Natural Resources, the Environment and Conflict

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ACCORD

The African Centre for the Constructive Resolution of Disputes (ACCORD) is a non-governmental organisation (NGO) working throughout Africa to bring creative African solutions to the challenges posed by conflict on the continent. ACCORD's primary aim is to influence political developments by bringing conflict resolution, dialogue and institutional development to the forefront as an alternative to armed violence and protracted conflict.

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Acknowledgements

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List of Acronyms

ACCORD	African Centre for the Constructive Resolution of Disputes
AFDL	*Alliance des Forces Démocratiques pour la Libération du Congo* (Alliance of Democratic Forces for the Liberation of Congo)
APRODH	Association for the Protection of Human Rights and the Rights of Detained People
CAMI	Mining Registry Office (DRC)
CNONGD	*Conseil National des ONG de Développement* (National Counsel of Development in NGOs)
CNDP	National Congress for the Defense of the People
CNTB	*Commission National des Terres et autres Biens* (National Commission on Land and other Properties)
CNRS	*Commission Nationale de Réhabilitation des Sinistrés* (National Commission of Rehabilitation of Victims of War)
CPA	Comprehensive Peace Agreement
CPCP	*Commission pour la Consolidation de la Paix* (Commission for the Consolidation of Peace)
CSO(s)	Civil society organisation(s)
DFID	Department for International Development (UK)
DRC	Democratic Republic of the Congo
EAC	East African Community
FARDC	*Forces Armées de la République Démocratique du Congo* (Armed Forces of the Democratic Republic of the Congo)
FDLR	Democratic Forces for the Liberation of Rwanda
FEWER	Forum on Early Warning and Response
Frodebu	*Front Democratique de Burundi (Burundian Democratic Front)*
ICC	International Criminal Court
ICG	International Crisis Group

IDP	Internally displaced person
ISS	Institute for Security Studies
JEM	Justice and Equality Movement
MNC	Multinational company
MONUC	*Mission de l'Organisation des Nations Unies en RD Congo* (United Nations Organization Mission in the DRC)
MRRDR	Ministry of Reintegration and Resettlement of Displaced and Repatriated Refugees
NGO(s)	Non-governmental organisation(s)
OAG	*Observatoire de l'Action Gouvernementale* (Observatory for Government Action)
OLUCOME	*Observatoire de Lutte Contre la Corruption et les Malversations Economiques* (Observatory for Fighting Against Corruption and Economic Embezzlements)
Palipehutu	*Parti pour la Libération du Peuple Hutu* (Party for the Liberation of the Hutu People)
PARECO	*Patriotes Résistants Congolais* (Coalition of Patriots in the Congolese Resistance)
Progesco	*Projet de Renforcement des Capacites de la Societe Civile Dans la Prevention et la Gestion des Conflicts en Afrique Centrale* (Central African Civil Society Capacity Building Project in Conflict Prevention and Management)
Sida	Swedish International Development Co-operation Agency
SPLA	Sudanese People's Liberation Army
TNG	Transitional National Government
UN	United Nations
UNEP	United Nations Environment Programme

Foreword

Ambassador Peter Tejler,
Ambassador of Sweden to South Africa

Vasu Gounden,
Executive Director, ACCORD

The natural environment has often played a key role in conflicts throughout the world. Africa is no different. The 19th century scramble for the continent saw immense bloodshed as European countries battled over Africa's natural wealth. Decolonisation in the 20th century seemed to embody a promise of freedom for Africa – politically, socially and economically. More than half a century later, this vision has not yet been realised and conflict is a constant feature. In many of the protracted conflicts in Africa, the control of natural resources and land is a major underlying issue. The Congo war, one of the biggest in the history of Africa, saw numerous actors involved in the exploitation of the country's vast and rich resources. To this day violence in North Kivu, in the eastern Democratic Republic of Congo (DRC), is largely fueled by the drive to control these resources. Disputes relating to land, environmental and, more recently, climate change issues further add to Africa's woes. In Burundi, for instance, peacebuilding efforts are being hampered by land disputes, often exacerbated by environmental degradation.

The growing climate crisis is the greatest long term challenge the world is facing. Africa may be the hardest hit – purely because the majority of people across the continent are dependent on the environment to make a living. Policy on climate change should therefore not be seen as "delinked" from other policy areas, but rather as an integral part of both development and conflict prevention. Progress in these areas will facilitate the attainment of the Millennium Development Goals (MDGs). Moreover, investment in mitigation and adaptation should go hand in hand with efforts to address and respond to international security threats posed by climate change. These actions should all be viewed as part of a broad preventive security policy. Developed countries will have to continue to take the lead and have a clear ownership of the problem, but developing countries - especially the advanced emerging countries -

will also need to contribute with intensified actions. Climate change, security and conflict prevention are important issues for Sweden's Presidency of the European Union (EU) and should, and must, be high on the international community's agenda. All international and regional organisations should contribute– within their respective mandates - to address these issues.

Africa's development is a common global interest and one of the Swedish Government's foreign policy priorities. Sweden and the EU take a broad approach to development in Africa. Security, aid and trade policy initiatives are viewed and treated therefore as an integrated whole – and actions in areas of climate, the environment and social development are included in this comprehensive approach. Conflicts in Africa are seldom restricted within a country's borders and often have regional dimensions and implications. For this reason, the EU maintains a regional perspective in its approach to, and interactions with Africa.

ACCORD works across the peacemaking – peacekeeping – peacebuilding continuum in the DRC, Burundi and many other African countries. It seeks to encourage and promote the constructive resolution of disputes and so assist in achieving political stability, economic recovery and peaceful co-existence based on just and democratic societies. The work is underpinned by research and the production of knowledge from practical experience in the field. The Embassy of Sweden has for several years, through the Swedish International Development Co-operation Agency (Sida), provided core funding to ACCORD and supports a partnership between ACCORD and the University of Uppsala's Department of Peace and Conflict Research. The relationship between the Embassy of Sweden, ACCORD and Sida is not merely one of donor-recipient dynamics. Rather, it enables us to share and exchange views and analyses on topics - such as the role of the natural environment in conflicts - that form part of the broad African agenda.

Executive summary

This report emanates from an exploratory study conducted in 2009 by the African Centre for the Constructive Resolution of Disputes (ACCORD), in collaboration with the Madariaga-College of Europe Foundation. With a focus on Burundi, the Democratic Republic of the Congo (DRC) and Sudan, the study solicited views and perspectives on the role that natural resources and the environment can play in complex conflict situations. As part of the exploratory study, ACCORD carried out desktop research and interviews with representatives of civil society organisations (CSOs), non-governmental organisations (NGOs) and international institutions in March and April 2009. While this report does not aim to capture all the outcomes from those discussions, salient aspects, informed by the results of the desktop research, have been included. Finally, this exploratory investigation was the first phase of an ACCORD research project on natural resources and conflicts. As such, the report focuses only on key concerns, emphasising specific issues that are part of a complex and widely researched problem.

A large proportion of Africans are dependent on natural resources and the environment to subsist. The natural environment is the foundation of livelihoods based on subsistence and commercial farming, animal husbandry, trade and mining. These activities are inextricably linked to the availability of natural resources and the sustainable management of those resources. Factors such as population growth, human movements, current and future land scarcity, rising levels of global consumption and consumerism, climate change and political and social instability all impact on the natural environment and, thereby, on livelihoods. In turn, the allocation, management and exploitation of increasingly limited natural resources can contribute to conflict in Africa.

In reviewing the exploratory study and preparing this report, ACCORD observed **five** main challenges. The challenges relate first to the problem of natural resources and the environment in complex conflict situations, and second, to the actors that can play a constructive role in natural resource, environmental and conflict management.

1. *Conflict management:* Increasingly, conflict management approaches should take the environment and natural resources into account when attempting to prevent violent conflict from erupting; negotiating and implementing durable peace agreements; deploying peace support operations; and establishing preventative and post-conflict peacebuilding mechanisms.

2. *A lack of viable alternatives:* Environmental changes and inequalities in the global economy are not solely responsible for resource exploitation or direct causes of conflict. Rather, it is the lack of alternatives for those reliant on the natural environment for their livelihoods and/or for power and wealth that can contribute to conflict.

