

Evaluation of the SLIRI/Landmine Action Socio-Economic Impact
and Dangerous Areas Surveys and of SLIRI's Organizational
Sustainability in the Nuba Mountains

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1. Executive Summary

From its inspired beginnings in 2001, the Sudan Landmines Information and Response Initiative (SLIRI) has had the potential to become an influential mine action organization with the capacity to use the mine action platform for engaging Sudan's adversaries in a peacebuilding dialogue. It is the only non-partisan indigenous organization in the country. Its first location – or Sector Operations Centre (SOC) as the site offices have been called – and the most innovative has been in the Nuba Mountains, where shortly after the cease-fire in January 2002 SLIRI first introduced two offices working in tandem on either side of the conflict line for collecting information about victims and mined areas. Information was collected by pairs of field workers drawn from both sides of the conflict. From the Nuba Mountains, SLIRI expanded, establishing 15 Sector Operation Centres (SOCs) throughout the country as the programme grew, operating simultaneously in Government controlled areas and SPLM controlled areas. Its ultimate ambition was to have SOCs in all major areas of the country with sub-sector locations where basic landmine surveys would contribute to protecting the population and to assisting mine clearance in setting priorities.

Unlike the other national NGOs dedicated to mine action SLIRI has actively avoided affiliation with either side of the conflict. The Sudan Campaign to Ban Landmines (SCBL) and Sudan Association for Combating Landmines (JASMAR) both operate under the authority of the Government. Operation Save Innocent Lives (OSIL) operates under the authority of the SPLM. But SLIRI, by its original conception and by conviction, has remained politically non-aligned. This has facilitated its work on both sides of the conflict line, in Government-controlled and SPLM-controlled areas, and neutrality has been an asset.

Neutrality has had its price. In order to accomplish its ultimate objective of becoming a legitimate nationwide organization with some permanence, SLIRI needed to become a full-fledged NGO and be recognized as such by both the Government and the SPLM. This was a commitment that Landmine Action and SLIRI made to its principal sponsor, the European Community. The difficulty was that, originally, neither the Government nor the SPLM were willing to accord legitimacy to an organization that stood opposed to the separate interests and the mutual suspicion that has defined Sudanese politics for at least 20 years. SLIRI did finally succeed in being registered as an NGO by the SPLM but not by the Government in Khartoum.

Attempts to achieve official recognition and registration on both sides of the conflict have a long history. When the Government was approached three years ago to initiate the registration process, its National Mine Action Office proposed that the SLIRI programme be attached to an existing organization, JASMAR, a mine action NGO operating under its authority. SLIRI advisors declined. Affiliation with the Government's JASMAR might have guaranteed registration but it would have compromised the ideal of neutrality, and it was a matter of principle that SLIRI be an indigenous, non-aligned organization. Resentment lingers among ranking Government officials whose memories are long, and

there seems little question nowadays that from this bed of lingering resentment has sprung a number of minor grievances which come up whenever the question of SLIRI's NGO registration is raised.

The United Nations Mine Action Service (UNMAS), which has become an increasingly influential fixture in the mine action landscape in the Sudan over the past three years, might have defended SLIRI and supported its ideal, but it did not. In 2003, SLIRI's early advisors argued, perhaps rather boldly, that SLIRI should be the custodian of the country's Information Management System for Mine Action (IMSMA), the data processing and record keeping function maintained by most mine affected countries. UNMAS' Programme Manager at the time took offense at the proposal. He subsequently went even farther by keeping SLIRI from having any access to IMSMA at all. Tempers ran high and here again resentment lingers. Without access to the international data management standard, SLIRI was obliged to develop its own software for recording its survey data. SLIRI's software was incompatible with the record keeping function kept by UNMAS, and this incompatibility has given UNMAS staff reason to disparage SLIRI's efforts, to take issue with SLIRI's use of the wrong kind of forms, and belittle the quality of SLIRI's data.

UNMAS works closely with the Government's National Mine Action Office. It is difficult to say whether this close collaboration with the Government has had a role in UNMAS' disinclination to support SLIRI, though many of those who were interviewed suspected this to be the case. UNMAS shares an office complex with the Government's National Mine Action Office and when the Government took the decision to prohibit SLIRI's use of GPS equipment, UNMAS supported the decision knowing this would cripple SLIRI's ability to provide reliable data. It matters little that the dispute between SLIRI and UNMAS sprang partially from personality differences or that these differences might have been resolved with a little more patience on both sides; the result has been that both the Government's National Mine Action Office and UNMAS, separately and together, have contributed to containing SLIRI's attempts to become a nationwide NGO.

Landmine Action might have helped SLIRI avoid these difficulties with the Government, the SPLM and UNMAS had its country directors been more tactful, though this is far from certain. The Landmine Action country directors struck a firm posture toward the Government's NMAO and made contact with UNMAS only when it was absolutely necessary. Only modest attempts were made by Landmine Action's country director in 2004 to mend fences, even when a new UNMAS programme manager arrived in 2003 who was more supportive of SLIRI's ideals, and who might have done more than his predecessor.

Landmine Action and SLIRI faced a financial dilemma in early 2005 that would have far-reaching consequences and compound SLIRI's difficulties. The second tranche of funding from the EC was inexplicably delayed. The delay had little effect on the demining operators whose funding was otherwise assured, but it did take its toll on SLIRI's survey and community liaison activities, which relied on EC funding. Ten weeks went by without resolution and Landmine Action was obliged to cut back its

commitments to SLIRI for its work in the communities and it did so just as SLIRI was completing the compilation of information using the United Nations' IMSMA format. The timing could not have been worse. The United Nations became even more entrenched in its distrust of SLIRI. In September 2005, SLIRI's dynamic Sudanese director in Kadugli left to take a position elsewhere.

A larger organization with more human and financial resources than Landmine Action might have found a way to bridge financing between payments. Landmine Action could not and subsequently took the decision to bring in a larger partner for SLIRI. By mid 2005 Landmine Action had begun negotiations with HALO Trust to take over Landmine Action's role as international partner for all of SLIRI's Sector Operations Centres in the SPLM area and three in the Government area. SLIRI's name has changed in these locations to Sudan Landmine Response (SLR) and it remains to be seen whether the name change is part of a significant change in strategy. A transition period presently prevails.

From the beginning, Landmine Action set its sights for SLIRI high but no one, not even those who have sought to contain SLIRI, would deny the boldness of SLIRI's vision or the value that SLIRI brings to the country. The Government continues to promise that registration is still possible and claims to support the SLIRI ideal but new excuses are perpetually found to prevent SLIRI's registration as an NGO. UNMAS, at the national level, regards SLIRI as a lost cause and in the Nuba Mountains, some UNMAS staff disparage the value of SLIRI's efforts as being "worse than zero." It is difficult to understand UNMAS' readiness to take such outspoken exception to SLIRI's work. It is even more difficult to understand why UNMAS would do anything to diminish SLIRI's presence in the Sudan.

This evaluation report argues that Landmine Action and other associated international partners should take measures to rescue SLIRI from its present decline, to resurrect SLIRI's reputation with UNMAS and to mend fences with the Government as it continues to seek official recognition. The EC continues to actively support registration for SLIRI, a sign that the EC maintains an interest in supporting the SLIRI ideal. The fact that SLIRI no longer functions in the way it was envisaged does not mean it should not do so or that it was not a good idea or that it did not do well. It has done well even if its present circumstances are poor testimony. SLIRI functioned well in Phase I of European Community funding and continued to function well, against some odds, in 2004 during the first year of the European Community's Phase II funding. Its accomplishments are considerable especially considering the difficulties experienced in providing data according to UNMAS' standards. A neutral, national indigenous organization is a viable and feasible ideal, and even if these first three and a half years have had disappointments, they have provided lessons for avoiding the risks that a non-partisan, national institution must navigate if it is to serve as a platform for implementing a peacebuilding campaign through mine action.

A final, more general impediment has stood in SLIRI's way as it stands in the way of other innovative mine action organizations globally. Two divergent cultures divide mine

action into separate camps. One is a military culture, and this military paradigm supports high-cost, highly centralized military managed endeavors that conduct mine clearance as stand-alone programs, as ends in themselves. An alternative paradigm regards mine action to be less a military than a civilian or community matter whose ultimate purpose is broader than mine clearance alone. The alternative paradigm places a significant measure of authority over mine action in the hands of local officials or village leaders who are encouraged to regard mine action as one among a menu of development needs: water access, small loans, agricultural advice or education. This civilian, or community-based approach that SLIRI espouses is suspect among military-trained staff in general, and the military-inclined personnel at UNMAS in Khartoum particularly who regard giving responsibility over disposing of the instruments of war too hazardous or too complex a task for a local organization.

SLIRI is an idea whose time has perhaps not yet come, but whose time may come soon. Funds will diminish for high-cost mine action. Donors will prefer to support mine action, especially in lightly contaminated countries such as the Sudan, through community development schemes managed through UNDP or international NGOs and will become increasingly wary of investing in the centralized UNMAS operating procedures that insist on quality standards that no local government could ever afford on its own. Sudan will need an organization like SLIRI, even if its capacity does not yet measure high by international standards.

Organization of the Report

Each of the report's seven sections, with the exception of this Executive Summary begins by raising a central question. Section Two, *The Conflict*, asks, "what aspects of the conflict in the Sudan and the Nuba Mountains bear on Landmine/SLIRI's capacity to promote peace through mine action?" Each of the subsequent sections, from Section 3 to 7, address issues specifically raised in the evaluation's Terms of Reference. Section 3, *The Survey*, addresses the first two issues raised under the Terms of Reference, i.e. "to identify strengths and weaknesses in the socio-economic impact and dangerous areas surveys as tools for setting priorities in mine action programmes," and "to gauge if such priorities are linked to local peacebuilding needs." Section 4, *Peacebuilding*, addresses the third issue, "to assess whether socio-economic and dangerous areas surveys can be used to design peacebuilding interventions in other areas of the Sudan." Section 5, 6 and 7 do the same, covering each of the subsequent issues in turn.

Recommendations

Section 8 offers 10 recommendations for how Landmine Action and other international partners might now proceed. The central theme of these recommendations is to re-place SLIRI on a sound footing and, in future programming, to make institutional strengthening of SLIRI the prime objective. It is in the long term interests of the international community and the Sudan to restore SLIRI as the only non-aligned indigenous mine action organization in the Sudan and to promote SLIRI's involvement in information gathering, community liaison and policy setting at both national and regional levels.

2. The Conflict

KEY QUESTION: What aspects of the conflict in the Sudan and the Nuba Mountains bear on Landmine Action/SLIRI's capacity to promote peace through mine action?

It is convenient though only partially correct to describe the conflict in the Sudan as between the Arab Islamic North and the African Christian South. These affiliations have become the main lines dividing those who oppose each other, though the reasons for the conflict are more complex than ethnic or religious or geographic divisions. As in other contemporary intra-national struggles, the basis of the conflict has more to do with control over resources than ethnic loyalties, and the ethnic divisions are largely an overlay on the conflict which, for the most part, involves disputes over oil, water and land.

