

Planning for Social Outcomes

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1 Abstract

There is usually no purposeful connection between the physical planning of refugee camps and the social outcomes for those living in these camps with each being treated separately by independent groups or more often the case by different organizations. And while there will be some exchange of information, such as the siting of a community office, the two disciplines remain separate and separated.

However, recent work by Mair et al. (Mair and Mair, 2003) suggests that there are potentially more links and connections than presently realized and certainly beyond the simple planning suggested above.

This paper presents the results of a field trial of an Opportunity Matrix for Sexual Violence Against Women and Children in Refugee Camps developed by Dugan (now Mair) et al. and applied for the first time in Ardamata Camp in El Geneinna, (the provincial capital of West Darfur) in June/July 2004. Although this was not a refugee situation but rather an internally displaced person (IDP) situation, the Opportunity Matrix (OM) can be applied in IDP situations as well.

The results from this field trial (albeit small) support Mair's position that the physical and administrative environment can affect social outcomes. Whereas further field trials are necessary, the results show that planners need to better understand this linkage so as to bring about more effective planning changes for better social outcomes.

2 The Development of the Opportunity Matrix

Sexual violence against women and children is common in conflict emergencies. Dahrendorf describes the situation as follows: “The picture is very bleak. Children and women in conflict affected areas face the constant threat of all forms of gender based violence including rape, prostitution, trafficking, forced pregnancy as well as violence and instability that impact their entire community in a time of conflict” (Dahrendorf, 2004).

Dahrendorf underlines this bleak outcome by the following:

- In Bosnia and Rawanda, rape was used as a weapon of war with approximately 250,000 women raped in both countries.
- 2 out of 3 of those raped in Rawanda became HIV positive.
- 35% (of a 304 UNICEF sample) of those raped in Rawanda became pregnant.
- This resulted in high risks of maternal mortality, infant mortality and the adoption of unsafe abortion techniques.
- Post conflict characterised by a rapid increase in prostitution, increased domestic violence, vulnerability to HIV and other sexual transmitted infections.
- The UNHCR report in 2002 citing refugee girls exchanging sex for assistance.

Hence, sexual violence is unfortunately a significant issue.

The Opportunity Matrix for Sexual Violence against Women and Children (OM) is a seemingly straightforward tool in the form of a matrix (or table) that maps the resources that the refugees and IDP’s require against the questions of “who, where, when, how, and with whom”. A hypothetical OM is shown below and the completed matrix from Ardamata Camp (which this paper presents) is included in Appendix 1. Use of a matrix is not new and a similar approach was proposed by Anderson et al. (Anderson, 2000). However, Anderson’s approach requires several different matrices, while the OM approach is concentrated into one. Its simplicity makes it more practical and portable in the field and gives a better “visual snapshot” of the situation.

A reflective analysis of the resulting matrix highlights the “opportunities” for sexual violence in a camp and moreover suggests alternative site planning approaches to minimise (and hopefully eliminate) such opportunities. The trial of the OM was completed with the assistance of Ms. Zeinab

Khatir (from Save the Children USA, based in West Darfur) without whom, this field trial would not have been as in-depth as it turned out to be.

Table 1: A Hypothetical Opportunity Matrix

	WHERE does activity take place or is good / service obtained	WHO is in charge of activity or distributes good/service	WHEN does activity take place or is good/ service obtained	HOW Is good/ service obtained	WHO engages in activity or obtains good/ service and WITH WHOM
FUEL	firewood gathered in woods north of camp	NA	early morning	self	women and children alone or with each other
FOOD	Distribution Centre	male volunteers in camp	Saturday mornings	vouchers	women alone
LATRINE	east side of camp at end of secluded unlit path	NA	all hours	self	women and children alone or with each other

3 Background to the Darfur Situation

Darfur consists of 3 states and occupies the western area of Sudan. It is a large area of approximately 256,000 square kilometres with an estimated population of 5 million people from a complex tribal mix. Large parts of Darfur are prone to drought and desertification that intensifies demands on its more fertile lands. In recent decades, areas of Darfur have been subject to sporadic inter-tribal clashes over the use of such resources.

From early 2003, fighting intensified in the region following the emergence of two armed groups, the Sudan Liberation Army (SLA) and later the Justice and Equality Movement (JEM), and the commencement by them of hostilities against the Government. (Commission on Human Rights, 2004)

Following a string of SLA victories in the first months of 2003, the Government of the Sudan appeared to have sponsored a militia composed of a loose collection of fighters, apparently of Arab background, mainly from Darfur, known as the “Janjaweed”. In certain areas of Darfur, the Janjaweed have supported the regular armed forces in attacking and targeting civilian populations suspected of supporting the rebellion, while in other locations the Janjaweed played the primary role in such attacks with the military in support.

