

Boma Development Initiative Briefing



Climate change and inter-community conflict over natural resources in Jonglei State, South Sudan

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Background

Since the signing of the comprehensive peace agreement in 2005, which led to the independence of South Sudan, the main cause of insecurity in the new state has been violence between different communities. Of South Sudan's ten states, Jonglei is the most prone to inter-community and political conflicts, which have escalated

since 1999. For example, in 2009, about half of the households in Jonglei reported having been affected by insecurity or violence.¹

While these incidents primarily involve different ethnic communities, they also occur among members of the same ethnic community. Previous reports attest to heightened levels of insecurity in the state. For example, according to the 2010 UN OCHA

incidence database, a total of 225 incidents were reported across the ten states of South Sudan, with Jonglei, accounting for 44 percent of the total incidences recorded.² The United Nations Department of Safety and Security (UNDSS) account of inter-community conflicts in Jonglei during 2010 showed that inter-ethnic conflicts pitted the Murle against the Dinka, and the Murle against the Nuer. On

the other hand, intra-ethnic conflicts pitted two Nuer sub-groups; the Lou against the Jikany.³

The conflicts and increased incidence of cattle raiding apparently resulted in massive displacement, asset depletion and livelihood maladaptation. On the basis that eighty six percent of the households in the state depending on crop farming or animal husbandry as their principal source of livelihood, according to the National Bureau of Statistics,⁴ these conflicts have serious consequences on livelihoods and food security. The Bureau of Statistics estimates that 48 percent of the population in Jonglei lives below the poverty line. The analyses presented in various studies indicate that levels of food insecurity⁵ are relatively high. The Southern Sudan Annual Needs and Livelihoods Assessment indicates that Jonglei has remained in the Integrated Food Security and Humanitarian Phase Classification (IPC) Phase 3 (acute food and livelihood crisis) since 2008. Some 39 percent of the population suffers from food insecurity and 30 percent from severe food insecurity.

These concerns became the impetus for longer-term measures to address livelihood and food security challenges. These efforts are reflected in such bodies as Southern Sudan Relief and Rehabilitation Commission (SSRRC) and Food Security Information for Action (SIFSIA) that are intended to make sure that food security is supported. These concerns also generated analytical interest in livelihoods and food security, such as the 'Southern Sudan Livelihood Profiles'⁶ that was undertaken in 2006⁷ and which remains one of the most robust analyses of rural livelihoods and food security on a geographical basis within southern Sudan. The livelihood zoning map and livelihood profiles provided by this assessment offer important documentary support for this document.

Securitization of environmental hazards in Jonglei

In order to understand the environmental dimensions of the inter-community conflicts in Jonglei, it is necessary to look at the classifications of the state's livelihood zones. The mapping information provided in 'Southern Sudan Livelihood Profiles' shows that Jonglei has diverse livelihood patterns and climate characteristics, which cut across four livelihood zones. These include the Nile and Sobat Rivers zone, Eastern Flood Plains Zone, Hills and Mountains zone and Arid/Pastoral zone. A review of the livelihood profiles for the period 1999-2002 shows that in each zone, the inhabitants had developed livelihood strategies according to the comparative advantages that are essential for optimizing utilization of the resources.

To understand the path towards vulnerabilities in Jonglei, it is essential to look at both the predominant sources of food and the main sources of income. The predominant sources of food for a group are an indicator of its livelihood pattern. In the state there is a wide variety of food sources. In the Nile and Sobat Rivers zone, apart from crops and livestock, wild foods and fish are the main sources of food. In the Eastern Flood Plain Zone, livestock and agriculture, supplemented by fish and wild foods are the main food sources. In the Hills and Mountains zone, the main sources of food fall are livestock and agriculture. In the Arid zone, there is an almost exclusive reliance on livestock for food.

On the other hand, the sources of income provide the context for understanding interrelationships between the inhabitants. The sources of income govern how the local communities interact. Primarily, in all the four zones, trade constituted an important source of income. This has

to be seen in relation to the fact that buying and selling, either by way of petty trade or marketing locally produced products have provided important channels, not just for accessing essential products, but also for buttressing livelihoods and food security through income generation.

