cattle camps been combined into a large cattle camp?</p>	<p>Mapping of locations and route</p> <p>Open discussion which shall be recorded by AO</p>	Community level (indicative, not representative indicator)
Demographic breakdown of who participates in cattle movements	FGD – participatory mapping	Demographics and Movement Dynamics	<p>Who (age, gender) moves with the herds? Has this changed over time?</p> <p>How often do people move between population centres to cattle camps?</p> <p>Who moves to and from cattle camps?</p> <p>Has the type and number of people moving to and from cattle camps changed over time?</p> <p>How long do they typically stay in cattle camps?</p> <p>In cattle camps, how do people access services? What services are available? If the location of cattle camps have changed, which services have changes and how does this affect the community?</p>	<p>Indicative breakdown of main age and gender groups</p> <p>Indicative breakdown of main age and gender groups</p> <p>Indicative breakdown of main age and gender groups</p> <p>Indicative changes over time.</p> <p>Indicative estimation of time</p> <p>Indicative estimation of what type (WASH, Health, etc.) and quality of services are available.</p>	Indicative breakdown by age and gender and demographic group.

What are the primary livelihoods for HHs in Pibor, and have these changed over the years?	FGD - Changes in Food Security and Livelihoods	Food availability, access, utilization and stability	<p>During normal times what are the primary livelihoods that most households in Pibor use to obtain food and income?</p> <ul style="list-style-type: none"> - Where do most of their primary food sources come from (livestock herding, farming, foraging for food in the bush, etc.) - Has access to traditional livelihoods changed over the previous years (worsened, improved, no change)? <ul style="list-style-type: none"> ○ <p>How is a household's wealth determined (number of wives, number of livestock, number of businesses, etc)?</p> <ul style="list-style-type: none"> - What do they use their wealth/income for? - How do they obtain wealth when they need more (ex. When they want to marry): 	Indicative estimate of the level of food security and drivers in changes in food security in recent years	Community level (not representative of the county as a whole)
What are the Socio-economic dynamics of cattle raiding with Muerle culture?	FGD – cattle raiding	Cattle raiding dynamics	<ul style="list-style-type: none"> • <i>Why are HHs raiding cattle?</i> • <i>How has the frequency and intensity of cattle raiding changed over the years?</i> • <i>Where and what groups are raided? (Use map to get general routes/areas/groups raided)</i> <ul style="list-style-type: none"> ○ <i>What are the driving factors for these particular routes/areas/groups?</i> • <i>Are raided cattle kept in the same location as cattle already owned? (i.e. newly stolen cattle v. cattle purchased or stolen in previous years)</i> 		

			<ul style="list-style-type: none"> <i>If the stolen cattle are sold/traded, where are the markets?</i> 		
What are the linkages between changes in livelihoods and the frequency, intensity and distance of cattle raiding?	FGD – Cattle raiding	Cattle raiding dynamics	<ul style="list-style-type: none"> <i>What time of year does typically raiding occur?</i> <i>Does the routes/areas raided change for wet vs. dry season? Lean season vs Post harvest? Why?</i> <i>Does the occurrence/frequency of raiding change during times of ample access to food (i.e. HH/groups that are very insecure are more likely to raid; less raiding during post harvest period)? What are considered the driving factors?</i> 	<p>Indicative motives behind cattle raiding</p> <p>Indicative timeframe of when cattle raiding is most frequent</p>	Community level (indicative, not representative indicator)
How is does the transfer of cattle, particularly through raiding, expose the Murle community to various disease, including cholera-like diseases in Jie, Kapoeta, and RVF in Lakes?	FGD - Cattle Raiding	Movement of stolen cattle	<p>Where and what areas are raided?</p> <p>Are raided cattle kept in the same location as cattle already owned? (i.e. newly stolen cattle v. cattle purchased or stolen in previous years)</p> <p>If the stolen cattle are sold/traded, where are the markets?</p> <p>Do they attempt to re-steal cattle that was stolen previously?</p>	Indicative of where raided cattle come from and where they are taken post-raid	Community level (indicative, not representative indicators)