3. *Conflict-sensitive natural resource and environmental planning:* Relating to the first challenge, the absence of long-term strategic conflict-sensitive planning – which takes

into account creeping vulnerabilities and assesses their negative impact on livelihoods and conflicts – undermines future conflict management and peacebuilding.

4. *Government and civil society:* The interdependent role of government and civil society actors in environmental and natural resource governance is vital for the equitable management of natural resources, environmental protection and strengthening sustainable livelihoods.

5. *External actors:* Neighbouring states, multinational companies (MNCs) and other non-state actors involved in illegal extraction of resources can benefit from – and consequently, contribute to – the perpetuation of chaotic conflict situations.

Finally, the report concludes with observations about renewable and non-renewable resources and environmental factors.

Introduction

"This lake is dying and we are all dying with it." These are the words of Muhammadu Bello (BBC, 2007c) who lives in a village in north-eastern Nigeria and depends on Lake Chad to make a livelihood for himself and his nine children. Originally a fisherman, Bello turned to farming on the shores of the lake in a desperate struggle to provide food for his family. Lake Chad is shrinking. Once Africa's third-largest inland water body, it could shrink severely in the coming two decades due to overuse, mismanagement and climate change. Nigerian fishermen have followed the receding lake into Chad and Cameroon, coming into conflict with local populations in the lands around the lake, where unresolved disputes have led to violence. There has also been a movement of some people in search of employment to Maiduguri, the capital of Nigeria's north-eastern Borno State (BBC, 2007c). The fates of many Africans are inextricably linked to the state of the environment, the availability of natural resources and the sustainable management of those resources. Factors such as population growth, human movements, current and progressive land scarcity, rising levels of global consumption, climate change and political and social instability all directly and indirectly impact on the natural environment and, thereby, on livelihoods. In turn, the allocation and management of increasingly scarce resources often contribute to conflict in Africa. The competition for and control over resources – in particular, minerals – can also drive conflict.

This report emanates from an exploratory study conducted in 2009 by the African Centre for the Constructive Resolution of Disputes (ACCORD), in collaboration with the Madariaga College of Europe Foundation. With a focus on Burundi, the Democratic Republic of the Congo (DRC) and Sudan, the study solicited views and perspectives on the role that natural resources and the environment can play in complex conflict situations. As part of the exploratory study, ACCORD carried out desktop research and interviews with representatives of civil society organisations (CSOs), non-governmental organisations (NGOs) and international institutions in March and April 2009. While this report does not aim to capture all the outcomes from those discussions, salient aspects, informed by the results of the desktop research, have been included. Finally, this exploratory investigation was the first phase of an ACCORD research project on natural resources and conflicts. As such, the report focuses only on key concerns, emphasising specific issues that are part of a complex and widely researched problem.

Natural resource and environmental factors and conflict analysis

A wealth of academic and policy research seeks to understand the role that natural resources and environmental factors play in conflicts in Africa. Because of the complexity of conflicts – whether they take place on an interstate or an intrastate level
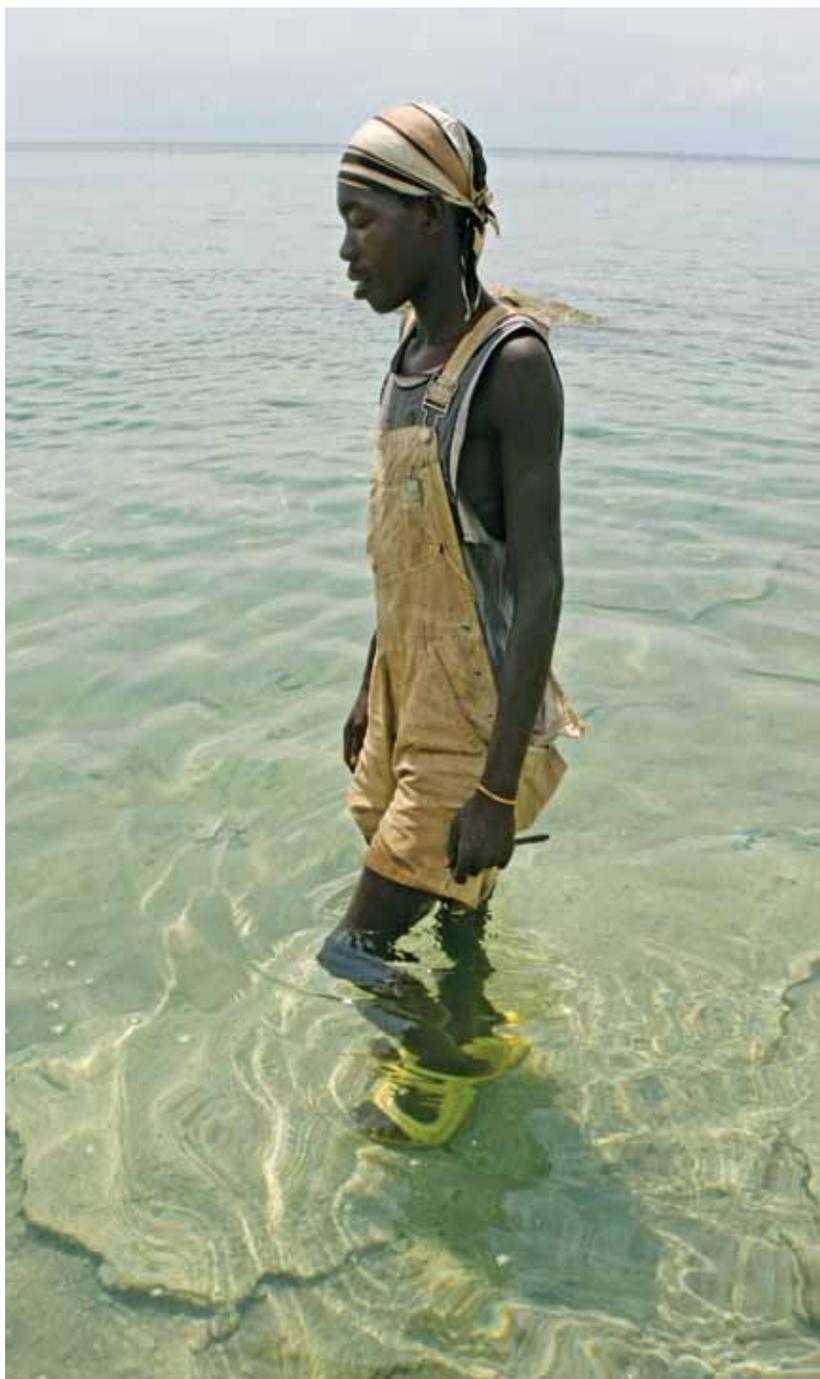
Environmental conflicts are closely linked with population growth, movement or competition over scarce or degraded resources, such as water.

– theoretical and conceptual scholarship in this field is inherently multidisciplinary and complex. Informed by a broad academic and policy literature, this report makes the distinction between natural resource factors and environmental factors or endowments. Natural resource factors are defined in the analysis as non-renewable extractable resources such as minerals, oil and diamonds. Environmental factors are categorised as renewable sources of livelihood that allow a person to make a living. Environmental factors such as land, water, fish stocks and timber may not be accessible to all people in a geographical area, and may be degraded by use or mismanagement.

Greed and grievance

The exploratory study was informed by a broad academic literature on natural resource and environmental factors and conflict. Scholarship on this topic has included the examination of the causes of violent conflicts through a focus on "greed", or economic motivations. Conceptually, "greed" is often associated with the economic motivations of competition for natural resources, thus leading to conflict, or where conflict is used as a strategic tool so the resources can be unlawfully extracted with impunity. Paul Collier's assessment of these issues (1998, 2004) has shaped this "greed" discourse. Importantly, natural resources do not always play a primary role in starting armed violence. Conflict erupts for a variety of inter-related reasons, but they can be perpetuated by greed when a state is weak and unable to protect its porous borders from state and non-state armed combatants (Fearon, 2004; UN, 2001a). Among other scholars, there is consensus that weak, weakened and/or unaccountable states with natural resources such as minerals, diamonds and oil are more prone to conflict (Keen, 1998; Collier and Hoeffler, 2004; Berdal and Malone, 2000; UN, 2001a).