In analysing the livelihoods in Jonglei it is important therefore to take note that, although some of the locations in the state, such as those contained in the Arid zone, have the most drought-prone environment in South Sudan, the current livelihood challenges and food security issues are not the product of a series of extreme weather conditions. In fact, the collapse of Jonglei's long-established livelihoods and trading practices can be viewed as the product of inter-community conflict that has spiralled since 1999. Important effects of these conflicts included population displacement, the disruption of farming, destruction of production assets, and disruption of trade routes and trading activities, all of which affect access to and the availability of food.⁸

In explaining the prevailing livelihood and conflict vulnerabilities, the first step is to look at the situation as an outcome of the collapse of long-established inter-community mechanisms that facilitated mobility and trade. Mobility allows the local communities to take advantage of seasonal food opportunities in different areas, and is also crucial for the survival of livestock, which depend on regular migrations between dry and wet season grazing areas.⁹ On the other hand, trade (in labour, cattle, and various local products) enables wealth generation and also helps to offset localised production failures in years of bad rain.¹⁰

The second step is to look at the prevailing situation as an outcome of maladaptations (or poor adaptation strategies), which in themselves appear to further destroy the environment and

in that way increase vulnerability. The bearing corroborates with the observed environmental problems in Bor County in the Eastern Flood Plains Zone. A key aspect of the livelihood strategy is that the Toposa and the Murle communities from the Arid zone counties need to move their livestock further afield during dry seasons, to the neighbouring Kidepo Valley and Bor County in the Eastern Flood Plains and Nile and Sobat Rivers Zone.¹¹ As noted, the increased concentration of settlements in the east of Bor County has led to overgrazing which in turn has resulted in gully erosion. Communities try to cultivate in low ground spots where there are good catchments and deposits of silt from surrounding sloping ground; however erosion often washes away the crop. The vegetation that is now growing in the region is not suitable for cattle but is more appropriate for small stock.¹²

But while insecurity is understood as an underlying factor of environmental degradation as already noted, the secondary observation and probably the most significant concern at the moment is what is sub-titled in this section as securitization of environmental hazards, often reflected in conflicts between different communities. It is apparent that, ordinarily, the risk of conflict would be influenced by perceived or actual threats to livelihood rather than ethnic identity. The observation made here is that, despite the ethnic divide and evidence of climatic extremes, the pastoralist communities who are the most prone to these hazards would normally not have recourse to violence, but are frequently compelled to engage in peace talks with their neighbours in order to get access to grazing, and negative changes in terms of trade for livestock and grain pose the biggest threats.¹³

What is increasingly surfacing is the securitization of ethnic identities, which is rather reflected in actions that

appear to depart from the customary ethics of warfare. Among the ethical principles of warfare were that the enemy must not be ambushed or killed outside the battlefield and that a fallen warrior covered by a woman for protection must be spared, as harming women and children in war was strictly forbidden.¹⁴ This phenomenon broadly explains the escalating incidences involving and road ambush.

At the moment, one of the most disturbing consequences of both the collapse of the long-established livelihood systems and apparent concentration of populations is that the potential risk for future tensions between groups remains high, with almost certain competition over scarce resources among ethnic groups, and between residents and returnees.¹⁵ It is noted that 170 of South Sudan's 505 payams are currently receiving returnees, and there are some limited reintegration plans in place to ease their return. However, while host communities have largely welcomed returnees, they are also struggling to find food.¹⁶

Locations and communities affected by conflict

The security situation in Jonglei has most deteriorated in Boma and Bor counties. Boma is largely inhabited by the Murle, the Jie and partly the Anyuak communities who have settled in area for trade and as IDPs. The Murle have been affected by the Toposa and the Jie migration since 2005. The Murle remain quite well armed. Due to the wide circulation of firearms, the county has witnessed increased incidences of cattle raids and child abductions. The 2006 disarmament campaign was a failure, primarily because it had to be aborted in the face of strong condemnation from the

international community and as a result it could not go forward and disarm the Murle, who, by their continuing attacks, encouraged the disarmed tribes to re-arm.¹⁷

On the other hand, Bor is largely inhabited by the Dinka and the Nuer communities. The conflict and tension between the two has been in many ways the most volatile and politicised of the conflict cycles. The greatest impact of conflict is seen in restrictions to migration for access to water, grazing and trade, all of which play an important role in the food security of households.

Inter-community relations and conflict

Conflicts between different communities are a continuing problem in Jonglei. In response to question about the prevalence of conflicts among the local communities in the study area, there was strong concurrence among study participants, regardless of ethnic affiliation, that conflicts among the local communities occur from time to time. The discussions revealed that the conflicts could take numerous forms, but mainly comprise of actions targeting resources and actions targeting persons. Regarding actions targeting resources, the most overt action noted by all the segments was cattle raids. The other transgression cited is that which involves encroachment on neighbouring lands for pasture and water.

Looking at actions targeting persons, the form most frequently cited was child abduction. At the ethnic group level, this was described by the participants representing three out of the four ethnic groups - the Murle, the Dinka and the Jie groups. At another level, this response also surfaced from those representing Peace Committees, women's groups and youth segments. The other form of conflict noted was road ambush, which

was described by Peace Committees, women's group and youth segments. These two types of action are well documented in literature relating to insecurity in South Sudan as actions that continue to pose severe risks to the local communities.