Even though the Nuba Mountains area is geographically situated in the northern half of the country, and the Arab/African divisions have not traditionally been a prominent issue, this changed in 1986. The trigger was an escalating contest for land between local farmers and pastoralist tribes. The pastoralist tribes were armed by the Government forces and trained as militias to move against the Nuban farmers cultivating the rich valleys and terraced hills in the mountainous Nuba terrain. The Government's ultimate aim was at least in part to force the Nubans off the fertile valley land to make room for agribusiness development by supporters of the National Islamic Front and to create a pool of surplus labour out of the displaced Nubans.¹

The Government's aggression in the Nuba Mountains provided a rallying cry for the SPLM among the Nubans, and between 1986 and 1989 the SPLM and its SPLA forces established permanent bases in the area. Antagonism escalated. The aggressive Arabization policies by the Government, part of its attempt to control the rich Nuban valleys, made ethnic identity a major issue among the Nubans, and many Nubans aligned themselves with the SPLM to be free from Government expansion. The Government, for its part, used growing support for the SPLM as a justification for declaring a *jihad* and for intensifying its offensive.² By the mid-1990's the Nuba Mountains had become the site of intense conflict.

The Government pursued a deliberate "population clearance" policy in the Nuba Mountains area intended to disperse and ultimately relocate the civilian population from villages in the Nuba to other parts of the Sudan. Villages were burned in their entirety, cattle were stolen, and facilities such as schools and clinics were leveled obliging

¹ International Crisis Group, God, Oil and Country: Changing the Logic of War in Sudan, Africa Report no 39, January 2002, p. 144

² Rebecca Roberts and Mads Fridlander, "Preparing for Peace: Mine Action's Investment in the Future of the Sudan," in K. B. Harpviken and R. Roberts (Eds.) Preparing the Ground for Peace, Mine Action in Support of Peacebuilding, Oslo: PRIO, 2004, p. 9

residents to relocate to transit camps outside of the area or in towns, such as Kadugli.³ And by insisting that aid organizations funnel aid only through Khartoum, the Government ensured that residents of the razed villages were left with little choice except to move to camps where they would receive international assistance rather than rebuild villages on their own. Access to food and humanitarian relief was used as a weapon, and it was only when UNICEF's Operation Lifeline Sudan negotiated access to displaced and threatened populations in SPLM controlled areas that some relief was available. This continued until early 2002 when representatives from Norway, Switzerland and the United States, in separate initiatives, brought the warring parties together to agree on a cease-fire.

A cease-fire in the Nuba Mountains area was formalized by the US/Swiss Birkenstock Agreement on 22 January 2002. A Joint Military Commission established its headquarters outside of Kadugli, centrally located in the Nuba Mountains area to implement the agreement and to respond to challenges to the cease-fire. It was a model peace-making initiative in two ways. It created a political space for peacebuilding activities to take place, such as mine action; SLIRI's mine action programme that Landmine Action now manages was one of the first. And it set the pace for other peacebuilding agreements. The Machakos Memorandum of Understanding on Cessation of Hostilities was signed in Nairobi in October 2002, and both of these agreements prohibited parties to the conflict from using landmines. The Nuba Mountains cease-fire agreement was a precursor to, and paved the way for, the nation wide Comprehensive Peace Agreement in 2005.

Though hostilities continued in pockets of the Nuba Mountains, the ceasefire agreement made mine action possible even before there was peace and while a peace agreement was being negotiated. The Joint Military Commission needed trained mine clearance services to open humanitarian access and before mine clearance could start, basic surveys were needed. The Danish NGO, DanChurchAid (DCA) worked closely with the JMC, trained demining teams from both Government and SPLM forces and mounted clearance teams in mid 2003. SLIRI was established in the Nuba Mountains area from the beginning of the cease-fire and provided information on mined areas and landmine casualties. By 2003, these surveys were being used by SLIRI's international partner, Landmine Action for setting priorities in mine clearance operations. The two mine action programmes in the Nuba Mountains – the one under DanChurchAid (DCA) and the other under SLIRI and Landmine Action – started in the second year of the Joint Military Commission, well before a peace accord had been signed and this has made their experience particularly relevant for exploiting the potential of mine action as a peacebuilding activity.

It was originally thought, in 2002 before any mine clearance had been conducted and surveys were just beginning, that anti-personnel mines had been widely used.⁴ An initial

³ International Crisis Group, *God, Oil and Country: Changing the Logic of War in Sudan*, Africa Report no 39, January 2002, p. 145-148

⁴ It appears that the Government forces used anti-personnel mines predominantly to protect the garrisons and outposts that they established inside strategically located villages; in these places, landmines were laid to stop or funnel the advance of SPLA forces toward a garrison and to force them into a vulnerable

estimate of casualties was high. There were reports of over 10,000 mines in the Sudan. In 2002, the Government informed IRIN that anti-personnel landmines had caused 1,135 casualties in the Nuba Mountains in the 11 years between 1989 and 2001, an average of 107 per year.⁵ When SLIRI first started its own investigations into victims and incidents in the Nuba Mountains, inquiries reported 387 casualties from both anti-personnel mines or UXOs between 1998 and 2003, 77 per year.⁶ Over the past 18 months when the return of displaced persons might have increased the number of accidents, SLIRI has reported an average of 3 casualties a month, or 36 per year from landmines and UXOs, half the number reported earlier by SLIRI and a third reported by the Government. As information is accumulated and done so with more care, the estimates of the number of victims and the number of landmines and UXOs are likely to diminish further.

Estimates are difficult because the memory of mine placement by army engineers and other well-placed informants as well as reports of casualties are often inflated. Inflated numbers benefit the Government and the SPLM by luring the sympathy and financial assistance of donors into their mine action programmes, over which their respective administration keep close control. But it has made it the more difficult to plan for how best to tackle the problem. A needs assessment for mine risk education conducted by DCA in the Nuba Mountains and published in April 2004 makes the same point: "...contamination in the Nuba Mountains is scattered."⁷ And the number of casualties from anti-personnel mines, as a percentage of all explosive remnants of war is rather small, less than 20 per cent. Clearly, the danger from anti-personnel mines is somewhat less than originally expected.

This matters because the strategy for containing harm to the population depends largely on the extent of contamination and if the contamination is modest and restricted to the verges of impassible roads or the crests of hillocks, costly manual clearance may be less of a viable strategy than educating residents to avoid contaminated areas. Mine clearance might well be less of an emergency measure than part of a long term plan to expand productive areas, and this means that establishing an indigenous capacity for identifying and dealing with dangerous areas is perhaps more important than undertaking costly clearance activities with international personnel in the short term. At the very least, gathering accurate information and giving good advice to villagers is essential. This is where SLIRI had the potential, and still has the potential, for serving a critical role in reducing the landmines threat in the Nuba Mountains area.

position. SPLA forces had fewer permanent positions to defend and used anti-personnel mines less frequently. Their strategy was to make it difficult for the Government forces to provision their positions, denying access by laying anti-tank mines along transport routes.

⁵ IRIN, "Sudan, Food Deliveries Vital for Nuba Mountains," May 2002

⁶ SLIRI, "Newsletter" March-May 2003

⁷ Uliks Hasanaj and Rune Hjarno Rasmussen, "MRE in the Nuba, A Survey to Assess the Need for Mine Risk Education in the Nuba Mountains," DanChurchAid and UNICEF, April 2004, p. 31

3. The Surveys

KEY QUESTIONS:

- (1) What have been the strengths and weaknesses in the socio-economic impact and dangerous areas surveys as tools for setting priorities?**
- (2) Are the priorities linked to local peacebuilding needs?**

Background

SLIRI has collected information in the Nuba Mountains for almost three years and throughout this time, SLIRI's survey activities have covered villages that are under both Government as well as SPLM control. The Nuba Mountains survey data is the principal concern of this evaluation. Data has also been collected, in six other survey sites in Government controlled areas, and this data set covers mine action information exclusively in Government controlled locations. Since the quality of the data from these other six sites bears on SLIRI's credibility as a survey organization, it is reviewed briefly here as well.

There is furthermore another data set from SLIRI survey sites operating under SPLM control. Presumably this information has been forwarded to SPLM authorities and, in fact, may be kept in SLIRI's own data base, but neither this evaluation nor other interested parties have been able to access this information.

SLIRI's Nuba Mountains survey was intended to help villages protect themselves, help donors identify the areas most in need of mine risk education and help identify the areas most in need of clearance. What the initial collection process lacked in expertise, it made up in determination and SLIRI staff made a reputation for themselves for their use of bicycles and motorbikes to travel to remote mine affected villages even during the rainy season. SLIRI maintained a running record of landmine and UXO incidents, detailing the type of device, whether the victim was a human, animal or vehicle, whether the human was killed or injured and what the victim was doing when the event occurred. SLIRI established a network of informants throughout the Nuba Mountain – and in other areas under Government control - which has given SLIRI the most complete record available from any organization. Up to the end of 2004, SLIRI data had contributed to information on 1,269 landmine incidents (see Table 4.3.), which was slightly over 60 per cent of all verifiable landmine incidents since 2002.⁸

SLIRI's collection of data during these first two years, roughly July 2002 to August 2004, was distinctive because it worked outside of the standard Information Management System for Mine Action (IMSMA) protocols and guidelines. The IMSMA protocols, guidelines and software had been denied to SLIRI and in their place, SLIRI advisors were obliged to develop their own format for data collection known as the SLIRI Information

⁸ Interview with Mohammed Kabir, UNMAS IMSMA database manager, Khartoum, 24 October 2005

Management System (SIMS). These two years can be considered a first period in SLIRI's survey activities.

The issue of SLIRI's access to the data management standard was resolved in July 2004 when UNMAS provided SLIRI with the IMSMA software and with training to data entry field personnel in Kadugli and Kauda in the Nuba Mountains. By August 2004, SLIRI staff began producing information in the IMSMA format and this ushered in a second period of survey work.

Between August and December 2004, SLIRI staff updated its existing material, revisiting many of the villages with whom it maintained contact through the SLIRI network and producing data on IMSMA forms. UNMAS's quality assurance staff approved, and SLIRI was finally able to participate fully in a UNMAS controlled nation-wide system of data gathering. The results of this intensive four month effort constitute the output of the second survey period. Work on this second period was cut short in January 2005 when the second tranche of EC funding for Landmine Action was delayed forcing Landmine Action to stop allocations to SLIRI's survey activities.

There are, then, two sets of Nuba Mountains SLIRI data over approximately two and a half years, collected in a first and second period. The first includes the data collected on SLIRI's own forms and protocols between July 2002 and August 2004. Since much of this data has been incorporated in a 48 village summary, it is referred to here as the 48 village survey. The second includes data collected with IMSMA forms and protocols and, up to the time when funding was stopped, SLIRI had accumulated data on 64 villages. This is referred to as the 64 village study.

Setting Priorities

The SLIRI data has been used differently for setting mine action priorities in the first and the second periods.

First Period, July 2002-August 2004

A complete compilation of SLIRI's first period data has never been assembled. Because it was not in the IMSMA format, only portions of it have been entered into the national UNMAS database. An overview of the first period data must now be gleaned from SLIRI newsletters, quarterly reports and files where updates were given regularly.

During SLIRI's first survey period, Landmine Action advisors established a school for deminers in Tillo, a small settlement outside of Kadugli. The first set of 26 deminers had completed their training by February 2003 and were preparing for clearance operations. A list of villages needing emergency clearance was based on the data collected by SLIRI in the initial months of its research. Landmine Action drew on this SLIRI data in conducting what was referred to as an Accelerated Village Data Confirmation programme, in which the SLIRI data was verified and dangerous areas confirmed. Forty-

eight villages were selected from the total number of villages on which SLIRI had documentation.