The role that natural resources play in perpetuating conflicts has been studied in Sierra Leone, where it was found that opposing political actors even colluded to extract resources (Keen,1998; UN, 2001a). External actors such as neighbouring countries, syndicates, criminal cartels and global private and governmental actors can also contribute to the perpetuation of conflicts for economic purposes. This is of particular importance in attempting to understand the conflict in the eastern DRC, where illegally exploited minerals and diamonds have been smuggled over the border by local armed groups or foreign military forces, and sold on international markets by criminal cartels in Europe and Asia (UN, 2001a). Finally, the type of resources and how "lootable" they are also shapes the very nature of conflicts. Easily lootable resources – for example, minerals and diamonds – tend to encourage conflict for non-secessionist purposes, such as in the DRC, while in South Sudan, non-lootable resources – such as mineral ores and, to some extent, oil – tend to encourage secessionist conflicts (Ross, 2004).

Conflicts are also analysed through a focus on "grievance", or the entitlement approach. This framework is particularly useful when assessing environmental factors and conflict. Grievance tends to focus on horizontal inequalities, power and group perceptions of injustices that may cause or drive conflicts. Homer-Dixon (1994) distinguishes between three types of environmental conflicts that are linked closely

with population growth, movement or competition over resources. His classification of conflicts ranges from those that happen as a result of resources that are difficult to control and which might become degraded, such as land and water (Gahama et al., 1999); to conflicts that are closely related to population movements, due to environmental stress factors like deforestation or desertification; and "deprivation conflicts", which exist where there are inequalities in access to the economic benefits of natural resources, such as in the Niger Delta. Horizontal inequality in access to or control over scarce land, water or other environmental endowments can be exacerbated when inequalities are based on ethnicity, religion, race or class (Nafziger et al., 2000). Poor environmental management on a local and national government level can also lead to conflict, such as in Burundi (Gahama et al., 1999) – especially where policies are skewed to favour particular groups, or where there is a lack of transparency.

A number of authors have pointed to certain weaknesses inherent in the greed and grievance theories. Some authors – especially those who focus on quantitative analyses of conflicts (Collier, 1998, 2004) – seek direct causality between natural resources and conflicts, where in fact the causality might be reversed or where natural resources play a secondary, tertiary or enabling role. Other studies have found that the political economy is often more predictive of domestic conflicts (Hauge and Ellingsen, 1998:299) than resources, and that political economy should become a third "leg" of the greed versus grievance theory, highlighting the role of governance and economic development in conflicts.

The exploratory study that informed this report drew on this complex discourse, and developed a framework that merges greed and grievance with broader conflict analysis concepts. This framework, as shown in *Diagram 1: Greed and Grievance and Conflict Analysis*, acknowledges the distinctions between greed and grievance, while addressing the overlap of *greed and grievance,* which fuels conflict. While this diagram is not exhaustive, it is a useful reference point for the analysis in this report.

Diagram 1: Greed and Grievance and Conflict Analysis
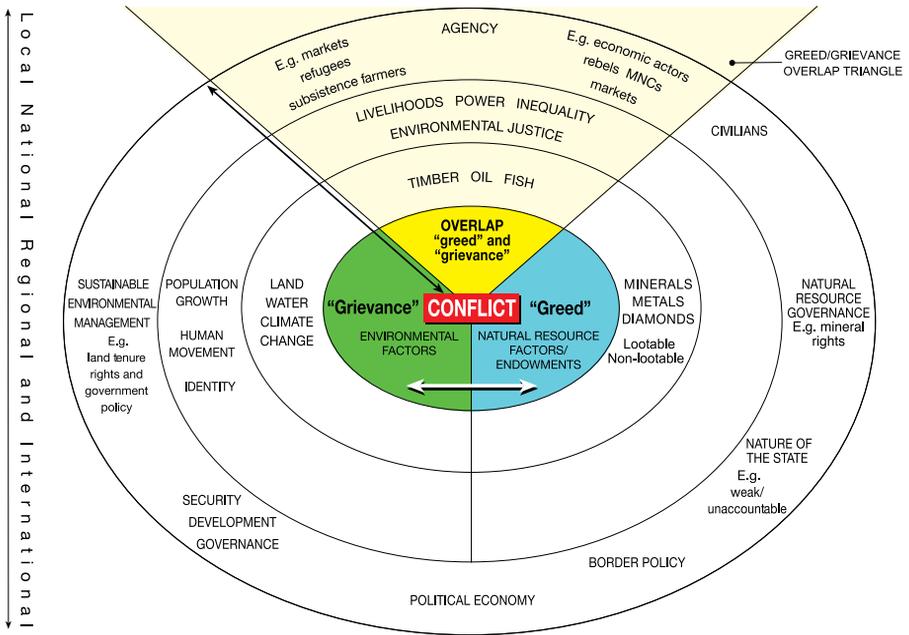
Greed and Grievance and Conflict Analysis

The right side of the diagram focuses on natural resource factors and "greed". Here, we see the importance of natural resource governance, the capacity of the state and control of borders in relation to non-renewable resources. The left side highlights environmental factors and "grievance". On this side, sustainable environmental management is central in relation to renewable resources.

The triangle area indicates the overlap of these two types of factors, as the merging of greed and grievance. Here, certain types of factors – such as timber, oil and fish – relate to both greed and grievance (renewable and non-renewable resources). The triangle also contains concepts that apply to both greed and grievance in conflicts (livelihoods, power, inequality and environmental justice). In this overlap, the agency of refugees, subsistence farmers, armed factions and local, regional and international markets and MNCs is critical.

On the whole, concerns about political and economic governance – displayed on the outer rim – apply to all types of conflict. Finally, the diagram considers that conflicts and the factors that may fuel them can play out at local, national, regional or international levels.

Burundi

Map No. 3753 Rev. 6   UNITED NATIONS
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Department of Peacekeeping Operations
Cartographic Section

Burundi

From independence in 1962 until 1993, the Burundian state was dominated first by a Tutsi monarchy (abolished by a coup in 1966), and then by a series of military regimes imposed by the Tutsi-dominated army. The small Central African country inherited social, political and economic constructions of identity that – as with Rwanda – demarcated between Tutsi, Hutu and the smallest minority, the Twa. Dictators violently suppressed dissent, and large numbers of Hutus were massacred throughout the 1970s and 1980s – a period when ethnicity became increasingly politicised. The military regimes attempted to maintain the structure of power and privilege in Burundi, and throughout, the Tutsi minority held almost all positions of importance.

In 1990, Burundi embarked on a process of democratisation, which was thwarted by an intrastate conflict in 1991 and 1992 between the Party for the Liberation of the Hutu People (Palipehutu) and the government. The democratisation process culminated in elections in 1993, and Melchior Ndadaye – a Hutu of the Frodebu (Burundian Democratic Front) – became president. When he was killed by members of the Tutsi-dominated army, violence quickly engulfed the country. The conflict raged between 1994 and 2008, and displaced millions as refugees before the last remaining rebel faction (of any notable size) agreed to enter the peace process. By the early 2000s, most rebel groups had entered into negotiations with the government and signed on to the Arusha process, which stipulated wide-ranging reforms of the army and society, and a return to democracy through elections. Elections in 2005 ushered in the National Council for Defence and Democracy – Forces for Defence and Democracy's (CNDD-FDD) Pierre Nkúrunziza as president of a government based on ethnic power-sharing. Efforts to rein in the last remnant Hutu rebels continued. To date, despite a number of political crises and outbreaks of sporadic violence, the peace agreement has endured, and Burundians will vote again in 2010 parliamentary elections

Source: Uppsala Conflict Data Program, 2008

Natural resource factors

Minerals

Non-renewable resources such as minerals are currently not major factors in conflict in Burundi. However, there are some interesting fluctuations in the production of minerals that may require further investigation, as these may well be linked to conflicts elsewhere in the Great Lakes region. For example, in 2005, gold only made up one percent of Burundi's gross domestic product (GDP), according to the United States (US) Geological Survey, but the registered gold production rose from 483 metric tons in 2002 to 4 314 metric tons in 2006.

Environmental factors

Land

I am going to tell you what I myself see. I am sixty years old. At my time and even now, I see that 90 percent live by agriculture and the land. In my native commune, I realised that we could cultivate on a small land [sic] and harvest much so that we can eat until the next harvest. I can say that I have faced famine after the crisis of 1972. In some provinces some people left their lands and the land has been taken by others and the new occupants do not have the skills to use the land. The land is unproductive. After 1978 people came back, some got their lands back. Men wanted more than one wife to have more children to make up for the lost years. Conflict arose between the many children of one father – the children had to fight over a small piece of land. That is why before 1972 there weren't many land conflicts – after 1993 things became complicated.