The humanitarian fallout of these attacks across the 3 states of Darfur (and the border regions of Chad) was an estimated one million IDPs by May 2004 (compared with 250,000 in September 2003).

In May, over half of these (some 570,000) were located in West Darfur, with the remainder being divided between North and South Darfur (approximately 290,000 and 140,000, respectively). And by July 2004, there were 601,096 IDP’s in camps in West Darfur (based on the Master Matrix compiled by the United Nations Organisation for Coordination of Humanitarian Affairs (OCHA) in Al Geneina).

Sexual violence and rape of the IDP’s was being reported and hence the impetus for this application of the OM. Was this occurring and if so where and when? And what could be done as part of the site planning for the camps were the research questions to be addressed. But clearly, these were more than solely research questions.

It was not obvious from the outset as to what extent such sexual violence was being perpetrated. The impression in the camps was of a complex emergency but without the more sinister tones suggested by such reports. Figure 1 below shows typical photographs of the camp. However, that view quickly changed once the OM was completed.

Figure 1: The Typical Camp Context in West Darfur



4 Survey Approach

The survey was administered by Ms. Zeinab Khatir to a group of 90 women at Ardamata camp. She had been previously working with the group in the area of sexual violence and had access to established women’s groups in both Kirinding and Ardamata Camps. Cultural and gender barriers meant that no males could be present at such meetings and hence the OM in Appendix 1 was constructed immediately after their meeting based on notes and a marked up matrix completed by Ms. Khatir. This process/discussion was also digitally tape recorded for later review and checking.

The initial intention was to survey the 3 main camps in Geneina namely Riyad, Ardamata and Kirinding Camps in one day. The 3 camps were selected because they were largest of the camps in and around Geneina, access was possible, and finally they presented the lowest allowable security risk. One could assume worst results in outer lying camps of which there were a further 15. A comparison of the statistics for the 3 selected camps and site planning issues in each are given in Table 2 below to give a sense of the typical planning issues addressed at each camp , as well as to highlight the need for these connections to social change mentioned at the introduction of this paper.

Table 2: Comparison of the Site Planning Issues at Riyad, Ardamata and Kirinding Camps

Camp	Site Planning Issues.
Riyad Camp as at July 13 2004	22,666 IDP’s according to a Doctors without Borders (MSF) June population study (taken from the OCHA Master Matrix 12 July). Fire breaks required in the “cramped” sections of the camp in the East and West sectors.

	<p>Lack of registration is blocking food and Non Food items NFI aid to the IDP's</p> <p>Walking distances to water points over 400 metres. (Well above United Nations High Commissioner for Refugees (UNHCR) and SPHERE standard of 100 metres).</p> <p>Waiting times in the queues for water at the hand pumps is typically 2+ hours. Given that 3-4 trips are required each day means that water collection occupies most of the day.</p> <p>As a consequence of this waiting time tempers queue jumping is popular. Hence there are arguments and tempers flare.</p> <p>Water quality is questionable.</p> <p>Water presently supplied to IDP's 2.5 litres/person/day of water. (Well below UNHCR and SPHERE absolute survival standard of 7 litres/person/day).</p> <p>Water table 20 metres below ground level.</p> <p>Latrines are not evident and the few that were checked were non functional.</p> <p>Sanitation is a significant issue for the camp.</p> <p>Nozzle reduction suggested for the standard UNICEF hand pump as it presently set up does not match the jerry can opening (resulting in increased water wastage).</p>
<p>Ardamata Camp as at July 13 2004</p>	<p>23,662 IDP's (OCHA Master Matrix 5 July)</p> <p>Issues of monitoring water supply</p> <p>Water table 5-6 metres</p> <p>33% of the camp have to walk further than the SPHERE or UNHCR standard of 100 metres to collect water</p> <p>Some IDP's have to walk 400+ metres to collect water.</p> <p>Algae growth evident in jerry cans</p> <p>Less than 7 litres/person/day for water. Depending on how it's measured the best estimate is 5.6 litres/person/day but the feeling from the review of the camp, the access to the well and the filling of the plastic tanks that it was closer to 1 to 2 litres/person/day.</p> <p>Maintenance required around bladder.</p> <p>Disinfection of at least one well required (frogs living in the bottom and periodically being sucked up into the drinking water)</p>