Thirty-five of these villages were thought to be contaminated by landmines and UXOs. From these thirty-five villages, between 10 and 15 villages were identified as most urgently in need of clearance and the village leaders - Emirs, Omdas and Sheikhs - were convened by SLIRI in Kadugli to discuss among themselves which should receive attention first. Information on village contamination was presented by Landmine Action/SLIRI staff. After a lengthy discussion, the group of village leaders came to the unanimous decision that village Korongo Abdala should be cleared first followed by the village Katsha.⁹ The village leaders valued these consultations.¹⁰ Landmines and UXO contamination became a collective, village-level responsibility in ways it had not been before, and the process guaranteed that the choice was made for humanitarian, not for military or political reasons. As it turned out, the priorities were probably appropriate. Clearance in the highest priority village, Korongo Abdala, removed 33 mines and 47 UXOs over a period of approximately 11 months, the highest number recorded so far in the Nuba Mountains for a specific village area.

Second Period, August – December 2004

Using IMSMA protocols and guidelines, and with UNMAS training, the SLIRI two-person teams in Kadugli (Government controlled) and Kauda (SPLM controlled) compiled an updated list of 64 affected villages in the Nuba Mountains. The raw data on these 64 villages was forwarded to UNMAS in Khartoum where it was assessed and, using a ‘scoring system’ that assigns numeric values for a range of variables, UNMAS assigned a composite ‘impact’ score that serves as the basis for giving an ‘impact-based’ priority ranking. A sample of the raw data on 64 villages can be found in Annex 1.¹¹ UNMAS’ summary of this raw data using its scoring system has been labeled ‘Light Impact Survey Priority and Weights by Village’ and is found in Annex 3. The scoring system is in Annex 2.

UNMAS has now assumed full responsibility for setting clearance priorities in the Nuba Mountains areas. Village leaders are not consulted. Presumably the priorities assigned in UNMAS’ Light Impact Survey Priority and Weights by Village, based on SLIRI’s 64 village survey and analyzed in Khartoum by UNMAS database managers have been used by UNMAS Kadugli in setting these priorities, though UNMAS Kadugli has not acknowledged doing so.

⁹ Details about Katsha and other villages mentioned in this report can be found in Annex 1, a compilation of information on casualties and mine areas for 64 villages.

¹⁰ Interviews were conducted with village leaders in Korongo Abdala who had participated in the consultations.

¹¹ This was provided by UNMAS Kadugli. It is a version of the raw data that has been extensively edited and cleaned and does not represent the range of variables provided as raw data. After persistent questioning, the evaluator discovered that the raw data is kept in Khartoum where it was released to him only after considerable discussion.

UNMAS has recently assigned Landmine Action an additional clearance operation in the SPLM controlled village of Koyea. Koyea is an abandoned village where only six households still live, reputed to have been heavily mined because of its proximity to an SPLM controlled airstrip. The landmines, however, pose little immediate threat to a population that has, for the most part, evacuated the place. After almost a half-year of clearance operations, the teams have found only two mines in an area where UNMAS' surveyors suspected as many as 200. This raises the question whether a village consultation, similar to the one conducted by Landmine Action and SLIRI in 2003, would have perhaps not regarded Koyea as a priority and chosen another location where the threat to human lives was more immediate.¹²

SLIRI Data for Six Other SOC Sites in Government Controlled Areas up to Mid-2004

In July 2004, SLIRI forwarded a compact disk to UNMAS of data assembled by the 7 Sector Operation Centres maintained by SLIRI in Government controlled areas. The database included information on roads, villages, other mined areas, human casualties and other incidents. UNMAS' data management specialist in Khartoum conducted a review with lessons for improving data quality. Three of the summary tables which the data yielded are provided here, on (1) mined areas, (2) land use of blocked areas and (3) victims. In all cases, the data has been cross-tabulated with location.

Table 4.1. summarizes the number of identified mined areas for each of six states.

Table 4.1. Number of Mined Areas by Location

State	Number
Bahr Al Jabal	31
Eastern Equatoria	7
Jonglei	2
Red Sea	100
South and West Kordofan ¹	53
Upper Nile	7
Total	200

Source: Mohammed Kabir, "Data Presentation: SLIRI North," UNMAS

¹South and West Kordofan cover the Nuba Mountains area.

Table 4.2. re-arranges information for all mined areas to classify them by how the mined area is normally or potentially used. This gives a rough idea of the social and economic impact of landmine contamination.

¹² See Sara M. Sekkenes, "Linking disarmament with local and national development: the example of Mine Action" Norwegian People's Aid, DRAFT, p. 9 for a discussion of the incompatibility between UNMAS and NGO procedures for setting priorities

Table 4.2. Classification of Mined Areas by Land Use

Reported Usage	Number
Agriculture	6
Agriculture-forest	1
Agriculture – grass and wood collection	25
Agriculture - grazing	34
Agriculture – grazing, grass and wood	2
All agriculture uses	6
Forest only	1
Forest and grazing	1
Grass/wood collection only	2
Grazing only	67
Not used for productive purposes	1
Residential or household garden	1
Unspecified	53
Total	200

Source: Mohammed Kabir, “Data Presentation: SLIRI North,” UNMAS

The data on victims contained 1597 incidents but only 1269 were listed in the IMSMA data base since 328 incidents were submitted without the location being properly identified. Those victims with locations identified are arranged in the following table.

Table 4.3. Number of Landmine Victims by Location

State	Number of victims
Western Bahr El Ghazal	321
Nuba Mountains	299
Warrap	188
Bahr Al Jabal	149
Red Sea	121
Upper Nile	94
Jonglei	45
Eastern Equatoria	20
Northern Bahr El Ghazal	16
Lakes	12
Western Equatoria	4
Total	1269

Source: Mohammed Kabir, “Data Presentation: SLIRI North,” UNMAS

While there have been some concerns about how data is presented, generally the SLIRI data for Government controlled areas has been appreciated by UNMAS and the National Mine Action Office.¹³

¹³ Mohammed Kabir, “Data Presentation, SLIRI North,” UNMAS, Internal Document

Strengths and Weaknesses

The intrinsic value of SLIRI, as a non-partisan indigenous organization is reiterated throughout this report and is repeated here. There are very few organizations in the Sudan, if any, which do not have some stake in the conflict and in the institutions that perpetuate it. SLIRI is an exception. Its non-partisan character is its strength. This has also been problematic for SLIRI which must work closely with a number of other organizations, North and South, and all of them in order to survive, have implicitly or explicitly made their partisan alliances. It is laudable that SLIRI was eventually recognized by the SPLM authorities, though not without difficulties. And it is perfectly understandable that, in part because of SPLM's recognition and in part because of SLIRI's principled neutrality that the Government National Mine Action Office has so far rejected SLIRI's application for NGO registration.

SLIRI's competence as a survey organization raises a different matter. Mined area surveys serve various purposes. They serve to identify villages where mine risk education and follow up for victim assistance are required, and the SLIRI survey did this. Any organization that wanted to know which villages needed a mine risk education programme or victim assistance would find it in SLIRI records. Surveys are also expected to serve a more rigorous purpose. They may be expected to identify with some precision and technical savvy the limits of mine fields, the intensity of contamination, the affected population and the threat to water access and livestock, and the claim has been that the SLIRI data does not provide this level of precision. A cursory examination of SLIRI's data indicates that this claim may be partially, though only partially true. Even if it is true, very little evidence has been provided to make the case.

The claim comes primarily from UNMAS staff, some of whom are outspoken on the issue. SLIRI's most recent 64 village data set and the priority setting based on this data seems to serve as one of the bases for setting clearance priorities in the Nuba Mountains. The performance of the survey activity was appreciated by UNMAS personnel in Kadugli at the time.¹⁴ The UNMAS staff may nevertheless have their reasons for discounting the quality of SLIRI's data and for disparaging SLIRI as an institution, and some of these reasons may include the following.

1. In 2003 when there was very little information on landmine/UXO contamination in the Sudan, Landmine Action's advisor,¹⁵ who had been instrumental in founding SLIRI, envisioned SLIRI as the national custodian of landmine information in the Sudan. The Programme Manager of UNMAS at the time took umbrage at his suggestion to have an indigenous organization assume functions which, in his view, were the exclusive responsibility of the United Nations. The legacy of hard feelings has not entirely disappeared. When finally SLIRI had no choice but to relent, UNMAS Program Manager denied SLIRI access to the IMSMA software. For SLIRI's first two years, its data followed a different format and UNMAS data managers resented, and resent still, the

¹⁴ SLIRI, "Impact Survey Summary Report," Kadugli: August 2004

¹⁵ Rae McGrath

extra work required to make it compatible with theirs. An indication of this legacy has been that none of SLIRI's extensive involvement in mine risk education has been entered into the Nuba Mountains mine risk education database, a particularly surprising omission given the observation by a recent UNICEF financed study of DanChurchAid in the Nuba Mountains that SLIRI has had the most advanced surveillance system, network and community awareness programme for serving mine risk education in the area.¹⁶

2. Beginning in 2003, SLIRI was the only organization in the Sudan collecting information in areas controlled by the Government as well as by the SPLM. At one point, there were eight SLIRI Sector Operations Centres collecting information in SPLM areas. The SPLM authorities were reluctant to allow the information to be forwarded to UNMAS or circulated widely, convinced as they were of the close links between UNMAS and Government institutions. UNMAS staff has been displeased about this and has assumed that SLIRI, itself, has been a factor in restricting their access to data from the SPLM controlled areas.

3. There may be a tendency among some UNMAS personnel¹⁷ to distrust 'community based' approaches to mine action. This has been mentioned by other commentators, and it is worth noting that UNMAS has hesitated, in the past, to embrace a broader, more inclusive concept of mine action that supports community involvement.¹⁸

Conclusion

There are different opinions about whether SLIRI's data meets the standards upheld by UNMAS. But there is agreement that SLIRI has functioned well in spite of substantial odds; that SLIRI produced considerable data in many parts of the country where no data had previously been collected; that this data has ably served to set appropriate clearance priorities; and that SLIRI had the most effective network for providing mine-action services such as mine risk education in the Nuba Mountains.

¹⁶ Uliks Hasanaj and Rune Hjarno Rasmussen, MRE in the Nuba, UNICEF and DanChurchAid, Mine Action Team, 2004, p. 40

¹⁷ The present Programme Manager excluded.

¹⁸ Rebecca Roberts and Mads Frilander, "Preparing for Peace: Mine Action's Investment in the Future of the Sudan," IN K. B. Harpviken and R. Roberts (eds) Preparing the Ground for peace. Mine Action in Support of Peacebuilding, Oslo: Prio. P. 14. The authors write: "...the grass-roots ideology underpinning SLIRI was at odds with the approach taken by UNMAS, which appeared to be advocating an internationally led mine action programme that could be initiated more quickly. It has been alleged by various organizations that UNMAS staff wanted to 'do a kosovo' – that is, a resource rich mine action programme to achieve rapid clearance. Many Sudanese civil society organizations claim that they were told by UNMAS that the Nuba Mountains would be cleared of mines within two years."

4. Peacebuilding

KEY QUESTION: Are the socio-economic and dangerous areas surveys effective for peacebuilding interventions in the Nuba Mountains and in other areas of the Sudan?