… Most of the population live by agriculture. You can even notice it in Bujumbura: you see mainly young people who do not have jobs. This is the case in all the cities over the country. Many of the young people left their areas to come to towns and cities in search for new livelihoods.

(Mbonimpa, 2009)

Burundi has one of the highest population densities in the world, with 6.68 million inhabitants in 2002, projected to grow to 9.2 million by 2015 (*Economist* Intelligence Unit, 2004 cited by ISS, 2005). More than 90% of the population is dependent on subsistence agriculture, and overpopulation places increased pressure on land – a severely limited resource. The exploratory study conducted by ACCORD in 2009 highlighted the importance of land as both a factor of production and a matter of survival. Since agriculture is the only noteworthy form of economic activity and security, subsistence agriculture is critical to family security. Land is usually obtained through means of inheritance, purchase, gift, lease or individual and state expropriations, and competition for access to arable land is high. In the past, this has degenerated into social tensions, and has also been the cause of violence within families and among neighbours wishing to expand their land (Gahama et al., 1999:94).

Various groups own land in Burundi, including:

- *Displaced landowners*: Refugees, internally displaced and urban employment migrants.

- *Poor peasants:* These people hold small parcels of land, in constant degradation caused by intensive farming. Others rent their land or do other intensive work to gain revenue.

- *Smallholders*: These are medium income-earning people who tend to become peasants because of land fragmentation resulting from repeated subdivision.

- *Medium owners*: These are relatively well-off Burundians, who enjoy better access to land resources.

- *Elites*: These are wealthy Burundians with access to, and control over, both land and land development resources. (Oketch and Polzer: 2002:127).

Apart from the value of land in subsistence and small-scale agricultural production, it is also a crucial element of stability, identity and belonging in Burundi. Burundians want to live on the land that belonged to their forefathers, and interviews with individuals noted that this can, and indeed has been, a contentious matter when internally displaced persons (IDPs) and refugees return to their communities and find that their land has been occupied or utilised by others. Further tensions are created when the Burundian government has to move groups of people from a piece of land in an attempt to implement development policies. Generally, those interviewed report a mistrust towards the government among the population, and say that some Burundians perceive land allocation processes to be corrupt and in favour of a small ruling elite. Finally, there are reports of inter- and intra-family feuds

Consolate Niyonkuru farms her piece of land in Kabezi 20km from Bujumbura. After fleeing the recent fighting between the army and rebels in Kabezi, Niyonkuru returned home and resumed work on her plot of land.

over land. Those interviewed say that, due to the high social value placed on land, Burundians who lose their land are perceived as holding lower social status than those who have retained their land, or indeed increased their land ownership.

Despite the high intrinsic value that land holds, survival from subsistence agriculture alone is becoming increasingly less viable in Burundi for a number of reasons. Oketch and Polzer argue that land remains the principal capital for most households and so increases competition for land. Increased subdivision of land between sons also has decreased the economies of scale accruing from larger fields. This has led to the overuse and degradation of land, reduced productivity and increases in food prices due to scarcity. People are also migrating to vulnerable, but more fertile and uninhabited areas, causing further erosion on the hillsides. (Oketch and Polzer, 2002:122). As a result, urban migration – in particular to the capital, Bujumbura – is on the rise. Individuals and family groups often have to part from their land in the rural areas.

At present, and in response to increasing population pressure and land scarcity, debate within the East African Community (EAC) is ongoing regarding the possible allocation of land to Burundian (and Rwandan and Ugandan) agriculturalists in Tanzania or in eastern and central DRC (Gasana 2009). Tanzania has already granted citizenship to some 3 600 out of 160 000 Burundian refugees who had applied for citizenship after the cycle of conflicts that occurred in Burundi during the last four decades (ACCORD Burundi Office, 2009).

Land tenure[1]

Land tenure is regulated by both customary and modern systems, often working in parallel, or in hybrid. While the 1986 Land Tenure Code requires that all land, and land transactions, be registered with the state, the government lacks the resources to implement the Land Tenure Code fully. It was reported in 2002 that customary tenure regimes were still very influential in rural areas, and land holdings remained largely unregistered (Oketch and Polzer, 2002:133). In the past, without secure access to land, peasant Hutus and poor Tutsis gained usufruct land rights from land owning classes. Arguably, land tenure has changed little, and land allocation and rights still favour powerful actors and groups, to the detriment of the majority. Rights are few for most Hutu, for poor Tutsi, as well as for the minority Twa (Oketch and Polzer, 2002:122).

The evolution of legal land tenure over time has had a significant impact on the complexity of land disputes, claims to land and their treatment in court cases (Ntampaka, 2006:12f). The application and overlap of inadequate laws – traditional and written – often lead to unclear judgements in land disputes (Van Leeuwen and Haartsen, 2005:4 cited in Ntampaka, 2006:13). The aim of two laws passed in 1976 was to encourage refugees to return and reclaim their land and property. In reality, when cases went to court, these led to land often being divided between claimants, amounting to a partial legalisation of land occupation (ICG, 2003a:45; Van Leeuwen, 2007:3, 9; Van Leeuwen, 2009). State-led development projects in the 1980s also led to the further expropriation of land (Van Leeuwen, 2007:8-9). One important and highly contested legal act was the 1986 Land Code. This Code required all land to be registered with the state, which was granted the right to intervene and make judgments on land issues – even those concerning private property (Kamungi, 2004:2). It also stated that, irrespective of the conditions under which the land was taken, occupiers of land and property for 30 years or more were entitled to legal ownership. Thus, returnees who had left the country due to massacres during the 1960s and 1970s currently have difficulties reclaiming their land (ICG, 2003a:7f; Van Leeuwen, 2007:5). In 2000, the Arusha Agreement noted the role that land and property issues played in the conflict, and highlighted the importance of addressing these issues for conflict resolution (Jooma, 2005:8). Protocol IV, Article 8 of the Arusha Agreement emphasises that all refugees and victims should be granted the right to recuperate their land and property and, in cases where this is impossible, receive appropriate and fair compensation and indemnification (Arusha Agreement, 2000; Van Leeuwen, 2007:4; CPCP, 2008:2). This includes the possibility of the distribution of state-owned land to returnees and victims. The *Commission Nationale de Réhabilitation des Sinistrés* (National Commission of Rehabilitation of Victims of War) (CNRS) was established in 2003 under Article 3 of Protocol IV of the Arusha Accord. In order to facilitate land redistribution to returnees and victims, a sub-commission was to be established within the CNRS to examine land issues and disputes and possibilities of redistribution of land (Jooma, 2005: 8).

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1   This and the following section on land tenure was drawn from an unpublished ACCORD working paper, Mediating land disputes in Burundi (Bunte and Monnier, 2010).

The state and land

Inter-related and overlapping mandates and limited funding complicate the management of land in Burundi (Ntampaka, 2006:6). Responsible ministries are the *Ministère de l'Aménagement du Territoire et de l'Environnement* (Ministry for the Management of the Territory and Environment), the *Ministère des Travaux Publics et de l'Equipement* (Ministry for Public Works), the *Ministère de la Solidarité Nationale, des Droits de la Personne Humaine et du Genre* (Ministry of National Solidarity, Human and Gender Rights) and the *Ministère de la Justice* (Ministry of Justice) (Ntampaka, 2006:6). In 1994, the Ministry of Reintegration and Resettlement of Displaced and Repatriated Refugees (MRRDR) was established, with particular responsibility for "humanitarian assistance, voluntary return, resettlement and reintegration" (Jooma, 2005:3). The distribution of competencies and responsibilities between the MRRDR and the CNRS are unclear. The latter is supposed to be independent of the government, focusing on IDPs and refugees – including the distribution of land, their sustainable repatriation and reintegration – as well as particular support for vulnerable persons (ICG, 2003b:1; Jooma, 2005:3f). Additionally, the *Commission Nationale des Terres et Autres Biens* (National Commission on Land and Other Properties) (CNTB), under the auspices of the vice president, is responsible for dealing with land disputes in relation to returning refugees (CPCP, 2008:2). The exploratory study found that the effectiveness of these commissions should be considered and bolstered, particularly since there are reports that their inter-related or overlapping mandates are problematic and that they have not been allocated sufficient resources to carry out their mandates (see also Van Leeuwen, 2007:4).