What factors are driving the conflicts?

When discussing the issues that they thought were responsible for the occurrence of conflicts, the respondents cited a range of factors, including cattle raids, disputes over grazing land and water resources, child abduction, poverty, hunger, bride price requirements, road ambush, and expanding farmlands. Essentially, these observations suggest that inter-community conflict is a complex problem caused by the interaction of many factors. It cannot, however, escape notice that many of the issues cited as causes, are fundamentally conflict outcomes. Therefore, for a more holistic appreciation of the problem, both the causes and outcomes of the conflicts need to be considered. By way of summary, what emerges from participants' views on the causes of the conflicts is a relatively clear picture of four specific conflict drivers. It is however important to note that the issue of cattle raid can be seen as straddling more than one dimension of the conflict. These aspects are discussed below.

Competition for natural resources: The main issue linking conflicts to the environment expressly mentioned was "fighting over water and grazing land." It is interesting that only the military participants that cited this issue. This observation is particularly important because it may point to two conclusions: That the local communities do not readily associate inter-community conflicts with environmental problems, or that the boundary between the ethnic and

resource-based drivers has become indistinctive.

Cultural values: According to the discussions, the bride price requirements put increased pressure on the local communities to use violence to acquire cattle. The distinction between the participants representing the four communities is of interest. This view was notably demonstrated among the participants representing Dinka group. Putting the bride price requirement among the ethnic groups of the Dinka, the Nuer and the Murle into perspective, it is notable that the demand for bride price is comparatively higher among the Dinka than either the Nuer or the Murle. It is noted for example, that in the Nuer tribes, 40 cows are generally paid to the bride's family compared to the Dinka where 100 cows are paid.¹⁸ Typically, an important implication of these cultural requirements would therefore be reflected in increased incidences of cattle raid.

Poverty and underdevelopment: Another dimension linked to conflict is general poverty and circumstances of underdevelopment. Again, in making a distinction between the participants representing the four ethnic groups in the study, this concern was notable among those representing the Murle, the Dinka and the Nuer. The aspect of poverty and underdevelopment also depicts notable gender inclination. With the women's group participants making reference to poverty and hunger, it appears that specific challenges related to food access are of greater concern to women.

Aggression and vendetta attacks: Among the local communities, actions of aggression and vendetta can take different forms, including road ambush, child abduction and cattle raiding. Community members interviewed for the field research emphasised that these security threats were pervasive. The findings of the report 'Southern Sudan Livelihood Profiles' draw attention to child abduction and cattle raiding,

underlining these as important constituents of the conflict cycle in Jonglei.¹⁹

Perceptions of inequality and conflict

An important aspect of the inter-community conflicts in Jonglei is the local perceptions of inequalities. To assess the relationship between perceived inequalities and the risk of conflict, the study participants were asked about the differences that they thought were the predominant causes of conflict between members of their ethnic community and members of a neighbouring ethnic community. From the results, it is apparent that the influence of economic, climatic and ethnic differences have the effect of increasing the risk of conflict. Having noted this, we can now look at each of these aspects separately.

The most noted differentiation factor affecting insecurity in Jonglei is the climatic dimension. When a distinction is made between how different segments of the respondents relate these inequalities and the risk of conflict, it was apparent that, across these three dimensions of differentiation, climatic difference was the one in which virtually all the participants appeared to have the same perception. An important feature of Jonglei's geography, as already noted, is its diverse ecosystem, with livelihood systems depending on the ability of people to move and to trade. Mobility allows people to take advantage of seasonal food opportunities in different areas, such as fish and wild foods; it is also crucial for the survival of livestock, which depend on regular migrations between dry and wet season grazing areas.²⁰ As such, it can be expected that the struggle to access natural resources influences inter-community differences and may lead to conflicts.

Turning to the economic differentiation, the results suggest that

differentiation in this dimension constitutes an important cause of conflict. This position emerged across all the participant segments, except when a distinction is made between the ethnic groups represented. Based on the discussions, it was apparent that economic differences may be particularly important among the Murle and the Nuer communities, but probably of less importance among the Dinka in terms of influencing conflict.

Finally, looking at ethnic differences, the discussions suggest that this dimension is assuming critical importance, making it a key source of conflict. Making a distinction between how different segments of the respondents, ethnic dimension appear to be a concern among all the ethnic groups represented in this study, and also among the participants representing local authority leadership. These results are generally consistent with the evidence from previous studies, such as the International Crisis Group's 'Jonglei's Tribal Conflict: Countering Insecurity in South Sudan', which show that, despite the shared, and recently achieved, goal of independence, local and tribal identities remain stronger than any sense of national consciousness.²¹ Against this backdrop, however, what is interesting is that the issue of ethnic differences does not surface in conflict risk perceptions of women.