10. Qualitative Tools

Key Informant Interview Tool

- Will be the first tool used in the assessment

- This tool is broad topics to be discussed with key informants (KIs) on the ground in Pibor
- Target KIs, NGO FSL and WASH officers, government ministers from the health, water and agriculture departments.
- Health and Water focused KIs
 - Can you elaborate on the general WASH habits for the county?
 - How do most people access water? (clean or unclean)
 - Does this change in depending on the season (wet v dry)?
 - If from a river/swamp, do HHs normally treat water with tablets?
 - What do people use to collect water?
 - Does the general population have access to boreholes?
 - Is there a particular area(s) that lacks boreholes?
 - To what extent are latrines available across the county?
 - Do people use latrines or are they more likely to practice open defecation?
 - If people prefer open defecation, why?
 - Are there designated defecation areas?
 - Hygiene and sanitation
 - To what extent do people regularly wash their hands?
 - To what extent are hygiene and sanitation goods available in the market?
 - WASH campaign initiatives
 - Which NGOs work provide WASH services?
 - What services do they provide (i.e. drilling boreholes, information campaigns, etc)
 - Are there active information campaigns?
 - **Probing questions**
 - Signs of cholera
 - Negative effects of open defecation
 - Negative effects of not treating water
 - Where are the cattle now?
 - Are people and cattle concentrated in the same area?
 - Are they sharing the same resources? (i.e. Do people watching the cattle retrieve water/bath from the same watering source as the cattle?)
 - What are the key cattle movements and cattle camps?
 - What household members move with the cattle?
 - Do more household members join during different stages of the year? (i.e. Do female members come at a later date)
 - Are cattle from different settlements mixed together?
 - What are the key time periods cattle move?
 - Has there been any outbreaks of diseases when cattle move back from the camps to the settlements?
 - Were there any outbreaks of diseases (human and/or cattle) last year?
 - What time period was the outbreak and how long did it last?
 - Were any NGOs/Government agencies able to understand were the underlying causes?
 - Is it suspected that it was transferred from cattle to humans?
 - What was the level of response to the outbreak? Is there pre-existing infrastructure to react to an outbreak?
- FSL/Agriculture KIs
 - How have livelihoods changed in previous years? What are the underlying causes of the changes?
 - **Probing questions**
 - Traditional cattle grazing grounds are no longer available
 - Has there been an outbreak in disease (both cattle and human)
 - Has there been an increase in insecurity (intra-communal or inter-communal) that has limited access to traditional livelihoods?

- Has the availability of resources decreased?
- Has there been recent years of erratic rainfall patterns that led to a reduction of food production?
- Macro-economic instability leading to the decrease in a HHs terms of trade (i.e. getting less food per head of cattle/goat)
- How have communities responded to changed livelihoods?
 - **Probing questions**
 - Human migration to other locations?
 - Have households change cattle migration routes?
 - By force (government regulation) or choice?
 - Has there been an increased dependence on certain livelihoods (i.e. more people relying on agriculture?)
 - Increased raiding for resources (including cattle)
- Where are the cattle now?
 - Are people and cattle concentrated in the same area?
 - Are they sharing the same resources? (i.e. Do people watching the cattle retrieve water/bath from the same watering source as the cattle?)
- What are the key cattle movements and cattle camps?
 - What household members move with the cattle?
 - Do more household members join during different stages of the year? (i.e. Do female members come at a later date)
 - Are cattle from different settlements mixed together?
 - How have cattle camps changed over the recent years?
 - If yes, please explain:
 - Have they become more consolidated?
 - Has this led to disputes between communities? (i.e. Those who've traditionally used the area versus new comers)
- What are the key time periods cattle and people move?
 - How do the different seasons (wet v. dry) affect people migration?
 - Do they move in large groups and are the groups related in anyway?
 - When do cattle migrate for dry season grazing and when do they return to the settlements?
 - Has there been any outbreaks of diseases when cattle move back from the camps to the settlements?
- Have communities lost large portions of cattle to disease or raiding?
 - Were there any outbreaks of diseases (human and/or cattle) last year, in which areas?
 - During which time period of the year is cattle raiding most frequent?
 - Has this changed over the years?
- Does the government or NGOs have the capacity to respond a large outbreak in cattle diseases?

South Sudan REACH PARTICIPATORY Cattle Migration MAPPING – Question Route

Moderator Name:

Assistant Moderator Name:

Focus Group Name/Code:

Started at

Completed at

County of Knowledge (the area we are seeking information about)	How do they know about this county? (Recently left, HH member visited, Regular contact etc)	State of origin	Age	Sex

Facilitator's welcome, introduction and instructions to participants [5 minutes]

Introductory note [2 minutes]

- Welcome and thank you for volunteering to take part in this focus group discussion about the current crisis in South Sudan, which is about a better understanding of community and settlements in your country of origin. You have been asked to participate as your point of view and knowledge about your community situation and current needs will be used to inform response strategy and planning. I appreciate your time.
- **Please note that this meeting does not have any impact on whether you or your family receives assistance. These discussions are only meant to better understanding how you, your household, and the community perceive the situation in your villages of origin**
- **Anonymity:** I would like to assure you that the discussion will be anonymous. I and the other focus group participants would appreciate it if you would refrain from discussing the comments of other group members outside the focus group. If there are any questions or discussions that you do not wish to answer or participate in, you do not have to do so; however please try to answer and be as involved as possible.
- The discussion will take no more than one hour.
- We are asking for your ration card number because we might want to contact you again to know how things have changed in your home communities several weeks of months after this focus group discussion.

