Mapping Conflict:
Using Data & Information to Promote Peace

The Tepeth family that lost its animals high up on Mt Moroto tracked the raiders to Turkana land in Kenya. The family, already scarred by what happened, thought of taking up AK 47s—but they had to consider whether as a small mountain community they had the means to take on the larger and better-armed plain-dwelling Turkana.

The sale of goats covered the cost of salt, soap and paraffin. Now they had lost 11 fully grown goats. There are young children to treat and feed, as well as unweaned goats to find milk for. The next harvest of the sorghum and sunflower ripening in the mountain air away from the plains is still weeks away.

The second option is seeking what could be a less costly source of replacing the lost animals. They decide to restock with Matheniko animals. Their deliberations have moved away from a retaliatory to a compensatory raid. Again, decisions have
to be made. The Matheniko are no pushover, especially for the Tepeth whose numbers don’t compare. The decision is taken to ask the Tepeth’s perennial allies, the Pokot, for armed support; given the lucrative outcome, the offer is accepted.

The raid sets in motion a chain of further events. The Matheniko consider that counter-attacking the Pokot is too costly. Memories remain fresh of what happened in 1993 after an unwise Pian raid on the Pokot. In that year it felt as though all of Pokot—both Ugandan and Kenya—had pursued the Pian, leaving nearly 200 dead. The Matheniko decide to turn on the Jie. But the Jie, as the Dodoth and Toposa learned to their grief on August 13 of 2003, are no pushovers. Like the Tepeth before them, the Matheniko ask for backup. It is rare for the Turkana to ally with the Matheniko, but in the pastoralist territories, pragmatism is not uncommon. The Matheniko calculate that the Turkana will on any given day ally with anybody against the Pokot.

The Turkana, who, as it were, fired the first shot, are now back in the picture. The Tepeth have not really avoided the costlier alternative, only postponed and complicated it, spreading the risk so the hammer blows don’t fall squarely on their heads. And by allying with the Matheniko against the Pokot and Tepeth, the Turkana are leaving their flanks open to Pokot attacks. That attack happens further to the east, along the banks of the Turkwel River in Kenya.

By now the initial raid in Mt. Moroto has been forgotten; but several compensatory retaliatory raids later, the epicentre no longer matters. There is only the harshness of inter-communal violence, only the endless cycles of pastoralist death and loss. The likelihood is that the raid on the mountain was in response to an earlier incident of Turkana stock loss, perhaps due to a Dassanech incursion from South Sudan. The expanding cycle of raids mirrors a generations-long process. Like a chain, no one link is the original.

How do you stop this cycle of violence if you are a government? Ugandans are involved, as are Kenyans, Ethiopians and Sudanese, Somalis as well as Djiboutians. And as this account illustrates, what happens a thousand miles away in any of these countries can have repercussions at any point in another country.

De-escalating the violence in these far-flung territories is a difficult job. Strong-arm attempts to control rustling since the colonial era came to naught. Merely blaming and acting against a particular group misses the point. It is likely that drought in the Turkana region had killed animals during the previous rainy season. A raid can be triggered by the search for bride price.
Most likely, the elders sanctioned the raid and the young men acted with full knowledge that theirs was a noble cause. Perhaps they suffered a similar raid and were out to replenish their stock. Maybe the rains for a harvest of sorghum they were banking on to stave off hunger had failed. Though they likely set the chain of raids and killings in motion, apportioning causality might be too easy an assessment in these conditions.

The Conflict and Early Warning mechanism (CEWARN) set up in 2002 by the Member States of the Intergovernmental Authority on Development has spent a decade testing a new and different option; understanding the dynamics of pastoralist life by gathering information on a constant basis. As Joseph Muhumuza, Uganda Country Coordinator at the Centre for Basic Research, the National Institute charged with data collection and analysis in Kampala, says: “From 2003 there has never been a break in our information gathering, so this captures a trend in terms of programming, and in terms of developing an action point—you can go behind the data and see what you can do with it.”

In 1996 the IGAD member states met to reconsider approaches to the chronic problem of under-development in the pastoralist areas. By 1996, the gun had been present in the pastoralist region for nearly two decades and the violence it occasioned had risen to the level of civil war. The revitalisation of IGAD that year led to incorporation of peace and security issues within the organisation’s socio-economic and environmental development programs, based on the realisation that development could not be achieved without addressing and resolving violent conflicts.