	<p>Cooling water from the diesel pumps should not be feed back into the drink water well.</p> <p>Camp area 840,000 m² which is approximately 35 m²/person and within acceptable standards.</p> <p>Existing roads and open fields need to be maintained as fire breaks. Where ever possible these need to be widen out to 30 metres in the areas outlined in the report.</p> <p>Sanitation is not working. While many but certainly not all latrines were checked this was a problem in the camp. All of those checked were non functional for various reasons and in many cases that were not checked the run down nature and consequent lack of privacy of the super structure made it “unusable”</p>
<p>Kirinding Camp as at July 13 2004</p>	<p>The camp population is between 14,213 (estimate by WHO) and 22,249 (May Registration by CONCERN) IDP’s (taken from the OCHA Master Matrix 12 July).</p> <p>Camp is spread in and around the village of Kirinding.</p> <p>Fire safety an issue in the “cramped” lower section adjacent to the Kaja River.</p> <p>Water supplied is between 3.8 to 4.1 litres/person/day.</p> <p>Queue times of the order of 1- 2 hours but as there was a registration in progress at the same time times are probably consistent with those found in Riyad camp.</p> <p>Chlorination levels were questioned.</p> <p>Sanitation is not working.</p> <p>Camp are is 16-25 m²/person. On the low side but OK given the village context.</p> <p>Work required protecting the well adjacent to the river.</p>

It was clear after completing Ardamata Camp that each camp would require a full day’s work. But because of other workload commitments only 1 of these 3 camps was eventually completed. Nonetheless, the results from Ardamata Camp are sufficient to show the potential of the OM approach and what is seemingly a straightforward process.

5 Findings

The use of a modified OM in the Ardamata Camp revealed the stark reality of camp life and the immense hardship particularly for women and children.

Women must wake up early to either collect wood as far as 2- 3 kilometres from the camp or work in Geneina which entails a two-hour walk. Only older women, some carrying babies, collect firewood, and they travel in groups to avoid being abused or sexually assaulted by the Janjaweed.

The women who work in Geneina face similar threats of abuse and sexual violence during their 2+ hour walk from the camp to town. They also travel in groups for protection. The women work as either domestics or as labourers with a typical pay of approximately 3,000 SP/day (less than \$1 USD). After work, the woman typically buys supplies and other necessities with their earnings before the return walk back to Ardamata Camp.

Men do not leave the camp (at least not during the day) because they would be shot if they did. It was significant that 16 of the 90 women present at the meeting have apparently lost contact with their husbands.

After collecting firewood, the women who are at the camp and older (female) children and teenagers will then start queuing and collecting water from the tanks. This usually requires 3-4 trips per day with queue times of up to 2-3 hours.

There is a clearly a lack of security in this camp. And the snapshot the OM provides goes beyond identifying solely the opportunities for sexual violence (which in itself makes the OM an excellent planning tool) but also highlights areas where camp management can be improved. The completed OM is attached as Appendix 1.

Consequently, the findings from the use of the OM are as follows:

- There is a complete lack of security in the camp that is deeply impacting the safety and protection of the IDP's. This finding was not unexpected but the extent to which it impacts on the IDP's was not.

- The main opportunity for sexual violence against women is during the collecting of fuel. The IDP's have responded to this risk by sending out only older women in groups to gather fuel. Apparently older women (those over 45) are less prone to such acts. This is tragic. It also suggests that physical violence and rape are opportunist acts resulting from a lack of security).
- The second key opportunity (though not specifically identified as such by the women but by the OM) is during their walk from Ardamata Camp to Al Geneina for work. This is potential a significant opportunity as 60 of the 90 women present at the meeting, indicated that they work (presumably part time or as work is available).

From a site planning perspective, collecting fuel and walking to work are the two main areas that need to be addressed to minimise the opportunity for sexual violence against women and children.