Introduction

A small body of literature has recently examined how mine action contributes to reducing conflict by promoting peacebuilding. Mine clearance obviously removes the instruments of war, often quite publicly, and the demonstration of their removal and destruction is a powerful show of the strong backing for advocates of peace.¹⁹ But there are other ways, four in particular, that have recently been cited to press the case for mine action's potential for encouraging peaceful dialogue. They fall under the broad headings: (1) Governance and Political Framework, (2) Reconciliation and Justice, (3) Socio Economic Foundations and (4) Security.²⁰

Each of these four areas involves strategies for reducing conflict and building peace in the context of mine action. The strategies are practical programming guides, but they are also useful as a template or standard in guiding inquiry about whether mine action programmes have realized fully their capacity to promote peace. They are, in this sense, four areas in which a programme such as the Landmine Action/SLIRI one, has to perform well. Column 1 of Table 6.1 gives these four areas and beside them, in column 2, are concrete initiatives²¹ that fall under each of them. Column 3 gives the indicators, adapted for this evaluation, to be considered in judging the Nuba Mountains Landmine Action/SLIRI mine action own peacebuilding programme.

Targets or objectives for each of these indicators could be expressed for each one, and they could also be given a numerical value in order to judge actual achievements against these objectives. This would have been too complex for such a brief evaluation. Instead, the performance of the programme on each of the indicators is ranked between 1 and 5 and the rankings totaled for all indicators to give a shorthand assessment of the

¹⁹ K. Harpviken and R. Roberts (Eds.) Humanitarian mine action and peacebuilding: exploring the relationship, Oslo: PRIO, 2003; Norwegian Ministry of Foreign Affairs, Peacebuilding – A Development Perspective, Oslo: Utenriksdepartementet, 2004; E. M. Cousens, 'Introduction', in E. M. Cousins and C. Kumar (eds.) Peacebuilding as Politics: Cultivating Peace in Fragile Societies, Boulder, Colorado: Lynne Rienner, 2001, pp. 1-20; Sara M. Sekkenes, "Linking disarmament with local and national development: the example of Mine Action, DRAFT

²⁰ D. Smith, Towards a Strategic Framework for Peacebuilding: Getting their Act Together, Overview Report of the Joint Utstein Study of Peacebuilding, Norwegian Ministry of Foreign Affairs, Oslo 2004; Kathleen Jennings and Christian Ruge, "Killing many birds with as few stones possible: Integrating ERW and SALW actions with peacebuilding and development efforts" Fafo New Security Programme, DRAFT; Richard Moyes, "Introduction: Organising Humanitarian Assistance" Landmine Action, DRAFT

²¹ Kathleen Jennings and Christian Ruge, "Killing many birds with as few stones possible: Integrating ERW and SALW actions with peacebuilding and development efforts" Fafo New Security Programme, DRAFT

peacebuilding programme as a whole. The total rankings and their rationales are given at the end of this section and summarized in Table 6.5.

Table 6.1. Indicators Adapted for Evaluating the Landmine Action/SLIRI Peacebuilding Programme

1 Category	2 Concrete Initiatives	3 Specific Indicators: Landmine Action/SLIRI Evaluation
1. Governance and Political Framework	<ul style="list-style-type: none"> • Institution and competence building: planning, diplomacy, advocacy and management • Human rights and IHL • Role for active and critical civil society • Engagement with non-state actors 	<p>I. Successful creation of a non-partisan institution at the national level</p> <p>II. Indigenization of a sustainable, capable institution at both national and regional levels</p> <p>III. Contribution to an active and critical civil society at the regional and national level</p>
2. Reconciliation and Justice	<ul style="list-style-type: none"> • Dialogue between former opponents • Opening up of public space • Trauma therapy and healing – victim assistance • Facilitation of evidence gathering 	<p>IV. Increased cross-lines dialogue between former opponents</p> <p>V. Creation of a ‘community of common concern’ among groups/villages across conflict lines</p>
3. Security	<ul style="list-style-type: none"> • Marking, fencing and clearance • DDR, stockpile destruction, removal of instruments of war, employment of combatants • Engage with SALW challenges • Increased human security 	<p>VI. Areas marked and cleared and stockpiles destroyed</p> <p>VII. Casualties and other landmine incidents reduced</p>
4. Socio-Economic Foundations	<ul style="list-style-type: none"> • Physical reconstruction • Economic reconstruction • Infrastructure of health and education • Repatriation and return of IDPs • Food security 	<p>VIII. IDPs returned</p> <p>IX. More secure livelihood opportunities</p>

This section assesses the Landmine Action/SLIRI Nuba Mountains programme as a peacebuilding endeavor using the indicators in column 3 as guidelines. As suggested in the Terms of Reference, this section also raises the question, in its conclusion, of whether the Landmine Action/SLIRI strategy could be used elsewhere in the Sudan.

Governance and Political Framework

I. Successful creation of a non-partisan institution at the national level

The original concept of SLIRI was explicitly to serve as an “indigenous, grass-roots organization working with both sides of the conflict...”²² Over the past 4 years, SLIRI has stood for a non-aligned cross-lines mine action body, and it differs from Sudan’s other indigenous mine action organizations in this regard, notably JASMAR (Sudan Association for Combating Landmines) under the authority of the Government and OSIL (Operation Save Innocent Lives) under the authority of the SPLM. JASMAR and OSIL are known publicly as NGOs, though para-government bodies is probably a better term since along with other mine action NGOs, these operate under the authority of the Government or the SPLM. When the idea of SLIRI as a non-aligned organization managing mine action information for the Sudan was conceived, consultations were held with JASMAR as a possible partner, but the difficult decision was made and made at some cost, to establish a separate, neutral and unaffiliated organization.

A comparison with DanChurchAid (DCA), the other international NGO implementing cross-lines mine action in the Nuba Mountains shows SLIRI’s unique character. The DCA programme has maintained two demining teams, one from JASMAR and another from OSIL and although they trained together, they work separately. While Landmine Action/SLIRI trains and employs its own deminers, DCA’s deminers belong institutionally to their home NGOs, JASMAR (Government) and OSIL (SPLM). In principle, it is a good arrangement though in practice, it has been difficult because the loyalty of the deminers remains, inevitably, with their institutional affiliations. DCA has lobbied strongly with its two separate partners, JASMAR and OSIL, that the clearance teams should be integrated but neither group agrees, and the compromise was reached that the JASMAR (Government) teams would work in SPLM mined areas and the OSIL (SPLM) teams would work in areas mined by the Government forces.

The compromise points to an instructive difference between DCA and Landmine Action/SLIRI. DCA’s peacebuilding initiative is founded on the link that it forges between two sides of the conflict, with JASMAR on the one hand and OSIL on the other. By contrast, Landmine Action/SLIRI does not seek to reconcile the two sides but rather to support a non-aligned organization – SLIRI – whose neutrality makes arbitration unnecessary. Landmine Action/SLIRI operates on both sides of the conflict lines because it never has been aligned with either side. DCA is in the business of compromise while Landmine Action works without affiliation. When DCA takes an initiative, whether to expand its operations or to intensify its cross-lines arrangements, agreements must be reached between the two sides. DCA is presently re-considering its two-sided affiliation

²² Rebecca Roberts and Mads Frilander, “Preparing for Peace: Mine Action’s Investment in the Future of Sudan, IN K. Harpviken and R. Roberts (Eds.) Preparing the Ground for Peace, Mine Action in Support of Peacebuilding, Oslo: PRIO, 2004, p. 13

in order to operate as an independent, non-aligned international organization engaging deminers as individuals rather than as members of existing, aligned organizations.

DCA's compromise suggests a more general observation. Sudan's two sides of the conflict see little benefit in fully reconciling at the national level since this would undermine their reason for existing. Any effort to integrate teams from the Government and SPLM controlled organizations must perpetually face the fact that neither, fundamentally, wants the full consequences of reconciliation which would effectively dissolve their separate existences and their rationale for making claims, as they do separately, on international donors. The decision by Landmine Action/SLIRI to operate as an autonomous, strictly non-partisan organization has been a good one.

II. Indigenization of a sustainable, capable institution at both national and regional levels

SLIRI sought to be registered as a national NGO by the Government and SPLM for two and a half years, between 2002 and 2004, and faced numerous difficulties. Eventually, SLIRI did receive official recognition as an NGO from the SPLM, but not from the Government side. The Landmine Action/SLIRI project has consequently not succeeded in establishing an indigenous institution at the national level. There might have been more that Landmine Action could have done to court the authorities more diplomatically though in the end, creating an indigenous and neutral mine action organization was bound to engender opposition. Neither Landmine Action nor SLIRI can be held too rigorously accountable for not being more successful.

III. Contribution to an active and critical civil society at the regional and national level

One of SLIRI's unique features has been that, unlike other Sudanese mine action NGOs, it is a genuine civil society organization. No other mine action NGO in the Sudan is free from the authority of either the Government or SPLM authorities who serve as patrons or protectors or direct participants. Its only patrons have been its technical advisors and international partners, OXFAM UK and Landmine Action, and its funders, principally the European Community. In the Nuba Mountains, notably, it has successfully linked villages in a network of common interest to generate information and awareness about landmines, and at the national level, it has been partially successful in creating an umbrella organization operating in the North and South for generating information on casualties and dangerous areas.

Reconciliation and Justice

IV. Increased cross-lines dialogue between former opponents

SLIRI has incorporated three specific cross-lines initiatives into its mine action programme.

1. It established Sector Operation Centres throughout the North and South and, as a consequence, its organizational structure has institutionalized a cross-lines dialogue. Branches in one part of the country have interacted frequently with those in another. SLIRI's organization in the Nuba Mountains area has been a microcosm of this national character, linking two sites from opposite sides of the conflict line: (1) Kadugli in a Government controlled area and (2) Kauda in a SPLM controlled area. Frequent interaction between them has likewise constituted a cross-lines dialogue. Convening the staff, in whole or in part, produced cross-lines interaction. These meetings only rarely involved Government and SPLM authorities, but such meetings did occur first in 2001 at SLIRI's founding and again in May 2004 when ranking officials from the Government and the SPLM, funders joined partners and advisors in a meeting to review SLIRI's future directions.
2. SLIRI's survey activities in the Nuba Mountains are carried out by two-person survey teams made up of a Field Officer and an Assistant Field Officer, each from different sides of the conflict.
3. Survey team members in a given Sector Operation Centre may conduct investigations in both Government and SPLM controlled areas.

V. Creation of a 'community of common concern' among groups across conflict lines

What began as a data collection scheme in the Nuba Mountains for SLIRI to assemble basic mine action information developed into a far reaching network that by 2005 linked over 50 villages in facilitating a flow of information *from villages* about dangerous areas and victims and *to villages* for the purposes of assisting victims and villagers in protecting themselves.

The survey in 2002 and 2003 initially brought SLIRI's Field Officer in contact with numerous villages as information on casualties and dangerous areas was recorded. But as the survey continued and as visits were repeated to fill in missing information, stronger ties were forged between the SLIRI office in Kadugli and participating villages. By early 2004, these ties had developed into a loose network and though at the time it had not been formalized, SLIRI soon recognized the value of these ties, not only for providing a regular flow of information on casualties and mined areas, but also as a vehicle for disseminating information on increasing the capacity of villagers to protect themselves.

Once the loose confederation of villages linked by the flow of information took shape, SLIRI gave it a formal structure connecting a group of two or three village committees to a county or provincial level committee which in turn interacted with state level committees all of which regarded Kadugli as their point of contact. At one point, there were six state level committees receiving information from (and disseminating information to) 21 county committees and these county committees were similarly connected to over 50 villages. This made SLIRI potentially the most efficient and extensive mine risk education and community liaison organization in the Nuba Mountains.