Linking seasonal calendar of activities, access to food and insecurity

The seasonal calendar of activities provides a starting point for understanding the effect that ecological factors have on the risk of conflict. In South Sudan, and particularly in Jonglei, perspectives on the inter-community conflicts subsume not just the ethnic and political underpinnings but also the environmental dimension.

The discussions during the course of this study highlighted the importance of farming as a livelihood support activity for the local communities. In making a comparison of the seasonal calendar of activities of in respect to crop production, the findings of this study point to two patterns of farming among the local communities. The first pattern entails two farming seasons, which involve planting during the months of April/May and September/October, and corresponding harvesting around August and December. The second pattern entails one farming season, which involves planting during the months of May/June and harvesting around October/November.

Going into more detail about the relationship between the seasonal calendar of activities and the occurrence of conflict, although the results do not point to clear-cut relationship between seasonal patterns and incidence of conflict, it was apparent that, by and large, that there is greater risk of conflict in the dry seasons. Generally, most of the participants either mentioning that most incidents occurred during dry season or that the occurrences are not specific to any season.

It will be seen that this outlook appears to be at variance with the perspective offered in 'Southern Sudan Livelihood Profiles' which showed that incidents of insecurity, notably cattle raiding, peaks during the wet and hunger season (July).²² The common attribute among the pastoralist groups point to lower likelihood of the conflicts occurring during periods of heightened drought because the affected communities, in accord, tend to view the imminent threat of drought as the 'common enemy'.²³

Viewed broadly, it appears that the dry seasons are turning out to be as risky, if not more risky than the rainy seasons. This observation is quite important in terms of understanding how the temporal distribution of inter-

community conflicts may have changed over time. The opinion that that the occurrence of conflict is unspecific to any season provides would seem to imply that the factors associated with the local conflicts have become more multifaceted and indistinct. The International Crisis Group Report shows that that the political aspects of the ethnic divide in Jonglei have increasingly permeated the core issues around inter-community conflicts.²⁴

Perceived long-term changes in natural resources availability

The findings of this study show clearly that the local communities generally perceive a change in the availability of natural resources in the past 3 to 4 years. First, looking at the changes in respect to rainfall, virtually all the study participants reckon that there has been a decrease in rainfall, which most described as 'short' and 'unpredictable.' Some participants reported specific observations, for example noting the lack of rainfall in the period 2007/2008 and increase in rainfall in the ensuing period, 2008/2009.

Getting into more detail about the evidence of decreasing rainfall, some participants provided more explicit descriptions; citing a range of manifestations as evidence of this change. The participants spoke of flooding, reducing pasture, increased migrations, and increase in cattle prices. A rather interesting and more explicit response was provided by one participant, who referred to the Toposa migrations from Kapoeta to Kuron and eventually to Boma, which ultimately led to cattle raiding and increased conflicts between the Jie, the Toposa and the Murle.²⁵ In making comparisons across the male and female participants, it was apparent

that overall, gender did not appear to influence differences in opinions concerning changes in rainfall.

We turn next to the changes in natural resources availability in respect to land. The study participants similarly believed that the amount of available suitable land for grazing and watering animals²⁶ has been decreasing in recent years. Here again, details offering explicit examples of the factors responsible for reduction of land were mentioned. Discussions on how this has impacted on land availability covered different dimensions. On the one hand, the changes were viewed to be as a result of factors which can generally be categorised as human induced. The issues mentioned included situations of higher concentration of settlements, and the occupation of a swamp area by a local company. Reportedly, these have led to reduction in the amount of suitable land available for grazing and watering of animals. On the other hand, these changes were viewed to be as a result of weather related factors, generally citing reducing precipitation. This is reflected in a view presented, to the effect that, "when there is sufficient rain then the space for grazing and watering increases, and the same decreases during dry seasons."²⁷

Perceived long-term changes in security situation

Another important angle is to examine perceptions on how the situation of security has changed over the years. Focus group participants were mixed in their opinions on whether conflicts over land, water and cattle have increased or decreased in the past 3 to 4 years. In considering the responses, it is perhaps important to first look at the security situation from the law enforcement perspective. The opinions presented by the military participants suggested that

conflicts between different communities have generally decreased, views that appeared to cut across other segments representing the youth and Peace Committee.²⁸

At the ethnic group level, the results suggest that the ethnic groups view the security situation differently. Whereas those representing the Jie group generally felt that there has been a decrease in conflicts over the specified period, those representing the Murle, the Dinka and the Nuer groups thought to the contrary. While we cannot be sure why there is discrepancy between perceptions of different ethnic groups; this may reflect heightened, but localised insecurity problems among different communities.