Other camp management issues that arose as part of the OM are as follows:

- The significant amount of time and work associated with collecting water is highlighted by the OM. Women and children typically have to make 3-4 trips/day to gather water for drinking, cooking, washing, and bathing. Distances for IDP's to collect water (as highlighted in previous reports), water storage in the household, and the number of jerry cans need to be addressed. In discussions with IDP's, they identified water storage in the house hold and the number of jerry cans as the main issues. MEDAIR is addressing shorter distances (presently over 400+ metres compared to SPHERE UNHCR standards of a maximum 100 metres). However, water storage capacity in the households still remains a pressing issue.
- Medical clinics are not doing triage but apparently take the first 50 patients on a first come, first serve basis. Thus, any serious cases which arrive after the first 50 are not seen by a doctor. This is causing problems for the IDP's and needs to be reviewed.
- The use of the school latrines was noted. It appears that because these were "serviced" regularly by the associated schools that they were relatively in better condition then other latrines. It should be noted that none of the other latrines outside the school were functioning (see table 1 above) and this would increase the vulnerability of women and children.
- The lack of adequate camp security was also an issue. And there were suggestions that the camp security were part of the insecurity issues being faced in the camp. The lack of security both for the IDP's and aid workers in West Darfur was a central issue. The historical background shows that there was not the support from the Sudanese Government that there should have been and this was

high lighted in the OM. The IDP's were locking houses at night (it was considered unsafe to be outside after 8.30pm), had animals for alarms, built fences to deflect intruders and established social and neighbour alert networks for protection.

This underlines the potential of the OM in making sense of this situation.

6 Planning Outcomes and their Social Consequences

From a planning perspective, it was as if a light had been tuned on and although the situation had not changed it looked (and was) different when viewed through the "lens" of the OM. Consequently, the above findings lead to the following planning outcomes and recommendations that were different from would have otherwise been put forward:

1. The need for security cannot be over emphasized. Security is lacking at Ardamata Camp and there appears to be little deterrent for acts of sexual violence against women and children.
2. Alternative fuels should be addressed. At the moment women are travelling 2km to collect firewood which will increase with time as resources are used. Provision of an alternative fuel would eliminate the "deforestation" of the surrounding area while also eliminating a key opportunity for sexual violence against women and children in the camp.
3. A bus service should be provided for IDP's between the camp and Al Geneina. Alternatively, "bus tickets" could be issued as part of the non food items (NFI) ticket for things such as soap. While this proposal is problematic because not everyone is registered and has a NFI ticket (soap is given out at certain intervals and usually just to the head of household) this approach would greatly assist women working in Al Geneina.
4. A capacity building program looking at providing ferro-cement based water storage jars should be reviewed. Alternatively, each household should be given a water storage container as part of its NFI.
5. Medical clinics should review patient numbers to confirm whether the IDP's have valid concerns regarding the apparent intake policy resulting in a patient limit of 50 people.
6. Distribution of ration should be monitored. It was suggested during the OM that the chiefs favour their immediate relatives and such practices (IASC, 2005).

7 Conclusion

The OM is a tool that alerts planners to safety and other issues within communities in conflict situations. The tool works by organizing information but still relies on the experience, knowledge, and sensitivity of the user to achieve good (or poor) outcomes. The tool does not in itself provide answers but conversely involves the community in determining what those outcomes could and should be so that more effective and efficient programs can be delivered.

But the other key lesson to come from this work is that there is a definite link between the physical work of camp planners and the desired social outcomes for refugees or IDP's. It is a wrong assumption to treat the physical planning as a separate issue to the social outcomes. They are, as demonstrated by the application of this OM, linked more than previously accepted and it is clear that planners and engineers need to take up the social consequences of the humanitarian aid they provide.

8 References

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APPENDIX 1. The Opportunity Matrix for Sexual Violence against Women and Children in Ardamata Camp, July 18 2004.

OPPORTUNITY MATRIX FOR SEXUAL VIOLENCE AGAINST WOMEN

AND CHILDREN IN _____ ARDAMATA _____ CAMP.

DATE 18/7/04 **INTERVIEWER** Zeinab Khatir (Save the Children USA).

N/A = Not Applicable

NFI = Non food items

HH = Head of Household.

	WHERE does activity take place or is it obtained?	WHO is in charge of activity or distributes good/service?	WHEN does activity take place or is good/service obtained?	HOW is good/service obtained (e.g., vouchers or as needed)?	WHO engages in activity or obtains good/service and	WITH WHOM
FUEL	Around the camp, 2km radius.	N/A	Early morning (7am) and after Breakfast (9am)	Walking in groups of 10-15 women (for security)	Older women (typically over 45) sometimes with their babies) Younger women and children prone to attacks and rape.	N/A
FOOD (collecting around camp)	Not happening at this camp as there is no food to collect.	Not happening at this camp as there is no food to collect.	Not happening at this camp as there is no food to collect.	Not happening at this camp as there is no food to collect.	Not happening at this camp as there is no food to collect.	Not happening at this camp as there is no food to collect.
FOOD (Market)	Usually from the market in Geneina. Note 75 out of the 90 women at this meeting worked.	N/A	Daily after work	From payment for work. Typical rate is 3000 SP/day. But requires a 2-3 hour walk each way into Geneina.	Women and some children (see notes 1 & 2 below)	Work as domestics or in building
FOOD (as aid distribution)	In camp. Some NGO's distribute to household. (see note 3 below).	NGO distribution team.	Typically monthly	By ration card. (See note 4, 5 & 6 below).	Men and women HH.	Distributing agency