In addition to complex judicial regulations, the reach of the justice system is limited because of institutional weaknesses, distances to rural areas, small budgets and questionable practices. Few Burundians are aware of their legal property rights, making it difficult for them to assess the legitimacy of their claims (Hilhorst, 2008:2). The length of time that refugees and IDPs have been away from their property affects the occupation of their land rights. In particular, there are differences between refugees from 1993, who often can reclaim and regain their land (even though they meet other substantial problems), and those who left in 1972 and whose land and property has been occupied or redistributed systematically over more than three decades (Kamungi et al., 2004:1-4). The status of the land at the time of return, whether it is considered private or state-owned and whether it is registered or not, may also significantly influence how the issue is dealt with (Hilhorst, 2008:2). In particular, the registration of land through *Certificates de Possession* may prove to have an impact, notably on those without land titles who risk being dispossessed (Jooma, 2005:9). Further, even though this factor is disputed (Van Leeuwen, 2007:4) in certain instances, ethnic dimensions may play a role where judgments are biased. Finally, the status and gender of the people involved in land disputes influence the process and the likelihood of a successful outcome. Traditionally, women in their various roles – as wives, widows, daughters or sisters – are particularly vulnerable, due to their very limited rights of land heritage. There are a number of other vulnerable groups such as orphans, children of former or second wives or landless people (including members of the Twa group), who face particular difficulty in realising their legal rights with respect to land (Van Leeuwen, 2007:15).

Democratic Republic of the Congo (DRC)

Since independence in 1960, the DRC has been torn apart by intrastate conflicts on five occasions – the first after independence, when two mineral-rich provinces of the Congo – Katanga and South Kasai – declared themselves sovereign. Army general Mobutu seized power in 1965, hailing the start of a 31.5-year rule, marked by extensive and endemic corruption, economic ruin, rebellions and intermittent wars. Mobutu crushed political dissent, and human rights abuses were widespread; he also amassed a vast personal fortune in the process. Nevertheless, his regime was backed until the late 1980s by Western nations as a bulwark against communist elements in Central Africa.

In 1996-1997, an armed rebellion, led by Laurent Kabila and supported by Rwanda and Uganda, managed to topple Mobutu in May 1997. In 1998, fighting ensued between the Congolese army and President Kabila's foreign backers, when foreign troops refused to leave the DRC. Kabila, backed by Namibia, Zimbabwe and Angola, accused the Rwandans and Ugandans of exploiting the DRC's natural resource wealth. During the course of the conflict, Rwandan and Ugandan forces fell out with each other, resulting in an all-out war between various factions. After a failure to implement the provisions of the 1999 Lusaka Accord fully, Kabila was assassinated in 2001 and was succeeded by his son, Joseph Kabila. On 2 April 2003, after a protracted Inter-Congolese Dialogue, an agreement was signed between all parties and the Transitional National Government (TNG) was formed. Elections were held in October 2006 and judged by the UN to be free and fair.

In recent years, non-state conflicts and one-sided violence have been frequent, especially in the eastern Kivu regions. In August 2008, intense fighting erupted between government forces and the National Congress for the Defense of the People (CNDP), then led by the Congolese Army general Laurent Nkunda, in the southern part of North Kivu province. By January 2009, after a de facto internal coup, Nkunda was overthrown, and CNDP forces agreed to integrate into the DRC military, followed by some other rebel groups. In the same month, on the invitation of the DRC, Rwandan troops entered the DRC to eliminate the Democratic Forces for the Liberation of Rwanda (FDLR). Nkunda fled into Rwanda, was arrested and remains in custody as of August 2009. Between 20 January and the end of February 2009, a joint Rwandan-Congolese-CNDP-PARECO coalition of forces engaged the FDLR and managed to convince several hundred FDLR members to return to Rwanda with their families. After the withdrawal of Rwanda's forces on 25 February 2009, the Congolese Government signed peace agreements with the CNDP and the armed groups in North and South Kivu. Subsequently, with MONUC's support, the *Forces Armées de la République Démocratique du Congo* (Armed Forces of the Democratic Republic of the Congo) (FARDC) launched Operation Kimia II, a military operation against the FDLR in North and South Kivu, resulting in low-intensity fighting.

Sources: Uppsala Conflict Data Program, 2008; US Department of State, 2009; ISS, 2009; FCO, 2008.
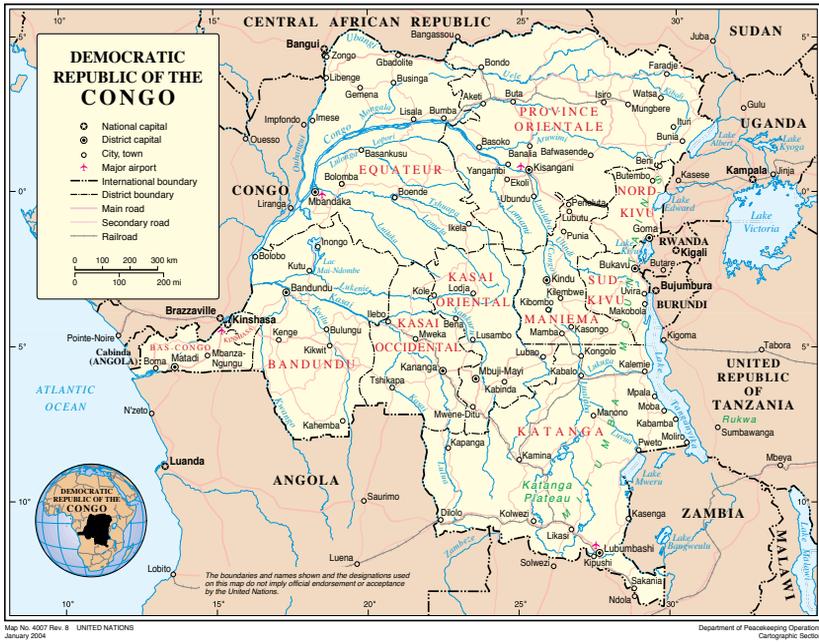
Natural resource factors

Minerals and metals

One of the greatest concentrations of precious minerals and metals on earth can be found in the eastern DRC. Congolese minerals have fuelled the developed world's industrialisation – the country's mines have provided the West with diamonds, metals and minerals. Niobium, tungsten, pyrochlore, coltan and germanium are some of the minerals used in the manufacture of a range of hi-tech devices, from mobile phones and laptops to spaceships. These minerals are valuable assets that many actors have been vying for in a protracted civil conflict for over a decade. For example, the extraction of coltan in North and South Kivu involves an intricate network of individual extractors and their superiors, armed movements and/or authorities, regional governments, regional and international air transporters and MNCs. The mining activities of these individuals and groups have also led to severe environmental degradation (Moyroud and Katunga, 2002:159–185; Porto, 2002:30).

Yet, the DRC is one of the poorest countries in the world, with an average per capita annual income of about US$ 184 in 2008. Agriculture accounted for 42.5% of GDP in 2007, although low commercial agricultural production or processing persists. Many producers are subsistence farmers. Industry accounted for 28.4%, of which 6.4% was from manufacturing, and services accounted for 29.1% of GDP in 2007. The DRC's formal economy is dominated, however, by the mining sector, with minerals the main export, representing the single largest source for foreign direct investment. Gecamines, a colossal

state-owned mining company, controls copper and cobalt interests, but production has declined because of corruption, civil unrest, global market fluctuations and failure to reinvest. Diamonds account for about 10% of export income – around US$ 875 million in 2008 (US Department of State, 2009). All diamond production in the DRC is currently artisanal and falls under the informal economy. Private and business interests in the formal sector often incur high costs under arbitrarily enforced laws. In 2002, only 230 000 Congolese in private enterprise – out of a population of about 56 million – benefited from social security. In recent years, the government has approved a new investment code, a new mining code and constituted a commercial court. One objective of these new regulations is to attract investment by promising fair and transparent practices to private business (US Department of State, 2009).