Making additional distinction by gender, the results reveal that generally women have negative perceptions of security situation. It should be no surprise that this outlook was paramount among the women's group participants. Considered, from gender perspective, this divergence may reflect a general grievance about the about the disproportionate effect of insecurity on women and children.²⁹

Pastoralist migrations, land use and conflicts

The importance of pastoralism as a livelihood system in Jonglei can be appreciated when we consider that the Arid Livelihood Zone makes up a large section of the state. The local communities typically rely on pastoralism for their livelihood activities. Migration therefore remains an important aspect in their production system. During the dry season livestock are taken to distant pastures which can take up to four days walking away from the homestead.³⁰

First, focusing on the past pastoralist migrations, the study participants spoke of movements, some dating as far back as the mid

1980s. By calculation, the durations of stay seem to range from few months to well over twenty years. Piecing together the evidence from the focus groups, we can deduce that at least five new locations that witnessed longer periods of stay of the migrating pastoralists. The study findings demonstrate that the longest periods of stay took place in Boma, Kasengor and Nowoyapuru, from the year 2002 to present. In more recent years, the locations that witnessed longer periods of stay by the migrating pastoralists were Macaol and Gamaiza, with the periods of stay ranging from 2005 to 2009 and 2006 to 2010 respectively.

The results of this study show that weather patterns continue to trigger pastoralist migrations in Jonglei, these locations have similarly become subject to conflict between the migrating and the hosting communities. Probably due to more severe climatic conditions, what emerges is that the pastoralists need to travel further to reach water and grazing land and stay on other communities' land for a longer time period than before. The locations cited included Boma, Kasengor, Loyapuru and Nowayapuru. However, the results also showed that more recent migrations to these localities apparently involved shorter periods of stay, from March to May 2011.

Respondents' perceptions reflected divided opinions on the link between pastoralist migration and conflict. The thinking among those participants representing the military officers segment was that these migrations are a source of conflict, with identical views surfacing among those representing the Murle, the Dinka and the Nuer groups. On the contrary, both those representing the Jie group and Peace Committee segment supported the view that pastoralist migrations do not of necessity cause conflicts. Gender perceptions on the question were difficult to decipher, because of divided opinion among the women's group participants.

In the context of inter-community relations, it seems that the seasonal pastoralist movements have over time become subject to higher risks of conflict. Evidence from an earlier assessment shows that "this is particularly so for the Hills and Mountains and Bor County, and is caused by cattle raiding practices which often result in the Toposa and the Murle being denied access to grazing land in the subsequent seasons."³¹ It is evident from this study that, to manage migration-related conflicts, most communities have or tend to make local peace agreements, particularly when there is food stress, to facilitate their movements to other territories, but as noted, they are of a temporary nature.³² From the discussion, virtually all the community representatives interviewed reported existence of previous agreements between the local communities and pastoralist groups,³³ although the majority of the participants representing the Murle group were uncertain of any such previous agreement. The specific agreements noted were those between the Murle and the Anyuak, and between the Murle and the Toposa. A supplementary observation, however, is that some communities, notably the Murle and the Nuer, do not have do not have an agreement with the pastoralist groups. In particular what came to the fore was that the duration of such agreements is often short-lived. A specific agreement cited was the one between the Jie and the Toposa groups, but which lasted only two months.³⁴

It was not an objective of the study to analyse the specific nature and extent of these movements on the receiving locations, but we can approximate that the long-term settlements had profound effects on the inter-community relations. The propensity for longer periods of stay appears to go against the customary system of seasonal migration, which is the essence of the right of access to resources during the dry seasons.

Accordingly, it would appear that the breach of these customary practices is what has rendered these locations subject to conflict. From the findings, it is evident that the migratory practices tend to generate and deepen ethnic tensions that have exacerbated the risk of conflict between the migrant and the host communities. In a seeming departure from the principle of resource sharing, current migratory practices, according to the respondents, involve the use of force to access grazing land and water resources, while cattle destroy the crops of the farming communities.

Possibilities for addressing insecurity problem

An important question was to ask the study participants to describe possible solutions to the conflicts. The findings described below reflect how the respondents viewed a number of issues relating to insecurity in their communities. The discussions also highlight viewpoints regarding how different segments of the sample viewed these issues. The suggested solutions give significance to six issues the community members would want to address. Each of these issues is discussed below.

Water scarcity: Lack of access to safe water makes the problem of insecurity more significant. With the exception of Local Authority leaders, participants in all the groups believed that inadequate access to water heightened the insecurity problem. As solutions to the problem, participants mentioned two key ways to address the issue: providing permanent water points to all communities, and digging canals, so that communities in land locked areas can have an access to water.