Though the ramifications of the grim story with which this article begins are conjectural, it reflects countless real-life scenarios. In fact, a raid on the mountain community did happen, on August 5 2012, and the Tepeth family did track the raiders to Turkana. The description of inter-communal alliances and standoffs is confirmed by the pastoralists themselves as well as observers working in the region. The Tepeth did go down the slopes of Mt. Moroto, but not to raid the Matheniko. They ended up reporting the matter to Ugandan security officials, an example of the alternative dynamic the CEWARN mechanism is nurturing in the region’s pastoralist areas.
DATA AS WEAPON OF CHOICE

When IGAD finally started CEWARN six years after the 1996 meeting, it was decided that data was the best weapon for systematically responding to the crisis. The new approach was based on studying and understanding patterns of conflict in order to break the vicious cycle of violence. Analysts studied and coded the information, developing a data-based model that became the CEWARN system.

At the core of this new approach is the CEWARN Reporter, an essential cog in a system of information gathering and analysis that maps and charts the conflicts as well as the underlying causes. This provides a tool through which decisions and actions can be taken. A workshop was held in November 2002 to designate conflict-sensitive indicators that CEWARN, research institutions, and civil society organizations could utilise in their work. Later that same month CEWARN contracted the Boston-based company, Virtual Research Associates (VRA), to incorporate the indicators generated by the workshop into a software program to monitor and track pastoral conflicts in the IGAD region.

The CEWARN Reporter comprises two reporting mechanisms, the Situation Report and the Incident Report. The first is a questionnaire that Field Monitors, CEWARN’s men and women on the ground, are required to fill on a weekly basis; the second is a detailed report that is filed when incidents occur.

In CEWARN parlance, the Situation Report is known as the SitRep, and the Incident Report is called the IncRep. Joseph Muhumuza describes how this system drives the CEWARN early warning mechanism: “Like any early-warning system, the mechanism is based on information. It is on the import of that information that you are able to act either in terms of response, designing programs that would rectify or address the situation at hand. Without an information system, there is no conflict and early warning.”

Using data as the basis, as Muhumuza explains, was crucial for quantifying, or to assess in terms of numbers the magnitude of a conflict in order to gauge how best to respond. “If the data says 10 people died, this indicates the scale of the problem, if the data says 100 animals were taken at a certain location spot, then you cannot send only two soldiers to rescue the 100 animals.”
The Four Key Components

The Reporter was the first part of a broader information system constituting four key components of the early warning mechanism the organisation adopted:

As one Ethiopian Country Coordinator explains: “At the time (2002-2003) more than four hundred indicators were initially proposed, but further vetting and sifting reduced the variables to forty-two. The underlying assumption, which still holds true, is the fact that conflict dynamics are always in a state of flux. As a result, new dynamics and drivers may emerge at any given time, while older dynamics and drivers may become obsolete.

“It follows that regular review of the indicators is intrinsic to the CEWARN working modality. The indicators have been reviewed many times, new indicators have been included, and redundant ones removed. Others indicators were refined to better capture events. At the same time, the statistical significance and relevance of each indicator were regularly checked and their value adjusted accordingly.

As a result of this rigorous review process the indicators have now expanded from 42 to 55. This figure may change in the future as the review process continues.”

Even with 55 indicators, the SitRep is impressive (55 from 60 field monitors report into the system on a weekly basis). As a tool of early warning, the SitRep reads like the margins of real life events, probing for likely scenarios, circumstances, and behaviours in the pastoralist territories. It is impressive, not just for the sheer number of indicators, but also for the ability to compress indicators in a manner corresponding to a near-total description of pastoralist events. The SitRep groups the indicators into several categories: communal relations, civil society activities, economic activities, governance and media, natural disaster and resource use, safety and security, and social services. As
USING DATA AND INFORMATION TO PROMOTE PEACE

the parameters indicate, the causes, contexts and circumstances of conflict range across a wide spectrum, and raise an array of questions:

Are peace-building efforts letting up or not; are there efforts to implement inter-communal agreements and to encourage disarmament; and, what are the reactions to relief aid within certain communities? Is trade continuing unhindered, has pastoralist movement been curtailed, is there an increase in the number of migrant labourers? What does it mean when communities refuse to collaborate with authorities and hold a protest march? Do new government livestock policies restrict the movement of animals? Are media reports positive, or have the media themselves been restricted from reporting?

The communal relations category asks what it means when a community blesses young men, and they are praised by women; what does a spike or drop in bride price indicate; what does the offer of gifts from one community to another mean; what is the significance if alliances between different groups have been revoked and inter-group marriages recalled. Activities by civil society will also confirm or modify the directionality of events.