In the Nuba Mountains, village affiliations with one side or another of the conflict were never that rigid since, for the most part, the demarcation lines drawn for the purposes of the 2002 cease-fire were often arbitrary. Some villages with SPLM sympathies ended up on the Government side of the line and vice versa. One village may have a Government garrison in the town centre while, at the same time, households fly the SPLM flag on the periphery. SLIRI's network and community liaison programme muted the differences that were open to question anyway, by assembling a large number of villages on both sides of the demarcation line into a 'community of common concern.'

Security

VI. Areas cleared and stockpiles destroyed

Efficiency is a standard performance indicator for most demining operations. It may be measured by the number of mines lifted in a certain time period or by square meters cleared in a certain time period. A cost benefit analysis is the most demanding of the group of techniques that compares inputs into a production system to the goods and services deemed critical outputs of the system. The goods and services can be measured as immediate outputs by areas surveyed or areas cleared or lengths of road cleared or devices lifted, or they can be measured as outcomes, i.e. the value of these new assets when used for planting crops or traveling on roads. Increased security of these productive resources has considerable peace dividends.

A cost benefit analysis is difficult to apply to mine action programmes because it is difficult to measure the quantity of outputs and even more difficult if not near impossible to measure the financial value of the outcomes. A more practical approach to measuring efficiency is a cost effectiveness analysis which compares the cost or the time required to produce the same level of outputs among different organizations, taking account of a number of relevant factors such as different clearance assets. Even here, the exercise can be no more than approximate since the analysis requires identifying the data problems, making reasonable assumptions for how to address these problems and making sure that the results are sensitive to reasonable changes in the assumptions. In this case, given the modest amount of information available for different organizations working in the Nuba Mountains, the best one can produce is some cost effectiveness conjecture.

The comparison here is between Landmine Action (LMA) and DanChurchAid (DCA) the only two humanitarian demining organizations in the Nuba Mountains area. They work in comparable terrains, difficult at the best of times, on abandoned roads that may be overgrown with tall grass and trees or along the slopes of hills covered with loose rock. The Government used anti-personnel mines on hill slopes and ridges to protect village garrison against SPLM foot soldiers, and the SPLM soldiers used anti-vehicle mines along roads to interrupt Government supply lines. Table 6.2. gives area and devices cleared by DCA and LMA over the past two and a half years.

Table 6.2. Comparison of Clearance for Two Organizations in the Nuba Mountains

Organization	Meters ²	AP cleared	AT cleared	UXO cleared
DanChurchAid	99,685	206	3	336
Landmine Action	54,325	107	1	1490

Source: UNMAS, Kadugli, November 2005

DanChurchAid has been operating for 2.5 years with 2 teams and has operated, during one of these years, with 4 teams, giving a total of 9 team years. During the same period, Landmine Action has been operating for 2 years with 2 teams and a half-year with an additional two teams, making a total of 5 team years. The disclaimer must be made that there are differences in the management and size of teams, the building of team spirit, the training, the terrain and the technique of working. A rough comparison is nevertheless possible. Table 6.3. summarizes the values for the DCA and Landmine Action teams and gives some indication of their comparative cost effectiveness. There appears to be very little difference between DCA and Landmine Action in cost effectiveness expressed in clearance rates. Otherwise said, Landmine Action meets the same respectable standards that other comparable organizations in the area have maintained.

Table 6.3. Area and Devices Cleared per Team per Year

Organization	Team years	Meters ² cleared/team/year	Devices cleared/team/year
DanChurchAid	9	11,076	60
Landmine Action	5	10,865	319.6

VII. Casualties and other landmine accidents reduced

It is near impossible to draw a direct connection between areas cleared and the reduction of casualties since casualties may increase in the short run as areas are cleared. Residents become less cautious and assume areas are safe when they may not be. Clearing land attracts the return of IDPs who are less informed than residents and who are more risk-inclined as they restart their livelihoods by farming in areas that may not be safe. A recent study of mine risk education in the Nuba Mountains suggests that returnees are typically the group most at risk for landmine accidents.²³

SLIRI kept a monthly record of landmine incidents and published these in its quarterly report and newsletter. Table 6.4. has been pieced together from these regular reports which give the number of landmine incidents recorded for a given time period in the area covered by the SLIRI network of villages. The coverage may have changed slightly since SLIRI's network was growing during the year and a half when these records were kept and one might well expect casualties to grow as a result. But the more likely reason for a greater number of human casualties beginning in the second half of 2004 was the growing number of returnees who, after two years of peace in the Nuba were returning to their home villages.

²³ Uliks Hasanaj and Rune Hjarno Rasmussen, MRE in the NUBA, a Survey to Assess the Need for Mine Risk Education in the Nuba Mountains, Kadugli: DanChurchAid Mine Action Team, 2004

6.4. Landmine Incidents Recorded by SLIRI in 2004 and 2005 for 6 provinces in the Nuba Mountains area

Date range	No. of months	Humans	Animals and vehicles	Total of all incidents	Incidents per month
01-03/2004	3	8	13	21	7/month
04/2004	1	3	3	6	6/month
05-07/2004	3	3	8	11	2.3/month
09-11/2004	3	11	17	28	9.3/month
01-04/2005	4	21	6	27	9/month

Source: SLIRI Quarterly Reports and Newsletters, 01/2004-04/2005

The point of these records has little to do with the impact of Landmine Action clearance since clearance covered only a restricted area (three villages during this time). The point is rather that the interventions by SLIRI, by Landmine Action and DCA in all aspects of the mine action involving clearance, education and disposal of ordnances contributed to the return of IDPs during this period. Figures vary widely, but a gross estimate would suggest that as many as 41,000 IDPs returned to the Nuba Mountains during the period covered by these records. What is surprising about these casualty records is not that numbers increased slightly, since this is to be expected, but that the numbers have not increased any more than they have.

Socio-Economic Foundations

VIII. IDPs returned

An estimated 13,000 IDPs returned to the Nuba Mountain area in 2003, an average of 1,100 per month. There was only a modest increase in 2004. In 2005, however, for the month of May, 4,600 IDPs passed through an IDP checkpoint reportedly returning to villages in South Kordofan. This is a four-fold increase over two years previous. At this monthly rate, 55,200 can be expected in 2005, and overall, approximately 80,000 will have returned between 2003 and 2005. To put this number into perspective, and assuming the population of the Nuba Mountains is approximately 1.5 million, total returnees over a three year period result in an increase of 5 per cent of the total population.

Questions posed to village leaders in the course of the evaluation confirm this picture. In Katsha, a village of 10,000 where Landmine Action maintains a clearance operation, village leaders estimated 500 returnees had arrived in the village, equal to five per cent of the village population. In Abdala Korongo, a population of 13,000 where Landmine Action has also conducted clearance operations, leaders estimated 800 returnees equal to six per cent of the population.

The mine clearance operations have been a catalyst for their return since, according to informants, the number of returnees was modest until mine clearance started and, once

started, the flow increased. Clearance is on-going in Katsha and once completed, villagers anticipate a greater number. But the presence of landmines does not appear to have been the principal reason for their original departure nor is clearance, in itself, the only reason for their return. Most of the IDPs departed because of the war itself. Cattle were stolen and crops were requisitioned for troops, family members were injured, their mobility was severely restricted and markets ceased to function. Families left to protect themselves generally from the ravages of war, not necessarily from the threat of landmine injury. Landmine clearance serves mainly to signal to IDPs that the war is over.

IX. More secure livelihood opportunities

The evaluation interviewed leaders and household members in two villages where SLIRI's survey and community liaison activities collected data and provided some mine risk awareness, and where Landmine Action cleared mined areas. The interviewees identified three significant impacts: (1) expansion of economic activity resulting from an increase in population, (2) a diversification of diets, and (3) an increase in external development assistance.

1. Economic activity

The return of IDPs has had the most significant of all impacts because the increase in population has expanded economic activity. In the village of Katsha, a 25 per cent increase in the number of small shopkeepers, from 8 to 10 has been the most visible indication that conditions have improved, apart from the diversity of products for sale. In Abdala Korongo shopkeeper income has increased sharply. While shopkeepers in Katsha report a 20 to 25 per cent increase in monthly gross income, in Korongo Abdala where the number of returnees is higher, two shopkeeper informants both reported increases from 1,000-1,500 dinars per day to over 5,000 dinars per day, a three-fold increase, and both of them have expanded their merchandise and the size of their shop.

2. Diet diversification

None of the respondents linked an increase in arable acres, resulting from mine clearance, with an increase in income. The reason was that most of the cleared, arable acres are close to the villages, on the hillsides or the slopes within the village that families use for their household gardens. These are 'gebracas' and are different from the sorghum and millet fields which are generally far from the village and have not been affected by landmine contamination. The value of sorghum grown on these distant fields has indeed increased but this is due to poor rains and increased population, not mine clearance. The real impact of clearance has come from greater access to family "gebraca" where vegetables and fruits are raised for household consumption and now that families feel safe in using them, production on these small plots has increased and diets have diversified.

3. Development Assistance

Mine identification and clearance bring in development assistance. In both of the villages, Katsha and Abdala Korongo and throughout the areas where mine clearance occurs, local and international NGOs now provide clinics, water and other services, services that had

not been available before. Mine clearance attracts outside assistance by reducing the threat of injury to the staff of charitable organizations.

Peacebuilding Performance Ranking

The summaries, below, justify the ranking of the programme's performance for each indicator on a scale of 1 to 5. Table 6.5. assembles all the summaries in a single table to give a composite assessment for all indicators.

Indicator I - Successful creation of a non-partisan institution at the national level: Landmine Action/SLIRI has successfully created a non-partisan institution at the national level against considerable odds. It was, in conception and as long as it lasted, a considerable accomplishment. **Performance Ranking = 5**

Indicator II - Indigenization of a sustainable, capable institution at both national and regional levels: SLIRI was, at its inception a genuine indigenous organization and ideally should have developed as a viable institution more than it has. This did not happen. Landmine Action might have done more to promote and strengthen SLIRI though clearly there were many factors contributing to its present tenuous status which were out of Landmine Action's control. **Performance Ranking = 3**

Indicator III - Contribution to an active and critical civil society at the regional and national level : Even if SLIRI does not survive, its presence over a period of four years has contributed to promoting activist civil society organizations and raising the standards for their performance particularly in its very principled cross-lines strategy. **Performance Ranking = 4**

Indicator IV - Increased cross-lines dialogue between former opponents: Landmine Action has supported SLIRI in its cross-lines activities, in team composition, staff meetings and data collection. It might have integrated its own mine clearance teams better, but it has not and its support for SLIRI's activities in general has waned recently. **Performance Ranking = 4**

Indicator V - Creation of a 'community of common concern' among groups across conflict lines: SLIRI's creation of a network of villages from both sides of the conflict as part of its data collection and community liaison work is a remarkable innovation. It is all the more unfortunate that it has not been sustained by either Landmine Action or other international organizations in the Nuba Mountains. **Performance Ranking = 5**

Indicator VI - Areas marked and cleared and stockpiles destroyed: Landmine Action's clearance teams work efficiently, have been accredited to work on their own and are highly regarded by international organizations in the area. **Performance Ranking = 5**

Indicator VII - Casualties and other landmine incidents reduced: Landmine Action and SLIRI programmes have meant that casualties are less than they would have been without intervention. But effective casualty reduction requires finding the appropriate balance

between clearance operations on the one hand and facilitating the flow of information about mined areas and landmine awareness on the other. A better balance remains to be achieved. **Performance Ranking = 4**