Ethnic differences: Participants in all the groups placed strong emphasis on the role of ethnic differences in the occurrence of conflict. In accordance with the responses, participants seemed to believe the government is

obliged to take special measures to enhance ethnic harmony. The range of suggestions that could prevent or lessen atmosphere of ethnic tensions included consultative meetings among the leaders of the communities and government officials, peace meeting and mediation for the communities, establishing new peace agreements, and holding peace talks to strengthen the relationship between the communities.

Land use disputes: Issues related to land dispute emerged among women's group and those representing the Dinka group. Overall, the respondents emphasised tribal dialogue on land use as the solution. This was qualified by the women's group who pointed out the need to advise pastoralists to avoid entering farms and the need for pastoralist groups to seek for permission before entering private land.

Value attached to cattle: The issue of cattle emerged more specifically among the women's group participants. Although there was no consensus on how exactly the issue of cattle would be handled, the participants ostensibly thought that addressing the issue of cattle raiding was important for addressing insecurity. Thus, in spite of the value attached to cattle among the local communities, an occasional indication of contempt was recorded, as reflected by the somewhat instinctive and emotional comment from one participant, such as "Poison all cows so peace can reign."

Unfortunately this is also a view shared by many policy makers in countries where pastoralism is widely practised. While it is tempting to see cattle-keeping as part of the problem, this is an over-simplification of the issue. Forcing pastoralists to abandon cattle-keeping is not a viable option, partly because pastoralism is in fact an adaptation to the environment, which, according to some research, is the most appropriate and efficient given the harsh environments where it is practised.³⁵ Furthermore, as an

integral element of the culture and identity of these communities, it would constitute a violation of the right of pastoralists to practise their culture.³⁶

Weapons in civilian hands: The discussions suggest that the escalating conflict cycles witnessed in and around Jonglei is tied with widespread availability of firearms. Issues related to circulations of weapons emerged from the participants representing the military, the Jie village leaders and youth groups. In view of that, the respondents emphasised disarmament as a measure necessary for the scale of violence to be reduced.

Limited educational opportunities: Views regarding educational opportunities emerged from the participants representing women's group, military officers and local authority leaders segments. It is worth noting this stood out as the long-term measure likely to offer the most positive results, in terms of providing livelihoods alternatives to cattle keeping, which is a major driver of violence.

Suggestions on policy directions

Respondents were asked to describe the policy directions they thought would be

appropriate if implemented by the local government officials, UNMIS and community representatives. The participants suggested a wide range of actions that they thought were suitable. The suggestions are sorted according to seven broad viewpoints, comprising: security, infrastructure, food and agriculture, land issues, water and inter-community relations.

In order of frequency of mention by different groups, the strongest suggestion expressed by the respondents primarily focused on the need to reinforce security. Suggestions offered pointed to the need to strengthen law enforcement agencies, enforcing law and order equally among all communities, posting security personnel away from their area of origin so that security staff are not restricted to providing security services in their areas, and introducing police posts along the county or community borders.

The next most important suggestion concerned the imperative to improve education. Participants generally emphasised the need to invest more in educating the youth. This view emerged across all the groups, with exception of those representing the Dinka and the Nuer groups.

The third important suggestion was in regard to land. This view emerged from all the segments, with the

exception of military participants. Participants recommended two key issues; first, that land should be demarcated to deter conflict, and second they stressed inter-community dialogue on land use. The emphasis on land gives weight to its importance as a conflict driver.

The fourth important suggestion was in regard to road construction. The road network is seemingly important for promoting cash income activities. This position fits with the information offered in the 'Southern Sudan Livelihood Profiles.' For example, in the Nile and Sabot Rivers zone, one of the challenges identified as contributing to recurrent inter- and intra-tribal hostilities, is poor access to local trade and cross border trade with Ethiopia due to a lack of roads and transport, and the under-utilisation of transport and food production potential of the Sobat River and associated wetlands.

Finally, regarding water, it is interesting that, despite the strong linkage between water issues and conflicts, this suggestion surfaced from the participants representing the women's group and those representing the Murle and the Nuer groups. The suggestion presented emphasised the need to make water accessible by providing water points to every community.

Conclusion

Throughout this discussion, it has been clear that inter-community conflicts continue to be detrimental to the local communities in Jonglei. It is notable that, among the wide array of factors that are seen to contribute to the occurrence of violence between different communities, the environmental dimension is underscored. Even among the study participants, however, the underlying factors generating the conflicts are difficult to determine. At the secondary stage, though, it would seem that the conflicts are accelerated, exacerbated and perpetuated by retaliatory actions, often involving child abductions, road ambushes and to some extent cattle raids.