These are some examples of the questions raised; there are many more. The build-up of indicators moves from peripheral possibilities to more direct issues suggesting developments are reaching a tipping point: have bullets become exchange currency; are there signs of external armed support; have the police, the army, local government and the courts been more active than normal; are travellers hiring armed escorts or are there significant numbers of people being displaced?

While the individual questions and corresponding data categories may show trends and likely developments, these may not necessarily be conclusive. The blessing of young men may point to an intention to raid, but a blessing ceremony in itself may not mean anything, which is why the SitRep seeks to know more about what circumstances apply. When women praise these young men, it could indicate they are lionising them, testing their mettle. If this happens in conjunction with a hike in bride price and the sudden absence of young men from school, there is the likelihood the ceremony signals active intention. Again, this may only point more to possibilities than can be confirmed by other indicators. For example, is there an interruption in trade, are bullets appearing in the market, how many animals have died recently, are there other signs of deteriorating security.

The SitRep is detailed to the degree where even reports of young men buying biscuits or carrying water cans is considered to support the indicators:
“Young men buying biscuits? That is a very critical indicator,” says Muhumuza. “If you see a large group of youth meeting at a certain hill, then you need to assess the meaning in terms of early warning. If you can’t interpret that, then what are you capturing? Because the fact is these youth are not talking about a wedding, nor are they talking about going to buy a vehicle, but what they are planning involves a raid. A meeting like this is often indicator number one.”

The IncRep, in contrast, captures real life events: On August 4 2010, CEWARN received the following report from Chalbi District in northern Kenya:

“Field reports are emerging that Borana Community settlers in El Dintu, Sololo District Kenyan side are attempting to re-route trade goods that are destined for Forole, Chalbi District, Kenya. The Borana settlers had initially been in Ethiopia for the use of grazing land. Upon migrating back to El Dintu along with Ethiopian Borana community members information has linked them with attempts to control the trade flow into Forole.” A month later, on September 4, another report came in on HF radio stating that:

On September 1 2010, the Turkana went and stole some property from the Dassanech of the South Omo zone near the Ethiopian police post at Nebremus. The Dassanech fought the Turkana raiders and dispossessed them of more than 200 goats they had stolen. As the Turkana were retreating, they shot dead one Dassanech and took an AK 47 rifle.

The SitRep transforms the answers from field monitors into figures set on a scale of 1 to 10; the seriousness of the indicator is expressed as “weights”. This becomes a narrative in numbers and the visceral difference is that the IncRep reflects the level of activity accompanying rapidly developing news stories. Alone, the SitRep and the IncRep can act as a torrent of information that may make it difficult to get a proper reading of unfolding events. This is why the Country Coordinators, officials who supervise the field monitors, are required to carry out what Muhumuza calls “triangulation”. The other networks that CEWARN collaborates with, NGOs, security personnel, government officials and locals, are called on to verify if the incident occurred, and what the particulars of it are. Triangulation is in effect a form of quality control.

The filing of information itself, as already explained, marks the beginning of an elaborate process. Depending on the urgency, say in the case of a group of Jie youth sighted on a hill, the information gathered is acted upon immediately. Elders will be contacted to talk them out of their plans. Sometimes, the youth may not listen to their el-
ders, as happened in Dire Woreda in Southern Ethiopia when a group of Muslim youths geared to attack a Christian congregation on November 6 2011. On that occasion, they broke through a line of elders interposing themselves bodily between the youth and the church. Anti-riot police had to be called in.

Often, the information goes straight into the system where it passes through the country offices and is picked up by the CEWARN secretariat in Addis Ababa. There, the SitRep is fed into a software program that generates graphs. It is at this point that the real complexity of the system emerges.

Using the 55 indicators featuring in the seven categories listed above (i.e. Communal Relations, Civil Society Activities, Economic Activities, Governance and Media, Natural Disaster and Resource Use, Safety and Security and Social Services), diverse indicators are matched and paired to test possible outcomes, i.e. the best, worst, and most likely case scenarios. The analyst may want to know what the blessing of young men by elders means when paired with a hike or drop in bride price; what the revoking of an alliance means for a blockage in trade, or in conjunction with a shortage in pasture and water.