Ground rules [2 minutes]

1. The most important rule is that only one person speaks at a time. There may be a temptation to jump in when someone is talking but please wait until they have finished.
2. There are no right or wrong answers
3. You do not have to speak in any particular order
4. When you do have something to say, please do so. There are many of you in the group and it is important that I obtain the views of each of you
5. You do not have to agree with the views of other people in the group you can say that.
6. Does anyone have any questions? (answers).
7. OK, let's begin

Questioning Route

INSTRUCTIONS TO MODERATORS

1. **Questions to participants:** these are the questions that should be read and communicated to the participants. If there are some specific vocabulary which may be unclear, do not hesitate to provide a definition for the purpose of the exercise.

2. **Probing questions:** Probes and clarifying questions are an important part of interviewing and have two main purposes: **1)** To help clarify what an interview respondent has said and **2)** To help get more detailed information on topics of interest. Probes allow the interview respondent to provide more than just a one-sentence answer to the questions you ask. **Do not read probing questions together with the questions to participants.** Use or adapt them if necessary

STAGE 1: Mapping cattle migration routes

Questions to Participants:

(Engagement question)

INTRODUCE PARTICIPANTS TO THE MAP – show them where we are now, and the area of interest on the map. Show them major towns in the region so they understand the map.

Exercise to build participant familiarity with the map: Through showing them key roads, towns etc, work with each participant to identify their home town on the map. Circle each participants home town/village on the map, if the settlement name doesn't exist, identify approximately where the village/town is and circle with the name. This helps participants orientate themselves to the map and ensures a reference point for discussions.

Note on using map: Wherever possible during the discussion mark details on the map, aka original homes prior to displacement, where people moved to, where was the fighting etc.

Please note the following locations in the area (Note: if you have already mapped these locations out in a previous session, place the locations on the map before the session and simply review the existing locations with the group; be sure to mark any new locations that have changed since the data was last collected (if using data from previous years):

- Main Towns
- Main Markets (for both livestock and commodities) and trade routes (for food, livestock and commodities)
- Official Borders with other States
- Dry and West season cattle camps (specify the season for each). Which are the large camps in each season? Which are the small ones in each season?
- Which camps were used in the past? Are they the same areas that they are using now? Have some camps change in size? Mark those that have changed.

Please draw cattle migration routes on the map.

- Where are the majority of the cattle now?
- Which cattle migration routes were used last year for both the dry and wet season? Where did people take their cattle?
- Are these routes the same as to previous years? If no, draw migration routes from previous years.
 - o Why are these routes different? (Ask this as open-ended, but provide guidance on possible reasons below if it's required):
 - **Probing questions – only ask if these don't come up naturally**
 - Lack of water/food for animals?
 - Lack of water/food for people?
 - Insecurity?
 - Government/higher authority blocked/regulated movement?
 - They never take the same routes each year?
 - o Are there particular places that people take their cattle (example: farming areas in the highlands near Boma) when they experience food insecurity
- Where do they expect to move their cattle this year?
- Have they combined cattle from many camps into a single, large camp in any areas? If so, when did they do it and why did they do it (Insecurity, smaller herd sizes, disease, lack of resources, etc.)?

STAGE 2: MOVEMENT DYNAMICS

Who (age, gender) moves with the herds? Has this changed over time?

- How often do people move between population centres to cattle camps (and from cattle camps to population centres) Who moves to and from the cattle camps (young men, women and children, etc.) Has the type and concentration (size, gender, age) of people who go there changed over time?
 - o i.e., 5 years ago it was only young boys going to camps, while now the whole family goes. Why?
 - o When the whole household moves, are they moving as one unit or is it a staggered movement? For example first young boys, followed by women, girls, etc
- How long do people typically stay in cattle camps?
- At cattle camps, how are resources accessed?
 - o People rely solely on cattle alone, or there are other services there (boreholes, markets, health facilities, etc)
- Do HHs take cattle from the camps to the markets?
 - o Which markets are used?
 - o Have these changed over time?