Insecurity seems to have influenced livelihood shrinkage and ultimately deterioration of the environment, which in turn exacerbated the risk of conflict. In terms of driving conflicts,

livelihood shrinkage is important when considered in the context of perceived marginalisation, particularly from the economic perspective. These dynamics are informed by unbalanced power relations between communities, which have a significant potential to stir feelings of inequitable development and marginalization.

With reference to current livelihood patterns, the findings of this study suggest that the environmental pressures continue to influence the intensity with which pastoralists continue to seek for water and grazing land during drought. The pastoralist movements are becoming more intensive, in that they now move further and stay for longer periods in the new locations.

Curiously, perhaps, when we scrutinise the participants' range of suggested solutions or policy recommendations, what appears to be lacking is any kind of view or suggestion focused on environmental protection, suggesting a lack of

education or awareness of environmental problems such as gully erosion and over-grazing, which are related to poor farming and grazing practices. These issues should clearly be part of any holistic strategy to address livelihood stress and conflict in the long-term. As noted, solutions and recommendations offered by practically all the participants, including those representing critical sectors such as Peace Committees and the Jie village leaders, appear to gravitate more towards solutions related to either law enforcement or livelihood support.

Finally, it must be mentioned that, left unaddressed, this vicious livelihood-conflict cycle, which is now quite established in Jonglei, potentially puts additional pressure on natural resources. In order to break this livelihood-conflict cycle, it is essential that good environmental governance is emphasised. There is a clear need for environmental best practice.

Recommendations

- There is need for collaborative regulation of the use of communal resources, including water, pasture and agricultural land. For harmony between pastoralist and non-pastoralist groups, it is necessary that potential risk factors, particularly water and grazing land resources are governed through inter-community mechanisms. More importantly, there is need to map out and designate seasonal migration routes to grazing land and water in order to prevent conflict between farmers and pastoralists.
- Government, donors and international civil society should provide increased support for community-based initiatives to address inter-ethnic conflicts. In particular, there is a need for government and donors to provide follow-up to support the agreements emerging from peace conferences, through monitoring of compliance with agreements, and support for alternative livelihoods.
- Given that environmental factors are certainly associated with greater conflict, conflict preventive measures

need to also address environmental issues, with priority on providing education on environmental degradation as well as protection for and sustainable use of environmental resources.

- Enhancement of livelihoods and economic support activities, such as trade are necessary to serve as buffers against vulnerabilities. In most cases, this will include making improvements and providing access to infrastructure such as road and markets and in enhancing inter-community relations.
- Expansion and improvement of education, particularly among the pastoralist groups, is necessary as a long term measure of reducing dependence on intensive primary production activities such as pastoralism for livelihood support.
- It is necessary to institute economic measures to curtail perceptions of economic marginalization, which according to the findings, is particularly apparent among the Murle and the Nuer groups. This requires interventions such as construction of roads and markets, to facilitate trade.

Note on the methodology

This study was conducted in Jonglei and sought to assess perceptions on environmental and non-environmental processes shaping and generating livelihood vulnerability and inter-community conflicts. The study effort consisted of nine focus groups representing a range of stakeholders, including the Jie village leaders, peace committees, women's group, military officers, youth, local authority leaders, and individuals drawn from the Dinka, the Murle, and the Nuer communities.