The role of external actors

> The current situation in Kivu. You sign a contract with Kinshasa, you pay for it. But the thing is that Kinshasa cannot access those resources either because of other government officials or people on the ground like militias, rebels, warlords or regional actors. It is a game – it is easier for a company to sign a contract with the rebels – minimising the costs, maximising the gains... Like in the past when Kinshasa didn't even care about Kivu, because it has always been more insurgents[sic]. There is still no road from Kivu to Kinshasa … And the geography – Kivu can easier move in the direction of Uganda and Burundi … .[2]

The conflict in the DRC is associated with an endless scramble for power and resources between internal and external actors. While its resource wealth should easily support development and the proper functioning of the state apparatus, neither the population nor the state benefit from the country's natural resource endowments. In the eastern DRC town of Kamituga, for example, an immense wealth of tin ore, coltan and other precious metals can be found. Here, resource wealth is a "resource curse" that has become synonymous with conflict and underdevelopment, because of constant conflicts between powerful individuals and groups who enrich themselves at the expense of the citizens and the state. This phenomenon has plagued the country for decades. In the past, factions within the national armed forces of the DRC have been known to abuse and exploit the civilian population in an effort to gain access to – and control over – the trade in natural resources, rather than protecting and upholding state and national interests (Braeckman, 2004:13–14; Kampf, 2007:111; Koko, 2007:35). A UN Panel of Experts (UN, 2001b:9–10; UN, 2006:7) found that some government actors work with local corporations to embezzle profits from diamond production, or to remove diamonds from production lines and sell these privately on the black market. Diamonds – in particular from northern Kisangani – provided a stable source of revenue for the Rwandan Patriotic Army (RPA) and Uganda's People Defence Force (UPDF), through which they continued to contribute to conflict in the region (UN, 2001b:11). The United Nations Organization Mission in the DRC (MONUC) reports that key actors driving the militarised economy in the Kivus include mining concession holders,

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2   The individual interviewed prefers to remain anonymous.

Gallo Images / AFP

Mine workers hold copper in their hands at Ruashi mine about 20 kilometers outside Lubumbashi, DRC.

transport companies, banks, *comptoirs* (syndicates), trading companies of raw materials and economic bodies, including customs (MONUC, 2009).

MNCs play a role in sustaining the conflict in the eastern DRC through supporting the extraction of, and trade in, mineral wealth. In the late 1980s, the rich resources of the DRC attracted the attention of approximately 20 large international corporations from South Africa, France, Canada, the US and Australia. These corporations actively competed for control of state-owned copper, cobalt, gold, diamond and cassiterite sources – but the Mobutu regime opposed the privatisation of natural resources. Since 1994, mining rights have been granted by various political regimes.

In 2009, the Mining Registry Office (CAMI) issued 138 mining rights to 36 mining companies or individuals in North Kivu. In South Kivu, 151 mining rights were issued, held by 48 mining companies. Apart from economic and legal risks, and any benefits they may have from the conflict's toll on the state's oversight and regulation, mining companies have also had to deal with the consequences of conflict (MONUC, 2009). Indeed, in 2006, the UN Panel of Experts reported receiving full support from governments whose private actors are domiciled in the DRC, the private companies themselves and from governments who expressed an interest in establishing a natural resource control system. Most major companies and their leading industry associations participated readily in the consultations, often providing extensive answers and, in many cases, offering continued support to any further efforts the UN Security Council or the group might undertake. There was also wide support for stronger governance measures, transparency and traceability mechanisms, and even sanctions upon those who illegally exploit or benefit from the illegal exploitation of resources (UN 2006:10).

While natural resource wealth has fuelled conflict among factions within the DRC, some neighbouring actors have also been eager to obtain a share of the country's vast resources. Since the 1998 conflict commenced in the DRC, competition between neighbouring states over the extraction of mineral wealth quickly served to fuel the conflict in the eastern DRC and broader instability in the Great Lakes region. The 2001 UN Panel of Experts report on the subject suggested that the governments of Rwanda and Tanzania had been involved in illegal coltan trade in the eastern DRC. Burundi was also named in the report as a destination or transit point for gold extracted in the DRC. Gold, it was reported, was smuggled by way of Bukavu, Fizi Baraka and Uvira through the porous borders of Burundi. In Bujumbura, gold dealers from Senegal, Pakistan and Greece are reported to purchase the smuggled gold, which is then personally transported to Europe and other regions (UN, 2001b:7, 8). It has also been suggested that military officers and politicians in some states in the region have exploited the conflict in the eastern DRC to profit personally from the country's mineral wealth (Alao and Olonisakin, 2000:31–32). The UN Panel of Experts report further highlights gold mining activities carried out by the Ugandan army in the Kivus, in Maniema and in Ituri (UN, 2001b:8). The sharp rise in Ugandan gold exports since the conflict – which curiously exceeded national production levels – provided further speculation that the Ugandan armed forces illegally transported gold to Kampala, from where it was exported. Apart from neighbouring governments, the *Alliance des Forces Démocratiques pour la*

A young boy digs for copper in Ruashi, DRC.

Libération du Congo (Alliance of Democratic Forces for the Liberation of Congo) (AFDL) was identified as appropriating and exploiting the DRC's resources, apart from attempting to overthrow the government (Braeckman, 2004:14). The Rwandese armed forces, it is reported, formed partnerships with Congolese operators to run the coltan trade, and handlers were relocated from towns such as Bukavu and Goma to towns on the border with Rwanda, such as Cyangugu and Gsenyi (UN, 2001b:6).

Environmental factors

Forests and timber

The DRC is endowed with some of the finest hardwoods in the world, which is an important export. In 2001, the UN reported that before the 1998 war timber was transported via the Congo River for export in Kinshasa. Since the war and the resultant instability, logging companies started using the ports of Mombasa and Dar es Salaam to channel exports. Evidence also indicates that timber was transported through Uganda before heading for Kenya or Tanzania, but the governments of both Tanzania and Uganda denied this. (UN, 2001b:11–12).

Forests and timber also provide livelihood opportunities to communities through ecotourism, conservation and through forestry products such as cosmetics or medicines. Unsustainable logging that leads to the degradation of forestry resources will put these livelihoods at risk, cause soil erosion, flood risk and lead to competition between groups. The DRC government has started to reform the forestry sector by reviewing logging concessions issued in the 1990s. Between 2005 and 2007, 163 of 185 reviewed concessions

were rescinded, covering 25.5 million hectares (Debroux et al., 2007). Although a new forest code was adopted in 2002, implementation has been slow. Information on quality, usage and ecosystems in the DRC remain scarce, and there is a lack of government oversight of the sector, leading to ongoing abuses, fraud and illegal exploitation (UNEP, 2009).

Land

It is widely recognised that, in the eastern part of the DRC, land and other natural resource factors contribute to conflict. Interviews with three Congolese NGOs and other international organisations drew out ethnic dimensions as contributory factors to the instability in the region. More importantly, for the focus of this report, the study highlighted the need for greater consideration of the role that land can play in conflict. The exploratory study pointed to multiple interests in land. Land can be a means to satisfy ambitious economic interests, such as mining. It can also form the basis of subsistence and survival, such as through farming activities.

Ownership of land is intertwined with identity-based conflict in the eastern DRC, involving the Banyamulenge in South Kivu province and Congolese with Rwandan origins in North Kivu (Van Acker, 2005:79–80; Huggins, 2004). The Kivus and the province of Ituri have been troubled by conflict for decades. Armed groups and peasant militia, until very recently, held sway with few constraints from the government or MONUC – the largest peace support operation in the world. The conflicts engulfed stretches along the eastern DRC's border with Uganda, Rwanda and Burundi for almost 500 km, and form part of a wider regional conflict system in the Great Lakes region. A combination of issues – involving the contestation for economic space, livelihood, prestige and authority – date back to pre-colonial, colonial and post-colonial times, and have continued in contemporary DRC. These tensions, exacerbated by external actors and competition for land and natural resources, continue to drive conflict (Van Acker, 2005:79–80; Huggins, 2004). The scope of the exploratory study included a brief review of the political, socio-economic and cultural factors of eastern DRC's so-called identity-based conflicts. However, these questions have been addressed by scholars and experts elsewhere. This report seeks to focus on the relationship of natural resources and environmental factors in these conflict dynamics.