Indicator VIII - IDPs returned: IDPs are returning as expected and mine clearance, where it has taken place, serves as a catalyst. The programme is working as planned in cleared areas. On the other hand, Landmine Action does not appear to have utilized SLIRI's extensive network of community contacts to facilitate IDP returns in the numerous other villages to which IDPs are returning without the benefit of mine clearance. **Performance Ranking = 4**

Indicator IX - More secure livelihood opportunities: Mine clearance is one aspect of the peace process, which has encouraged the return of IDPs, restored some land and attracted development assistance. Landmine Action has recently emphasized clearance more than other mine action inputs and where clearance has taken place, the results are promising. But aiming to provide clearance on any significant scale is impractical and Landmine Action might well have considered that a more balanced approach to mine action might have brought benefits to a wider area with more beneficiaries. **Performance Ranking = 4**

Table 6.5. Programme Performance Ranking on Key Indicators (Ranking 1-5)

Category	Ranking
1. Governance and Political Framework	
I. Successful creation of a non-partisan institution at the national level	5
II. Indigenization of a sustainable, capable institution at both national and regional levels	3
III. Contribution to an active and critical civil society at the regional and national level	4
2. Reconciliation and Justice	
IV. Increased cross-lines dialogue between former opponents	4
V. Creation of a 'community of common concern' among groups across conflict lines	5
3. Security	
VI. Areas marked and cleared and stockpiles destroyed	5
VII. Casualties and other landmine incidents reduced	4
4. Socio-Economic Foundations	
VIII. IDPs returned	4
IX. More secure livelihood opportunities	4
Total	38
Per cent of perfect score	85%

Conclusion

The dangerous areas surveys and their application to clearance have served peacebuilding in the Nuba Mountains area reasonably well. The analysis summarized in Table 6.5. suggests that the programme has accomplished nearly nine-tenths of what might ideally have been expected, and this is quite commendable.

The Nuba Mountains is unique in the Sudan since it is the setting of Sudan's first formal cease-fire. It is commonly agreed that the Nuba Mountains cease-fire was an uncommon success and paved the way for the peace agreement adopted three years later in both the Nuba Mountains and for the country as a whole. It was an ideal place for an experimental mine action programme to serve the broader purpose of constructing a more peaceful environment.

The Landmine Action/SLIRI model of combining surveys, intensive community liaison and mine clearance in a single programme and, in particular, involving the communities themselves in most stages of the process, clearly has the potential for working throughout the Sudan. It will perform less well where the stakes are higher in prosecuting the conflict and where the lines of hostility are more firmly drawn. They were not firmly drawn in the Nuba Mountains. In some sense, the Nuba Mountains provided a favourable proving ground. There will be other grounds less favourable and while more difficult, these other grounds may be more appropriate and more challenging venues for the peacebuilding programme.

5. The Cross-lines Strategy

KEY QUESTION: Is the SLIRI Cross-lines Programme Efficacious?

Landmine Action and SLIRI have done more than arrange token encounters and collaborations between individuals from opposing sides. They have aimed at investing the efforts of adversaries to remove landmines in a single non-aligned institution which places its institutional objectives above the separate interests and claims of the two sides. The reason why it must be considered successful is not that it granted full recognition to both sides of the conflict, but rather explicitly that it did not overtly recognize the legitimacy of either of the two sides. SLIRI's conciliatory potential came from the fact that it was one organization, not two, and this gave the phrase 'cross-lines' a weightier nuance since the objective was to dissolve the two sides, not respect or resolve them.

The principle of non-alignment bestowed on SLIRI its unique character as well as an element of controversy for SLIRI occupied a moral high ground that was threatening to a number of partners who might otherwise have been supporters. SLIRI held to its principal of neutrality by refusing alignments with other NGOs that operated under the authority of one or the other side of the conflict. This made it difficult for SLIRI to secure patrons since all aligned organizations have considerable stakes in remaining so and organizations with political stakes are reluctant to promote ones without them. Political stakes translate readily into funds: Government bodies are funded by their superiors who have their own patrons with their own stakes in a state of conflict that justifies their continued existence. NGOs are their clients and receive funding with the blessings of their patrons. Access to donors is inevitably made through those patrons who, openly or not, are dependent on their place in a hierarchy of affiliation.

SLIRI survived in spite of its detractors. It had a reliable funder for three and a half years, the European Community, which looked to SLIRI to achieve the promised ideal of securing official recognition from both sides of the conflict. This meant receiving official recognition as an NGO, capable of operating independently and receiving funds on its own, from both the Government's National Mine Action Organization (NMAO) and SPLM's Sudan Relief and Rehabilitation Committee (SRRC). Efforts were stymied on both sides as neither side gave full support originally. Relations frayed between personalities in the heat of the effort. Finally SPLM's SRRC, under the direction of an enlightened director, granted recognition, but the Government's NMAO never has. SLIRI has therefore not been able to meet original expectations and become a nationwide indigenous and neutral mine action body.

The cross-lines strategy has built relationships that otherwise would have remained dormant or adversarial, and in this sense, it has been efficacious. On the grander scheme, SLIRI remains unrecognized nationally. Perhaps this was inevitable and perhaps nothing more could have been done, but the fact remains that it has not met its ultimate objective.

Conclusion

The institution spanned conflict lines in a number of senses. It had survey teams in both Government and SPLM controlled areas and its two person survey teams in the Nuba Mountains came from both sides of the conflict. This was testimony to its peacebuilding intentions and no doubt, hostilities were reduced by SLIRI presence alone. The question for SLIRI was not whether it was prepared to take the bold step of spanning conflict lines but what would be the political and financial consequences. As it turned out, SLIRI could not overcome the difficulties for an organization that was so squarely non-aligned and eventually its international partner, Landmine Action, took the regrettable but necessary step of withdrawing support when it became clear that it had neither the financial nor human resources to maintain the required level of assistance. The nobler choice for Landmine Action might have been to do what was necessary to make SLIRI succeed, to persist in its diplomatic advances, and while maintaining a modest presence in the clearance field, to invest more heavily in human and capital resources to strengthen SLIRI enough to ensure its survival.

6. Community-based Mine Action

KEY QUESTION: What has been the relevance of SLIRI's programme to local community needs with special attention to women and disabled persons?

SLIRI's principal function was to collect information on landmine casualties, their location, circumstances and consequences. Information collection took place in two different periods, one less structured using protocols devised by SLIRI advisors themselves, and a subsequent more structured period of work carried out in collaboration with UNMAS Kadugli. In the first period, SLIRI assembled a network of village contacts from the villages surveyed and, in many of these, SLIRI identified local volunteers who served the village by sending and receiving information. The network grew to include formal links to a large number of villages and structured so that village contacts would report through local councils and county committees to the office in Kadugli.

The network made it possible for SLIRI to proceed quickly with the second survey period. It also made it possible for SLIRI to deliver other kinds of services, provide victim assistance, make awareness programmes available and train leaders in helping villagers avoid injury.

Although the network never became officially recognized as either an objective or an outcome of the project, its importance rivaled the surveys.²⁴ When it began, there was very little landmine awareness and only a handful of NGOs providing mine risk education. When information about a human casualty reached head office through the network, a Field Officer visited the village to monitor the status of the victim, provide assistance where needed, gather information and conduct public sessions on how to avoid further accidents. The disabled victim became a rallying point and participant in the information sessions.

SLIRI's mine risk education programme delivered through this network was the largest and most effective in the Nuba Mountain area and recognized as such by other NGOs. "When it comes to community work the most advanced is undoubtedly SLIRI who has established a far reaching surveillance system counting 38 local networks in mine contaminated communities. These networks consist of local military engineer's village elders and chiefs. The local networks have the role of post incident monitoring and sustaining the MRE. The MRE community should follow the SLIRI example and draw all they can on the SLIRI competence in establishing this kind of community network to receive IDPs with MRE and collect information."²⁵

²⁴ Landmine Action's Phase II European Community project executed in December 2003 with the European Community acknowledges the presence of these community networks as a mechanism for extending the scope of the programme, but they do not figure among the distinguishing features of either Phase I or Phase II objectives.

²⁵ Uliks Hasanaj and Rune Hjarno Rasmussen, MRE in the Nuba, A Survey to Assess the Need for Mine Risk Education in the Nuba Mountains, Kadugli:UNICEF and DanChurchAid Mine Action Team, 2004

Attention was everywhere accorded to women and children, though it happened that women were rarely landmine victims; in fact none of the 49 landmine victims reported in SLIRI reports for 2004-2005 were women. A larger victim data set from DanChurchAid using report forms for 152 casualties registered only 6 female victims, 4 per cent of the total. In Nuban society, women do not engage in the most risk-inclined activities and this partially explains the low involvement of women in accidents and in public awareness campaigns. Women were therefore not singled out as dedicated targets in SLIRI's community liaison programme, though they did participate in the network, worked closely with the female Assistant Field Officer, and attended meetings of the network.

Conclusion

SLIRI committed itself fully to focusing its mine action activities on serving community needs and did so innovatively, linking communities together in a network of mutual assistance and training local leaders on steps for reducing accidents among villagers and returnees.

9. Sustainability

KEY QUESTIONS:

- 1. Is the SLIRI programme sustainable once LMA has devolved full managerial control to the SLIRI programme?**
- 2. Is there potential for continuation of the programme's impact if there is no further input from donors?**
- 3. Does the SLIRI crosslines approach offer value for money? Is it an efficient way to implement mine action interventions in the Nuba Mountains?**
- 4. Are SLIRI future strategies viable?**

SLIRI's Sustainability

SLIRI is Landmine Action's brainchild. It was spawned in the course of a cross-lines meeting in 2001 among a number of Sudanese mine action organizations sponsored by Landmine Action, and the relationship between Landmine Action and SLIRI has continued for three and a half years. SLIRI has relied on its international partners, OXFAM UK and Landmine Action for its existence and now as its international partnerships are less certain, so SLIRI's future has come into question.

SLIRI became an increasingly complex and demanding partner after 2003. Its administrative and financial resources were stretched as it sought to establish itself nationwide putting in place a number of survey sites (Sector Operation Centres) in both Government controlled and SPLM controlled areas, each with a pair of surveyors and the required logistical resources. Landmine Action served only as technical advisor in Phase I of European Community funding (June 2002 – December 2003) but when Phase II was approved, Landmine Action assumed the functions of both technical advisor and international partner.

The Sudanese mine action landscape was changing and becoming more challenging during Phase II of EC funding. There were more donor funds available for mine action than before and with them, competition intensified among Sudanese mine action organizations to capture the windfalls. SLIRI's status as a neutral organization worried the politically partisan bodies – on both the Government and the SPLM sides – who had created mine action organizations each with grand aspirations. This meant that Landmine Action would have to meet its advisory obligations as well as navigate SLIRI through difficult political waters. These were onerous tasks.

Landmine Action and SLIRI were to perform complementary functions in Phase II. SLIRI was to gather information on mined areas while Landmine Action, with its clearance "response" teams, would clear the areas that SLIRI identified as most contaminated. But by 2004, the administrative and political complexities of managing the project began to erode this complementarity. Landmine Action was making little progress getting SLIRI officially recognized by Government authorities and in fact, it seemed as if the Government was raising ever more obstacles. UNMAS took over the function of

assembling information and deciding where to clear, in some instances dismissing the credibility of SLIRI data. At the same time, Landmine Action was forced to recognize that its budget was insufficient for maintaining the growing number of Sector Operations Centres, supporting the Nuba Mountain survey, plus training and maintaining Landmine Action's own mine clearance operations.