Notes

- 1 FAO, 2011, FAO/WFP Crop and Food Security Assessment Mission to Southern Sudan, Special Report, 12 January 2011, retrieved 6 December, 2011, <http://www.fao.org/docrep/013/a1973e/a1973e00.htm>
- 2 WFP, 2011, Annual Needs Analysis Report, South Sudan, January 2010, retrieved 6 December, 2011, <http://home.wfp.org/stellent/groups/public/documents/ena/wfp231789.pdf>
- 3 Famine Early Warning System Network, SOUTHERN SUDAN Food Security Alert March 31, 2010, retrieved 10 November, 2011, http://www.fews.net/docs/Publications/Sudan_March_2010_Alert_final.pdf
- 4 National Bureau of Statistics 2010 estimates on economic and business activities
- 5 Plan of Action for Southern Sudan August 2010 – August 2012, retrieved 10 November, 2011, http://www.fao.org/fileadmin/templates/tc/tce/pdf/SSudan_PoA.pdf
- 6 Southern Sudan Livelihood Profiles, January 2006, retrieved 12 November, 2011, <http://ssnbs.org/storage/Southern%20Sudan%20Livelihood%20Profiles.doc>
- 7 The assessment was jointly undertaken by the South Sudan Centre for Census, Statistics and Evaluation (SSCCSE), Save the Children UK (SC-UK) and the Famine Early Warning Systems Network (FEWS NET) and other member agencies of the Livelihoods Analysis Forum (LAF)
- 8 FAO, 2010, Plan of Action for Southern Sudan, Emergency response and rehabilitation for food and agriculture August 2010 – August 2012, retrieved 10 November, 2011, http://www.fao.org/fileadmin/templates/tc/tce/pdf/SSudan_PoA.pdf
- 9 Southern Sudan Livelihood Profiles, January 2006
- 10 Southern Sudan Livelihood Profiles, January 2006
- 11 Southern Sudan Livelihood Profiles, January 2006
- 12 Southern Sudan Livelihood Profiles, January 2006
- 13 Southern Sudan Livelihood Profiles, January 2006
- 14 Deng, Francis M. (1998) “The Cow and the Ting Called “What”: Dinka Cultural Perspectives on Wealth and Poverty,” retrieved 6 December, 2011, <http://www.thefreelibrary.com>
- 15 Southern Sudan Livelihood Profiles
- 16 Save the Children, 2011, South Sudan: A Post Independence Agenda for Action, retrieved 6 December, 2011, http://www.savethechildren.org.uk/en/docs/South_sudan_agenda_for_action_4.pdf
- 17 Young John, 2010, Jonglei 2010: Another round of disarmament, ISS Situation Report, May 4, 2010 <http://www.iss.co.za/uploads/May2010Jonglei.pdf>
- 18 Nyawaragak Dei Wal, 2004, Migrant Information Centre (Eastern Melbourne) Southern Sudanese Culture, retrieved 12 November, 2011, <http://www.miceastmelb.com.au/documents/SouthernSudaneseCrossCulturalTrainingReport.pdf>
- 19 Southern Sudan Livelihood Profiles, January 2006
- 20 Southern Sudan Livelihood Profiles, January 2006
- 21 International Crisis Group, 2009, Jonglei’s Tribal Conflict: Countering Insecurity in South Sudan, Africa Report N°154 – 23 December 2009
- 22 Southern Sudan Livelihood Profiles
- 23 Omondi, Paul, 2010 (under review). Investigating the Link between Environmental Scarcity and Conflict in Darfur: Paper prepared for IPPS/UPEACE conference on “Traditional Knowledge and Adaptation to Adverse Impacts of Climate Change among Pastoralists in the Horn of Africa” held in Addis Ababa in September 2011.
- 24 International Crisis Group, 2009, Jonglei’s Tribal Conflict: Countering Insecurity in South Sudan, Africa Report N°154 – 23 December 2009
- 25 MRG focus group response from participants representing the Murle group
- 26 MRG focus group response from participants representing the Dinka and Nuer groups
- 27 MRG focus group response from participants representing the women, youth, Local Authority leaders, Peace Committee segments
- 28 MRG focus group response from participants representing the military officers, Peace Committee and youth
- 29 MRG focus group response from participants representing the women’s group
- 30 Southern Sudan Livelihood Profiles, January 2006
- 31 Southern Sudan Livelihood Profiles, January 2006
- 32 Southern Sudan Livelihood Profiles, January 2006
- 33 MRG focus group response from participants representing the Murle and the Nuer groups
- 34 MRG focus group response from participants representing the military officers
- 35 “Survival of the fittest: Pastoralism and climate change in East Africa”, Oxfam Briefing Paper 116, August 2008
- 36 United Nations Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities, Adopted by General Assembly resolution 47/135 of 18 December 1992 (<http://www2.ohchr.org/english/law/minorities.htm>)

Boma Development Initiative Briefing



Climate change and inter-community conflict over natural resources in Jonglei State, South Sudan

By Paul Omondi

In this briefing, the impact of climate change on conflict dynamics between ethnic communities in Jonglei State, South Sudan, is analysed. The researchers looked in particular at how community representatives perceived changes in climactic patterns in recent years, and resulting changes to migratory movements by pastoralist groups. Community representatives were also asked to provide views on measures needed to address under-development, conflicts and environmental degradation. Based on the findings of this research, recommendations for conflict prevention and poverty reduction are made to policy makers at the local, national and regional level. The briefing draws on field research carried out in Jonglei State in December 2010, as well as on desk research.

Boma Development Initiative is a community-based organisation, based in Boma town, Pibor County, South Sudan, which implements development, human rights and peace-building initiatives with the various ethnic groups in

the Boma area. It is registered with the South Sudan Ministry of Legal Affairs and Constitutional Development.

Minority Rights Group International (MRG) is a nongovernmental organization (NGO) working to secure the rights of ethnic, religious and linguistic minorities and indigenous peoples worldwide, and to promote cooperation and understanding between communities. Our activities are focused on international advocacy, training, publishing and outreach. We are guided by the needs expressed by our worldwide partner network of organizations, which represent minority and indigenous peoples.

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