In the 1990s, regional conflict, resultant displacement and influxes of refugees shifted land ownership and control in the Kivus. Further, according to Autessere (2008), control over land has been a source of disputes in rural areas historically. For many – as in Burundi – land is the key to survival and to making a living. For many more, it is "both a primary method of gaining the social capital needed to integrate local structures and a means of securing natural resources" (Autesserre, 2008:94). In the territories of Masisi and Walikale, in North Kivu, different groups struggle over land claims. Antagonism related to land abound among other communities, such as the Hundes, the Nandes and the Nyangas. The greatest source of conflict is against Congolese – who are claimed to be, or are identified as being, of "Rwandan" origin (Autesserre, 2008). Grievance thus fuels conflict between these groups (Autesserre, 2008). Yet, according to Vlassenroot (2002:501), the conflict in South Kivu has to be "explained as the outcome of an intensified process of renegotiating the political,

social and *economic space*". Ethnically-motivated action and violence may also be a result of socio-economic and political exclusion. Not only are identity-based conflicts deeply entrenched with issues of grievance and the right to livelihoods, the land itself is also a major economic resource for the extraction of natural resources, such as minerals and metals (Vlassenroot, 2002).

A weak state, insecurity and conflict

The exploratory study highlighted how the exploitation of land by armed groups, a fragile state and corrupt government officials in Kivu help to sustain conflict dynamics. Armed groups continue to ignore private property rights and land belonging to peasants, and local populations have been known to be forced into labour – usually in illegal mining operations. The government in Kinshasa is working, through decentralisation, to improve its capacity to establish a degree of governance. The researchers working on the exploratory study understood this to be an attempt to re-establish mechanisms of governance, especially in the east of the country, which is essentially isolated from the capital city, situated in the west. As part of government policy, former members of armed groups are incorporated into the national armed forces through a process of *brassage*, and the land illegally taken by armed groups is taken into control by the government. While these positive steps are being taken, there is an impression on the ground that corrupt government officials may be extracting the region's mineral resources, illegally exploiting land and oppressing peasants in the same

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More than 21 million hectares of rainforest in DRC are allocated to the logging industry, an area nearly seven times the size of Belgium.

manner as the armed groups (interview, 2009[3]). Other sources include the view that the government in Kinshasa has increasingly displayed the political will to address the situation in the east through political and economic means, yet government efforts require additional capacity and resources (Kasongo, 2009).

According to Huggins (2004), a challenge to reconciliation in the future and to the prevention of further conflict, will be to address the land issue in terms of the changes in land since the violence began. Thousands of people have been displaced, and their return/relocation during peacebuilding efforts will have to be managed carefully. Local dialogue, negotiation and mediation will have to be prioritised. This will have to be done in tandem with "a review of political representation of 'non-autochthonous groups'; land tenure systems (civil and customary) and studies of the way that systemic problems have interacted with historical specifics and local power-struggles". Local peace efforts can only be successful if communities have the capacity and freedom to critique existing legal and administrative structures and actively advocate for their needs (Huggins, 2004:3).

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3   The individual interviewed prefers to remain anonymous

Sudan

Map No. 3707 Rev. 10   UNITED NATIONS
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Department of Peacekeeping Operations
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Sudan, the largest country on the African continent, became independent in 1956. Since then, it has seen conflict for all but 11 years, and has been surrounded by conflict in its neighbouring countries. Sudan is a very heterogeneous country when it comes to ethnicity, language and religion. The north is mainly "Arab" and Muslim, while the south is primarily "African" and Christian/animist. However, this dichotomy is very simplistic and the reality is much more complicated, with a large variety of ethnic groups both in the north and in the south. The origins of the conflict lay largely with skewed colonial policy that concentrated economic, political and administrative development in the north. The conflict is rooted mainly in cultural and religious issues and competition for political dominance, later perpetuated by oil resources.

The first civil war lasted until 1972, with the signing of the Addis Ababa Agreement, which guaranteed a Southern regional government with executive powers and a regional assembly in Juba. The second civil war – which ended with the signing of the Comprehensive Peace Agreement (CPA) in 2005 – broke out in 1983 after the government introduced Sharia law, imposing it on all Sudanese. It also redrew provisional boundaries, effectively cutting off oil-rich areas and the fertile lands of the Upper Nile from the South (ISS, 2009). More than two million people died and double that were uprooted in the wars. Over half a million people fled the country as refugees (UNMIS, 2007; US Department of State, 2009). In addition to intrastate conflicts, Sudan has suffered from many non-state conflicts as well as large-scale, one-sided violence, conducted primarily by those on the side of the government. The government of Sudan has a practice of arming militias as a response to armed rebellion. These militias are known for their gross violations of human rights – the most infamous being the feared Janjaweed militia of Darfur.

Since 2003, hundreds of thousands of people have died in Darfur, two million were internally displaced and 250 000 fled to Chad. Ceasefire and other agreements signed in the following years were unsuccessful. Talks in Doha, Qatar, between the government of Sudan and several Darfuri rebel groups – most notably the Justice and Equality Movement (JEM), began in early 2009. The Doha talks have, thus far, produced an agreement of goodwill and confidence-building between JEM and the government. In Addis Ababa in August 2009, four of the Darfuri rebel groups reached agreement to unify politically, following a week-long forum arranged by the US. In a separate development, on 4 March 2009, the International Criminal Court (ICC) issued an arrest warrant for President Omar al-Bashir, for crimes against humanity and war crimes.

Sources: Uppsala Conflict Data Program, 2008; ISS, 2009; US Department of State, 2009.

Natural resource factors

Oil and natural gas

The main non-renewable resource factors in Sudan are oil and natural gas. The presence of these natural resources has led to the involvement of a range of regional and international actors, at various levels. Consultations undertaken as part of the exploratory study indicated that these resources play a less direct role in the daily lives of Sudanese in South Sudan than do environmental factors such as land. However, addressing natural resource factors such as oil and natural gas in Darfur and in South Sudan is important, because of their central role in conflict in both regions.

Although the North-South conflict began well before oil reserves were discovered in central Sudan, competition for ownership and shares in the country's oil and gas

Members of Australia's Sudanese community take to the streets on May 27, 2008 in protest against what they say is a lack of effort by the United Nations to stop the fighting in the Abyei region, the oil rich point of contention between northern and southern Sudan.

reserves was a driving force for the continuation of conflict and were key issues in the 2005 negotiations. Indeed, from 1999, the Sudanese government spent 70% of oil revenues on "defence", while oil pipelines and fields were regarded as legitimate military targets by the Sudanese People's Liberation Army (SPLA) (New York Times, 2006; Christian Aid, 2001).

Consultations pointed to wealth division in the oil sector as a source of political tension in Sudan, because of a lack of transparency. The 2005 Comprehensive Peace Agreement (CPA) specifies that oil revenues from South Sudan should be shared between Khartoum (in the North) and the new Southern government. This wealth-sharing agreement ends in 2011, at the same time as a referendum on possible Southern independence will be held. A recent Global Witness (2009) report highlights a lack of transparency in sharing oil revenues between North and South, suggesting that this could lead to renewed conflict. Oil comprises 98% of the Southern government's income. With most functioning oil wells situated in the South, the Southern government received over US$ 6.5 billion in revenues since 2005. While the Khartoum government publishes figures on oil revenue, it is not possible for the Southern government to verify those figures. In fact, investigations show, inter alia, that oil figures published by the Khartoum government do not match those from other sources. Discrepancies of under-reporting are of the order of 9% to 26%, while the pricing of the oil in international markets has raised suspicions. Moreover, it is reported that the Khartoum government deducts a 3% management fee and a 3% to 8% pipeline fee from revenues shared with the South, and that it owes the Southern government US$ 180 million as of March 2009.

Consultations undertaken by the United Nations Environment Programme (UNEP) in central and southern Sudan also revealed grievance (2007). In addition to conflict over ownership and the distribution of wealth revenues, people living near oilfields are subjected to all the negative social and environmental effects of the industry. According to UNEP (2007:78), these forms of dissatisfaction among local populations must be addressed to avoid environmental justice conflicts at the local level, as is the case in Nigeria's oil-rich Niger Delta region.

Environmental factors

Forests and timber

> With higher population density and growing demand for resources, recurring drought under conditions of near anarchy has fostered violent competition between agriculturalists, nomads and pastoralists in a region where some 75 percent of the population are directly dependent on natural resources for their livelihoods.