Landmine Action had to make some difficult decisions in early 2005 when EC's second tranche payment was delayed and a budget crisis loomed. Landmine Action reduced its commitment to SLIRI's Sector Operations Centres throughout the country. The Nuba Mountains office felt the cuts particularly since the Nuba Mountains SOC was on the verge of completing its 64 village survey of mine-affected villages in collaboration with UNMAS format. SLIRI's reputation suffered when it abandoned the survey mid-stream. Inevitably, the reduction of Landmine Action's financial commitment was accompanied by a reduction in its support, more generally, to the SLIRI ideal. Landmine Action focused its attention primarily on its mine clearance operations and the complementarity between SLIRI's outreach activities and Landmine Action's clearance operations effectively disappeared. Without funds, SLIRI's activities came to a halt, its existence in jeopardy. Landmine Action took the decision to bring in a new partner, HALO Trust, to assume Landmine Action's partnership role in all of SLIRI's SOC's in the SPLM area and three SOC's in the Government area.

SLIRI's new partnership with HALO Trust is still being negotiated and so far, funding is insufficient to restore SLIRI's activities to their previous level. As of November 2005, Landmine Action had withdrawn involvement from all but two sites in Government controlled areas, the Nuba Mountains (Kadugli) and the Blue Nile (Damazzin). SLIRI's future, tenuous as it is, depends as before on decisions taken by its present and future international partners.

SLIRI without Donor Support

One of the explicit objectives of the European Community's funding was "to ensure that SLIRI is a registered, independent NGO by the end of Phase II." Whether this was ever feasible is another question, and opinions differ on the matter. It did not happen and even though many of the Phase II objectives were met, this one was not and the European Community may have understandably judged it impractical to invest further in SLIRI becoming an independent Sudanese-wide NGO. The European Community's decision may have been symptomatic of the risks that many donors associate with funding a small NGO in the Sudan where political rivalries leave little space for an independent organization. Without funding, SLIRI has very little chance of surviving, except as a small group of volunteers.

An organization like SLIRI is doubly disadvantaged. Independent as it is, it will probably not find a supportive niche within either the Government or the SPLM authorities. Nor is it likely to be an attractive investment for multilateral donors since United Nations agencies and organizations actively encourage bilateral donors to funnel assistance through United Nations organizations. SLIRI might well be adopted, in an exceptional

circumstance, by a sympathetic bilateral donor willing to make a long-term commitment, but this is somewhat unlikely. It will continue to rely on the largesse of international NGOs, like Landmine Action, HALO Trust perhaps and others.

Why has Landmine Action not taken more substantial measures to secure SLIRI's future during the recent crisis? Practical considerations probably have taken precedence over the ideological affinities between the two organizations. It required a strong resolve to support SLIRI's non-partisan, cross-lines programme, when both the Government and the SPLM authorities would have preferred an organization that served one or the other of their separate interests. When UNMAS itself declined support for SLIRI, it required an even stronger resolve to keep SLIRI going. There was a change in Landmine Action personnel when the original advocates departed and in their place were administrators with less firm resolve, less stature and less of the diplomatic skill to usher SLIRI into the right kind of alliances and collaborations. Eventually, the practical obstacles were insurmountable. None of this, however, is irreversible.

The Cost Effectiveness of a Cross-lines Strategy

A cross-lines programme is idealistic by nature, advocating collaborative dialogue in an environment that is hostile and opportunistic and as such, is likely to be cost effective in only the most favourable circumstances. The Nuba Mountains might have been one of these. Parties to the conflict there were willing to endorse a cross-lines strategy and this meant that mine action services could be extended to a larger population than would otherwise be the case. There might have been some efficiency gains as a result. A cost effectiveness analysis might show that a mine action program in the Nuba Mountains with a cross-lines component generates greater economic returns on a larger scale as a result of a more sensitive approach to prioritization and the greater incentives it provides for returnees to resume their economic lives; and all this with more modest inputs than mine removal exercises that have little social component. Such a comparison has not been possible for the Nuba Mountains area though the rudiments of a cost effectiveness analysis are given on pages 23-24.

That said, judging cross-lines programmes by their economic return probably misses the real merit of incorporating peacebuilding initiatives whose value is difficult to measure. All the more reason to applaud the European Community's willingness to take a risk in supporting the Landmine/SLIRI programme knowing that the parties to the conflict in the Sudan were unlikely to agree on much, much less on how to implement a mine action programme for surveying and clearing dangerous areas. The European Community provided support anyway on the off chance that the programme would give a boost to national reconciliation. Cross-lines programmes in conflict zones are not likely to be chosen for their efficiency, certainly not without better odds of success than can be found in the Sudan.

SLIRI's Future

A reputable non-partisan institution like SLIRI is essential for any peacebuilding mine action programme to endure beyond the support of expatriate experts and donors. SLIRI was originally conceived for this reason, as the long-term institutional anchor for a mine action programme in a post conflict country where political affiliations are both unavoidable and problematic. SLIRI succeeded in avoiding affiliations, but largely as a consequence, it has not succeeded in supporting itself either from government or international NGOs or donor funds. Satisfying the institutional side of sustainability has undermined its capacity to satisfy the financial. The fact is that SLIRI is not a very promising investment if the result anticipated is to create a self-sustaining, self-supporting organization. But if seen from another perspective, which is the creation of an organization that stands conspicuously for a neutral, peacebuilding mine action programme, SLIRI continues to have promise.

Conclusion

SLIRI has so far achieved neither institutional permanence nor financial sustainability. A non-aligned organization in a post-conflict environment, where parties to the conflict continue to define the political landscape, are bound to have difficulty getting political approval. Donors are not likely to fund an organization for any period of time that, by virtue of its non-partisan status, goes so squarely against the political grain and therefore lacks political support. Without continued outside support from an organization willing to back an innovative mine action organization, an organization like SLIRI has little chance of having an impact over the long-term.

8. Recommendations

The gist of the ten recommendations that follow is for Landmine Action and other international partners to re-place SLIRI on a sound footing. It is in the long term interests of both Landmine Action, other international partners and the Sudan to restore SLIRI as a non-aligned indigenous mine action organization in the Sudan and to promote SLIRI's involvement in information gathering, community liaison and policy setting at both national and regional levels.

This evaluation is cognizant of the difficulties these kinds of recommendations pose. Landmine Action has made a decision to distance itself from SLIRI for understandable reasons. Potential international partners might reasonably argue that there is neither financial nor political support for an organization such as SLIRI and future support is likely to encounter the same difficulties it has in the past. But international mine action partners have only a limited menu of choices. One option is to withdraw from the country altogether leaving SLIRI to seek support as it can. Another is to provide resources through multilateral organizations which themselves maintain privileged links to partisan organizations in the country. Another is to continue supporting the modest clearance activities in the one or two villages which have, at best, limited impact and contribute little to advocating alternative mine action approaches. A fourth is to revive Landmine Action's policy of providing independent support for indigenization that has the potential of greater social and economic impact and that contributes to advocating for innovative solutions to landmine contamination. As difficult as it may be, this final option appears the only feasible one because it gives SLIRI a distinctive niche, it builds on SLIRI's strengths and it is more likely than other mine action strategies to achieve far-reaching benefits for peacebuilding in the Sudan.

The following recommendations are designed to accomplish this overall objective. They do not pick up where Landmine Action left off when the unavoidable decision was taken to reduce support for SLIRI. They do not attempt to restore the programme pursued under Phase II of European Community funding. The ultimate objective of building indigenous capacity for mine action is the same, but these recommendations set about achieving it differently.

Recommendation 1: The centre of operations and SLIRI's national headquarters should be shifted to Kadugli in the Nuba Mountains. This locates SLIRI in more neutral surroundings. A modest presence might be maintained in Khartoum but only for the purposes of displaying results and giving briefings to national and international collaborators.

Recommendation 2: It is imperative that the results of SLIRI's surveys be compiled in a comprehensive fashion as soon as possible and be disseminated widely. This report has attempted to demonstrate that these results are grossly undervalued. A complete compilation and presentation of SLIRI's data, along with how this data has contributed to making key mine action decisions, should correct this situation.

Recommendation 3: Every effort should be made to expand the existing deminer training school in Tillo outside of Kadugli into a National Mine Action Centre, possibly situated in an expanded complex adjacent to its present facilities. This expanded facility will be in a position to serve a number of functions, one of which will be to serve as SLIRI's national headquarters (see Recommendation 1.). It will also provide a locus for coordinating advocacy efforts in the area of peacebuilding and mine action.

Recommendation 4: This National Mine Action Centre should furthermore serve as one of the national repositories of mine action information, not supplanting UNMAS but complementary to it. SLIRI's data should be analyzed and on display. The national IMSMA database, maintained primarily by UNMAS in Khartoum and elsewhere, should also be accessible with the associated facilities to produce maps, analyze data, assign information gathering tasks and produce regular reports on dangerous areas, casualties and policy issues.

Recommendation 5: It should also support SLIRI's community liaison activities through a network of linked communities that serves to receive information as well as disseminate information throughout the network. This successful innovative approach to mine action community liaison should be replicated in other areas of the Sudan.

Recommendation 6: A further function will be to support a mine action raining facility. This mine action training centre should aim to be the principal school for training deminers in the country, the place where accreditation is given and accepted by both Government and SPLM. There are indications that UNMAS Kadugli would be supportive.

Recommendation 7: While training deminers from Government and SPLM controlled areas in both full and refresher courses, the National Mine Action Centre should also offer courses to deminer candidates and to others in a broad range of mine action and community development competencies. These should include, at a minimum, survey skills, data management for mine action information, conflict resolution and community development programming in health, small scale finance and agricultural production.

Recommendation 8: The National Mine Action Centre should be administered by SLIRI and be identified with SLIRI as an organization. SLIRI's identification with this National Mine Action Centre will provide a justification for the Government to officially recognize SLIRI as a national NGO.

Recommendation 9: Landmine Action mine clearance activities should be reduced to, at most, one full team. This mine clearance response team should be based at the training centre and used (1) as a training resource associated with the National Mine Action Centre and (2) for deployment to urgent mine clearance operations identified in collaboration with UNMAS.

Recommendation 10: The National Mine Action Centre should undertake community development initiatives in the Nuba Mountains area and beyond as opportunities arise,

incorporating mine action into programmes for improving agricultural production, improving access to water facilities and providing health and micro-finance facilities.