STAGE 3: Changes in Food Security and Livelihoods

During normal times what are the primary livelihoods that most households in Pibor use to obtain food and income?

- Where do most of their primary food sources come from (livestock herding, farming, foraging for food in the bush, etc.)
- Has access to traditional livelihoods changed over the previous years (worsened, improved, no change)?
- If worsened, why?
 - **Probing questions:**
 - Access to cattle reduced (raided, died, etc.)
 - Outbreaks in diseases
 - Insecurity
 - Trade has been cut off
 - Resources have depleted
- During periods of low food availability, what are coping strategies used to stretch current food stocks, obtain food or income to purchase food? Which are considered common (i.e. used every year during the lean seas) and which are considered severe (i.e. only used during times of extreme hunger)
 - **Probing questions:**
 - Eating fewer meals
 - Borrowing from relatives
 - Gathering wild foods
 - Sending children away
 - Selling cattle in the market
 - Cattle raiding

How is a household's wealth determined (number of wives, number of livestock, number of businesses, etc)?

- What do they use their wealth/income for?
 - **Probing questions**
 - Marriage
 - Purchasing more cattle
 - Expanding businesses

- Building more shelters
- Purchasing food
- Purchasing medicine/school fees/NFIs
- How do they obtain wealth when they need more (ex. When they want to marry):
 - **Probing questions:**
 - Cattle raiding
 - Borrowing cattle or other assets
 - Buying cattle in the market
 - Mining or other work
 - Remittances

STAGE 4: Cattle Raiding

What are the main reasons that the community conducts cattle raiding (it's likely that this will have come up in the conversation in the previous section).

Probing questions (also consider reponses from the previous section)

- Fill consumption gaps (sold for food, slaughtered)
- Increase wealth
- Sell for resources or services (education, medicine, NFIs)
- Marriage payments
- Debt repayments
 - No reason (i.e. stolen out of revenge, it's fun, etc.)
- What time of year does typically raiding occur?
 - **Probing questions**
 - Does the routes/areas raided change for wet vs. dry season?
 - Lean season vs Post harvest? Why?
- Does the occurrence/frequency of raiding change depending on the community's access to food (i.e. HH/groups that are very insecure are more likely to raid; less raiding during post harvest period)
 - **Probing questions**
 - What time periods do you consider cattle raiding to be at its worst (i.e. high frequency and intensity)? What was the reason for it?

How has the frequency and intensity of cattle raiding changed over the years?

- **Probing Questions:**
 - Last year, 5 years ago?
- If changed, what was the driving factors for the increase/decrease in frequency and intensity?
 - **Probing questions (keep a focus on how has climate shift has affecting changes in livelihoods)**
 - Increase in food insecurity (i.e. people using stolen cattle for food or selling them)
 - Consolidation of cattle camps
 - Loss of cattle due to disease outbreaks
 - Fewer resources for cattle
 - Changes in lengths in wet and dry season
 - Revenge for previous
 - Rival cattle camps in close proximity
 - Marriage payments
 - Pay debts

Note: The following questions are about cattle raiding and can be sensitive. The questions should only be asked if the topic is brought up naturally during the conversation, and can be framed from both a victim (i.e. The group's

cattle were recently raided) and/or if the group is open to discuss if they partake in raiding. Do not ask very detailed locations but more broad areas/CCs that are more likely to be raided. Previous assessments have been quite successful with groups activity discussing raiding patterns, but it does need to come up naturally.

Where and what areas are raided?

Use map to get general routes/areas raided)

- Why do they choose these particular routes/areas?
 - **Probing questions (This do not are not meant to discuss when/how a group raids, but how they select the area to raid)**
 - Does the targeted area have an excess amount of cattle
 - Are migration routes getting closer
 - Are they easy target? (i.e. unarmed)
 - Rival tribes
 - Revenge raiding for previous raids on their cattle
 - Have the areas raided changed over years?
 - Is there intercommunal raiding? (HHs from the same payam/county raiding each other's cattle)
 - If yes, when did this begin?

Are raided cattle kept in the same location as cattle already owned? (i.e. newly stolen cattle v. cattle purchased or stolen in previous years)

- If not, why and where are they kept?

If the stolen cattle are sold/traded, where are the markets?

- Is there an issue with selling stolen cattle (i.e. Selling stolen cattle in other markets than those normally used.),if so what is it?
- How quickly are cattle resold after being stolen?
- Is there a difference in price for stolen cattle and non-stolen cattle?

Do they attempt to re-steal cattle that was stolen previously?