WATER	From tanks	No control at tank	All hours. Lack of storage and jerry cans means 3-4 trips/day typical.	By queue.	Women and children	Other women and children
LATRINE (during the day)	Men and women using school latrines (see note 7 below). Women are also using outside the camp or on the way to work.	N/A	Morning and at night.	N/A	N/A	N/A
LATRINE (during the night)	School latrines?	N/A	as above	At night go in groups.	N/A	N/A
LATRINE (during menstrual cycle)	as above	N/A	as above?	Usually in the morning. More water involved.	N/A	N/A
SHELTER (During the day)	At their shelter	Men and children	N/A	N/A	N/A	N/A
SHELTER (During the night)	At their shelter	All family sleep inside for security? (after 8.30 pm security curfew)	N/A	N/A	N/A	N/A
SHELTER (during rain)	They get wet.	N/A	N/A	N/A	N/A	N/A
CLOTHING	N/A but refer to washing clothes below.	N/A but refer to washing clothes below.	N/A but refer to washing clothes below.	N/A but refer to washing clothes below.	N/A but refer to washing clothes below.	N/A but refer to washing clothes below.
MEDICAL (within the camp)	2 clinics in camp	Medical staff.	Morning	Queue but only the first 50 are apparently seen. Need to come back the next day if they miss out. See note	Patients and family members	Medical staff.

				8 below.		
MEDICAL (in Town)	N/A Apparently not used?	N/A apparently not used?	N/A Apparently not used?	N/A Apparently not used?	N/A Apparently not used?	N/A Apparently not used?
MEDICAL (When HH is sick)	2 clinics in camp	Medical staff.	Morning	Queue but only the first 50 are apparently seen. Need to come back the next day if they miss out. See note 8 below.	HH is accompanied by neighbours.	Medical staff.
SECURITY	No security. See note 10 below.	Supposed camp security?	Security is particularly an issue at night in the camp. See note 11	N/A	N/A	N/A
BATHING	Women inside their shelters. Men outside shelters.	N/A	Early morning or at night.	Queue for water	All family	N/A
NFI DISTRIBUTION	Camp and sometimes house to house.	Distributing agency	3 months ago?	By ration card.	Men and women HH.	Distributing agency
WASHING DISHES	At their shelter.	N/A	Twice a day after meal.	N/A	Women and children.	N/A
WASHING CLOTHES	At their shelter.	N/A	Twice a week and in some cases daily (See note 9 below).	Queue for water	Women and children.	N/A
VISITING TOWN	Daily if working or as required.	N/A	During the day. Refer to Food (Market) above.	Walking which takes 2-3 hours each way.	Women	Other women?
PLANTING CROPS	No planting occurring due to lack of land and	No planting occurring due to lack of land and	No planting occurring due to lack of land and security.	No planting occurring due to lack of land and	No planting occurring due to lack of land and	No planting occurring due to lack of land and

	security. See note 10 & 11.	security.		security.	security.	security.
OTHER	N/A	N/A	N/A	N/A	N/A	N/A

Notes

1. No jobs for men who consequently tend to the children in the camp during the day.
2. It is not safe for men to go outside the camp. 16 of the 90 women in the discussion group have lost contact with their husbands since coming to the camp.
3. Many people missed out on distributions to household because of the daily requirements of simply surviving (that can be sensed from reading this matrix).
4. Some agencies combine food and NFI ration cards.
5. The chiefs appear to be issuing all the ration cards for the people that they are responsible for. There were questions as how the chiefs distributed the cards (and suggestions that the chiefs favour their immediate relatives).
6. Chiefs and sheiks are apparently elected by their people. This seems at odds with note 5 above?
7. School latrines are apparently maintained but their use by those outside the school is causing issues with the school
8. No triage is done and patients are seen on a first come first served basis.
9. Those that are washing daily are doing so because of a lack of clothes.
10. Security is a major issue in the camp and is not being provided. The IDP's reported that theft of radios, clothes, and food is common and that they suspect that the camp security are involved in many of these instances.
11. Curfew is at 8.30 pm and after that time it is dangerous to be outside one's house.