**ANNEX 1: 64 NUBA MOUNTAINS VILLAGES SURVEYED BY SLIRI
AUGUST-DECEMBER 2004 – A PORTION OF THE RAW DATA**

Sn	Dname	Sname	vname	No HH	HH Affected	IDPs Expected	LifeThreatening	No of DA's
1	S. Kordofan	Dileng	Abri	125	0	4000	Yes	1
2	S. Kordofan	Dileng	Abuad	150	20	2000	Yes	1
3	S. Kordofan	Dileng	Al Gnei	0	0	0	Yes	2
4	S. Kordofan	Dileng	Al Laghair	0	0	0	Yes	0
5	S. Kordofan	Dileng	Brakandi	60	0	1000	No	1
6	S. Kordofan	Dileng	Dari	100	0	4000	Yes	2
7	S. Kordofan	Dileng	Dulami	450	5	7000	Yes	2
8	S. Kordofan	Dileng	Julud	2000	10	5000	Yes	3
9	S. Kordofan	Dileng	Kabila	92	0	300	No	0
10	S. Kordofan	Dileng	Kalandi	0	0	10000	Yes	3
11	S. Kordofan	Dileng	Katla	400	50	400	Yes	5
12	S. Kordofan	Dileng	Magda	0	0	0	Yes	1
13	S. Kordofan	Dileng	Nieil	165	0	72000	No	0
14	S. Kordofan	Dileng	Tukma	0	0	0	No	0
15	S. Kordofan	Dileng	Wali	3000	40	5000	Yes	9
16	S. Kordofan	Kadugli	Abu Snoon	500	0	3000	No	1
17	S. Kordofan	Kadugli	Addar	2000	0	1000	Yes	1
18	S. Kordofan	Kadugli	Agab	52	0	200	Yes	2
19	S. Kordofan	Kadugli	Al Azraq	500	20	5000	Yes	1
20	S. Kordofan	Kadugli	Andulo	275	30	500	Yes	1
21	S. Kordofan	Kadugli	Angulo	0	0	0	No	0
22	S. Kordofan	Kadugli	Atmor	833	0	500	No	0
23	S. Kordofan	Kadugli	AtTaiss	833	50	1200	Yes	5
24	S. Kordofan	Kadugli	Bilynga	182	18	300	Yes	1
25	S. Kordofan	Kadugli	Boram	1666	0	2000	Yes	1
26	S. Kordofan	Kadugli	Dabakia	583	20	1000	Yes	1

27	S. Kordofan	Kadugli	Daliuka	300	0	1500	No	0
28	S. Kordofan	Kadugli	Damba	300	0	3000	No	0
29	S. Kordofan	Kadugli	Damik	1831	0	5000	No	3
30	S. Kordofan	Kadugli	Eiri	2660	10	5000	Yes	4
31	S. Kordofan	Kadugli	Fama	1500	0	4000	Yes	2
32	S. Kordofan	Kadugli	Ganaya	800	25	2000	Yes	2
33	S. Kordofan	Kadugli	Heiban	833	30	1000	Yes	3
34	S. Kordofan	Kadugli	Karkar	700	0	3000	No	0
35	S. Kordofan	Kadugli	Karkaria	833	0	5000	No	0
36	S. Kordofan	Kadugli	Katsha	1299	100	6000	Yes	8
37	S. Kordofan	Kadugli	Kauda	700	0	2000	No	1
38	S. Kordofan	Kadugli	Kiga Al Kheil	322	20	1800	No	3
39	S. Kordofan	Kadugli	Kofa	97	0	3000	No	1
40	S. Kordofan	Kadugli	Koyea	0	0	0	Yes	0
41	S. Kordofan	Kadugli	Krongo	950	22	3000	Yes	5
42	S. Kordofan	Kadugli	Kubang	567	0	345	Yes	2
43	S. Kordofan	Kadugli	Kulolo	520	0	1600	Yes	3
44	S. Kordofan	Kadugli	Miri Juwa	78	0	1000	No	1
45	S. Kordofan	Kadugli	New Masakin	100	0	500	No	0
46	S. Kordofan	Kadugli	Ragafi	500	30	5000	Yes	1
47	S. Kordofan	Kadugli	Rieka	166	50	4000	Yes	1
48	S. Kordofan	Kadugli	Sama	150	0	2000	Yes	2
49	S. Kordofan	Kadugli	Shat Damam	450	20	1200	No	3
50	S. Kordofan	Kadugli	Shatel Sufya	1833	30	5000	Yes	3
51	S. Kordofan	Kadugli	Taballa	927	0	927	Yes	1
52	S. Kordofan	Kadugli	Tabania	1000	20	5000		4
53	S. Kordofan	Kadugli	Tangal	3000	0	8000	Yes	2
54	S. Kordofan	Kadugli	Trogi	1750	5	0	Yes	3
55	S. Kordofan	Kadugli	Um Durain	166	25	500	Yes	5
56	S. Kordofan	Kadugli	Um Serdiba	700	50	5000	Yes	3

57	S. Kordofan	Kadugli	UM Suran	30	0	2	Yes	1
58	W. Kordofan	Lagawa	Nimir Shago	100	0	50	No	0
59	W. Kordofan	Lagawa	Raafu	0	0	0	No	0
60	W. Kordofan	Lagawa	Ras Al Fil	133	0	1500	No	1
61	W. Kordofan	Lagawa	Saada	490	0	4000	No	1
62	W. Kordofan	Lagawa	Safaria	367	0	2000	No	1
63	W. Kordofan	Lagawa	Suelogi	6500	0	2000	No	1
64	W. Kordofan	Lagawa	Tima	6000	0	7000	Yes	1

ANNEX 2: UNMAS' Scoring System for Assigning an "Impact-Based" Priority Ranking System to the Villages Surveyed in the SLIRI 64 Village Set

Microsoft Access - [MiniImpactReport : Form]

MS Sans Serif 8 B I U

File Edit View Insert Format Records Tools Window Help

Criteria of the reports

☐ Location Apply Filter

Organization:

Time Period: Start Date: End Date:

Owned By:

Life Threatening:

Parameters Priority:

Life Threat Priority:

Type of Reports

☐ By Access (Category)
☐ By Access
☐ Priority by village
☐ By Priority
☐ MA By Vegetation/Terrain
☐ By Type of Devices (Veg/Terrain)
☐ By Type of Devices
☐ By Population
☐ By MA in 100m or less
☐ By Incident
☒ Priority by Village Detailed Score
☐ Priority by Village Grouped Score

Exit

Impact Scoring selection Page (The user can change the scores)

☐ Aff. Pop Individual H.Hold
☒ Aff. Pop Avg House Hold
☒ IDPs Returnees

Life Threat(Vhigh)	5.00	Grazing Land	3.00	Housing	3.00	Low P. minimum (Treshol)	0.00
Life Threat(High)	4.00	Fixed Pasture	2.00	Roads	3.00	Medium P. minimum (Tres)	12.00
Life Threat(Medium)	3.00	Migratory Pasture	1.00	Alternative Avail.	1.00	High Minimum (Threshold)	24.00
Life Threat(Low)	2.00			No Alternative	2.00		
Life Threat(Vlow)	1.00	Non Agriculture	4.00				
MA <100m	3.00	Fuel	1.00	Other Infrastr.	13.00		
Presence of mine	6.00	Building Materials	1.00	Bridge	1.00		
AP only	1.00	Wild Fruit	1.00	Dam or Canal	1.00		
AT only	2.00	Medicinal	1.00	Airstrip	1.00		
Presence of UXO	3.00	Water	7.00	Pipeline	1.00		
		Drinking	3.00	Culture site	1.00		
Agriculture Land	6.00	Fishing	1.00	Medical Facility	3.00		
Grain	3.00	Watering Animal	1.00	Education Facility	3.00		
Cash crops	1.00	Bathing/Laundry	1.00	Market	1.00		
Fruit Trees	1.00	Other	1.00	Other Vital Points	1.00		
Unknown	1.00						
		After ceasefire each Human Incident:	3.00				
		After Cease fire each live stock incident	1.00				
		Before ceasefire each Human Incident:	0.00				
		Before ceasefire each live stock incident	0.00				

Village Priority Calculation based on the impact parameter

Form View

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Annex 3: Light Impact Survey Priority and Weights By Village

[illegible]

[illegible]

Annex 4: Abbreviations

AP	Anti-personnel (mines)
AT	Anti-tank (mines)
DCA	DanChurchAid
DDR	Disarmament, Demobilization and Reintegration
EOD	Explosive Ordnance Disposal
ERW	Explosive Remnants of War
GPS	Global Positioning System
IDP	Internally Displaced Person
IRIN	Integrated Regional Information Network (humanitarian news agency)
IMSMA	Information Management System for Mine Action
JASMAR	Sudan Association for Combating Landmines (Government affiliated)
JMC	Joint Military Commission – peacekeeping force in the Nuba Mountains
LMA	Landmine Action
MRE	Mine Risk Education
NMAO	(Government) National Mine Action Office
NPA	Norwegian People's Aid
OSIL	Operation Save Innocent Lives (SPLM affiliated)
SALW	Small Arms and Light Weapons
SCBL	Sudan Campaign to Ban Landmines
SLIRI	Sudan Landmines Information and Response Initiative
SLR	Sudan Landmines Response
SOC	Sector Operation Centres (SLIRI survey sites throughout the country)
SPLA	Sudan Peoples Liberation Army
SPLM	Sudan Peoples Liberation Movement
SRRC	Sudan Relief and Rehabilitation Committee
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNMAS	United Nations Mine Action Service
UNMIS	United Nations Mission in the Sudan
UXO	Unexploded Ordnance

Annex 5: Contacts and Interviews

Landmine Action - UK

Richard Moyes	Policy and Research Manager, Landmine Action, UK
Simon Conway	Acting Director, Landmine Action, UK
Dan Ayliffe	Programme Manager, Sudan, Landmine Action, UK

Other International NGOs

James Murray	Programme Manager, Comic Relief, UK
Mike Kendellen	Director of Sudan Survey, Survey Action Centre, US

Government of Sudan

Hamid Ahmed Abdelaleem	Director, National Mine Action Office, Khartoum
Alfatah Ali Ismail	Director, Humanitarian Affairs Commission and Sudan Relief and Rehabilitation Committee, Kadugli
Abdul Munim Al Taib	Wali/Governor, South Kordofan, Nuba Mountains

Landmine Action, Sudan

Patrick McLeish	Country Director, Landmine Action, Sudan
Rae McGrath	Previous Director, Landmine Action, UK and Sudan
Jez Lockett	Technical Advisor, Landmine Action, Sudan
David Elliott	Technical Advisor, Landmine Action, Sudan

Sudan Landmine Information Response Initiative

Mohamed Fawz Mohamed	Programme Coordinator, SLIRI Sudan
Aziza Farah	Programme Monitor, SLIRI Sudan
Asha Babala Adam	Assistant Field Officer, SLIRI, Kadugli
Nadir Phillip Kadou	Field Officer, SLIRI, Kadugli
Simon Jundi	Previous Field Officer, SLIRI, Kadugli

United Nations

Jim Pansegrouw	CTA Program Manager, United Nations Mine Action Office, Khartoum
Mohammed Kabir	Senior Data Management Advisor, United Nations Mine Action Office, Khartoum
Qadeem Khan Tariq	Senior Technical Advisor, Mine Action Service, United Nations Development Program
Sherif Baaser	Project Officer and Coordinator, Mine Risk Education, United Nations Children Fund
Ahmed Gangari	Mine Risk Education Technical Advisor, United Nations Children Fund

Angus MacMillan	Quality Assurance Officer, Nuba Region United Nations Mine Action Office, Kadugli
Jan Bosman	Programme Manager, Nuba Region United Nations Mine Action Office, Kadugli
Boutros Obidka	Regional Coordinator, Mine Risk Education, United Nations Mine Action Office
<u>Other</u>	
Bob Scott	Programme Director, DanChurchAid, Um Sediba, Nuba Mountains
Abdelati Abdelkheir Eid	Coordinator, Sudan Campaign to Ban Landmines, Khartoum
Abo-Osama Abd Allah	Executive Director, Sudanese Association for Combating Landmines (JASMAR)