The pairing may indicate what scenarios are likely to emerge when civil society is in overdrive at the same time pastoralists have been blocked from moving freely and trade has been stopped, and so on. By itself, the SitRep is a forecast, a scenario-generator. Events build upon scenarios that are evolving all the time. The software provides for the generation of graphs for each category and then goes further to create a layered picture resulting in a compound graph. This is done on a weekly basis, so that CEWARN is capable of reading into what the threats are. The IncRep, is a simpler mechanism without the sociological depth of the SitRep. It asks the questions: who, what, to whom, when, and where.

The August 4, 2010 report from the Chalbi District, for example, illustrates how these questions are aligned: The Borana Community are the Who; El Dintu, Sololo District, Forole, and Chalbi are the Where; re-routed trade goods are the What; the Gabra are the Whom the action are targeting; and August 4 is the When.

With so much happening, the likelihood that too much information will be filed in is a constant possibility. To forestall this, the procedures listed in the CEWARN Code Handbook cut through the mass of data by insisting that field monitors report only ‘relevant incidents’ recognisable as leading to conflict. The field monitors are chosen for their knowledge of the dynamics of their societies, and this means they must be members of the communities they are monitoring. As the
August 4 report further explained, the action of the Borana was creating unease among the Gabra, who were already mobilising for attack against the Borana should the trade route extending from Turbi to Forole be blocked. The fact that both the Gabra and Borana straddle the Kenya-Ethiopia border illustrates why CEWARN must coordinate cross-border actions on the regional level.

Though they have different functions, the Situation and Incident Reports tread similar ground. Together, they create a holistic picture. Scenario building at its most basic makes it possible to recognise implications of building events. The September 4, 2010 report on the attack by the Turkana on the Dassanech also describes the context and significance of incidents. The attack was expected to result in retaliation. That the Turkana shot dead an important individual made this urgent. But the Dassanech counterattack was expected to cover the territories of Ng’issiger from Todonyan, Kokuro, Mai-tha, Liwan and Lorubae, which would affect communities that did not take part in the attack, and as the field monitor noted, fishermen from Todonyang had already fled to Lowareng’ak.

A third report widened the scope even more:

The heavy rains of early 2010 washed away roads and forced pastoralists in northwestern Kenya to herd nearer their homesteads. Without proper guard, the herds, along Lodwar-Kitale road, in Lokichar, Kalem’ng’orok and Kako’ng are vulnerable. Already, some 200 to 300 armed Pokot were sighted around Nakapaparat and Ekunya in Kalem’ng’orok sub location near Kako’ng River. It was suspected they were planning to attack the Turkana of Nakabosan, Kakali, Kagete kraal and Nakukulas. As a result, the Turkana had been forced to move with their herds.

In reaction, the CEWARN Kenyan unit, or Kenyan CEWERU, made three recommendations:

1. That the authorities in Turkana South work with peace building organisations to give early alerts to kraals in the Turkana
2. Mobilise Kenyan security to intensify patrols to foil any likely action by the Pokot warriors; and,
3. The elders convene peace meetings between the Turkana and the Pokot.

The issues captured by these questions were present in the early 1980s when historically important famines swept the region and inexpensive guns became available. The hope of the creators of the mechanism was to avoid a repeat of the 1980s famines that fed a rising cycle of unchecked violence.

CEWARN produces quarterly reports from the Reporter that are
made available to decision-makers. After a decade in operation CEWARN has gathered a mass of information mapping the pastoralist regions. Enough data has been accumulated to make response to the pastoralist crisis amount to something of a science. In Muhumuza’s estimation, the bigger picture based on the data makes it possible to know with a fair amount of accuracy not only which months violence flares up, but also the meta-causes. After studying the data, CEWARN created the Rapid Response Fund.

Says Muhumuza: “We were gathering information, we had the data about what is happening on the ground, but we were helpless. According to the analysis, we know that every April, incidents go up. If it is known that maybe water is scarce causing the communities to fight then if you can give an alternative water-source the fighting and competition is likely to cease. The first incident we dealt with by using emergency response funds was in 2008 when the Turkana from Kenya crossed over to Uganda through Kotido and the Jie took over 2000 head of their cattle. We released US $10,000 via the CEWERU, the money was dispatched to the Kotido District peace committee, and over 1600 heads of cattle were recovered. That was the first example of emergency funds use by CEWARN.

“That helps decrease the vicious cycle of revenge. Once communities lose their animals and there is no alternative method of recovery they are going to mobilise to recover their animals by force, and they won’t necessarily raid the community that took their animals,” Muhumuza observes. “So the communities are trapped in a vicious cycle. The information that we produce out of this data is put into the report form that now informs strategies and the next action, and not only for CEWARN but for other partners that make use of it.”