> (UNEP, 2009:9)

Gallo Images / AFP

An injured government militia prisoner drinks from a river with his arms tied after attempting to escape from the SPLA (Sudanese People's Liberation Army).

In Sudan – particularly in the dry regions – deforestation has resulted in the permanent loss of resources, including seasonal grazing for pastoralists and the natural soil recovery that farmers need. Deforestation rates in Sudan are estimated at an average of 1.87% per annum (UNEP, 2007:80–88). Timber resources in South Sudan are currently being affected by the burning of trees to clear land for agriculture and to promote growth of grass for pastoralists (UNEP, 2007:216). However, consultations with civil society representatives active in South Sudan revealed that deforestation due to the use of timber and the cutting down of forests is not a significant concern. Indeed, southern Sudan still retains the majority of its forest cover (UNEP, 2007:198), but will require sustainable resource management if this is to continue.

However, most of the timber resources in northern, eastern and central Sudan are in peril. In Darfur, overgrazing and deforestation – because of the ongoing drought, conflict, influx of refugees and political marginalisation – have caused reduced vegetation cover, leading to the loss of fertile land. Indeed, charcoal may have become part of the war economy in Darfur. Yet, the timber issue in Sudan is still considered by experts as an environmental impact issue, rather than a driver of conflict (UNEP, 2007:79).

Water and fisheries

… People are looking for land that has water. We go and talk to communities and encourage them not to move. They should ask organisations for help and these organisations will contact us [PARAD] to go and drill for water.

Last year we were in the South and the people were fighting [in a dispute]. We called PACT and told them that the people have taken our machinery and our cars and we cannot move. All they want is a borehole. And we, we cannot just drill – a borehole has to be funded by somebody (this took place in Dhouk [the incident]).

(Antony, 2009)

Traditional fishing in Juba with spears has been banned. The new commissioner has come in and made some rules on fishing and ever since there has been a problem. We see the government going 'don't' 'don't' 'don't' 'don't'. As people will continue coming into the urban areas from the rural areas, there will be a conflict for resources. That is why the government has started to control fishing … but these people have no alternatives. Maybe this is their only source of livelihood and what they depend on … So, if you think why they were stopped – they have been using very crude ways of fishing because they just spear the fish … and what the people do is they just go to another area where there are fish. In a way, we should be provided an alternative when we are being told to stop.

(Omondi, 2009)

Discussions during the course of the exploratory study pointed to water and fisheries and their relationship to conflict vulnerabilities in South Sudan, particularly in areas where water is scarce or over-utilised. If the successful management and sustainable use of these resources is not encouraged, access to and the use of water resources may become a flashpoint of violent contestation. In Bor, a town on the border of Jonglei state, the local population fishing in the Nile River use rudimentary and unregulated practices. This, coupled with other factors, has led to the degradation and destruction of the environment. The government has started to implement policies to prevent people from fishing in certain areas of the Nile (Omondi, 2009). This has, however, resulted in fishermen moving to other areas and coming into conflict with other local populations who also fish. The degradation of the river can cause fish stocks to migrate from one part of the river to another, which also results in conflict between fishermen, as they follow the fish and may intrude into the areas of other groups. Yet, one civil society representative who met with ACCORD did not appear to be concerned about unsustainable fishing in the Nile, noting there was enough fish and that people were being taught to fish sustainably, minimising any future unsustainable practices (Antony, 2009).

According to UNEP (2007:79), water was an important contributing factor to the civil war in South Sudan in 1983, and the significance of the water issue has not declined over time. However, a number of "institutional safeguards" are likely to keep conflict

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Touloum refugee camp, Chad, 30 June 2007: A woman leaves the line with a container of water - happy to have survived the scrum around the tap. Water is pumped twice a day and the water usually runs out before all are served. 22,718 refugees from Darfur live in this camp near the town of Iriba.

over water rights from breaking out again at state and federal level. Water management issues are now attaining increased attention in South Sudan, and receive significant attention from the government and international partners. As mentioned, one civil society organisation interviewed (PARAD) and others work directly to provide water to pastoralists and peasants in order to reduce conflicts.

Land

A historical factor in conflicts is the effect that colonial practices have had on social structures. British colonial policy granted settled peasants in Sudan large pieces of land. In allocating land ownership, peasants were recognised as natives, while nomads were neither granted homelands nor were they acknowledged as natives or citizens in Sudan or elsewhere. This policy soon served to fuel grievances, as homeland administrations favoured "native" over "non-native" tribes, and thereby favoured settled agriculturalists over nomadic pastoralists (Mamdani, 2009:18). The exploratory study noted that differences between pastoralists and agriculturalists continue to fuel conflict in parts of South Sudan, although notions of citizenry no longer adhere to the colonial practices (Kipkore, 2009).

Conflict itself also essentially destroyed traditional regulatory mechanisms in the Nuba Mountains, for example. There, under traditional systems, settled farmers and pastoralists coexisted peacefully, ensuring that pastoral nomadic populations were fully integrated into the political economy. Political marginalisation and economic exploitation in Nuba, however, have caused relationships in the region to be "characterized by conflict rather than complementarity". The last decade and a half of war has further undermined the viability of previous regulatory agreements (Pantuliano, 2007). The destruction of social norms due to conflict has also led to more destructive and militarised cattle raids, marked by displacement, killings and a loss of livelihoods. The regulatory function of local institutions over water and pasture were also weakened by conflict, and this led to the overexploitation of natural resources and had a negative impact on pastoralists' livelihoods (Catley et al., 2007). Some interviewees noted that parts of Sudan are well endowed with resources and do not suffer from drought, and so the sense is that it is unlikely that pastoral conflicts at present contribute to greater instability nationally, although it might be the case in the future (Muchai, 2009).

While it is generally recognised that property rights are – and have been based on – customary rights and value systems, land tenure is a source of contention. The interpretation of what is customary varies. In 1925, land registration was formalised and, in 1970, the Unregistered Land Act was enacted, which placed all unregistered land as of 1970 under the ownership of the government. According to Goldsmith et al. (2002:200), this included tribal and communal lands, although the Act maintains that customary rights to land can be invoked under various legal provisions. The reference to legal provisions is argued to be an inherent contradiction within the Act, especially for communities in Sudan who subscribe to customary laws and value systems.

Land and environmental degradation

Demographic and environmental factors underpin the social and political instability in Sudan. Decreased rainfall in pastoral areas, environmental degradation of agricultural areas around the centre and south, and "technological-economic stagnation" combine to intensify ethnic conflicts over subsistence resources in both the south and the north (Goldsmith et al., 2002:197). In the north, communities – often in ethnic dyads – have been in conflict and competition for land since the Sahel famine of 1974-1976. It is estimated that the Sahara Desert has expanded by 100 km in the last 40 years. This process of desertification reached a climax in the 1980s, when tribes from the northern parts of Darfur moved southwards in search of more fertile lands. Conflict over land resulted between landowners and the migrants; hardly surprising, as both parties subsist from the land (Mamdani, 2009:18). Degradation of rangeland and rain-fed agricultural land in the drier parts of Sudan also play some role in conflict between herdsmen and peasant tribes in the region (UNEP, 2007:79, 80–88). In the dry land regions of South Sudan, the absence of environmental management policies are causing vulnerabilities that may lead to a large-scale ecological breakdown in the medium to long term (Goldsmith et al., 2002) – this has already been witnessed in Darfur (UNEP, 2007:190). Those interviewed and other studies show that ecological breakdown has already caused a degree of food insecurity and famine in some areas (Goldsmith et al., 2002).

Civil society representatives active in South Sudan indicate that land is not yet such a problem in the southern parts of the country, but has been a cause of increasing conflict in areas where arable land borders on the drier parts of the country and region (Antony, 2009; Omondi, 2009). Nevertheless, a lack of development of other non-primary resources to grow the economy, combined with unsustainable practices, has "created a pseudo-state of scarcity within an abundant resource base. Its (sic) not that there is not enough – its (sic) that people do not have enough" (Goldsmith et al., 2002:199). Perverse and inappropriate development policies – remnants of colonialism – have exacerbated resource scarcity. Investment in development is lacking, with funds rather directed at security (Goldsmith et al., 2002:199). This is especially pertinent as, while industrial production (which includes oil) only accounts for a quarter of GDP, agriculture forms a significant sector of the national GDP, engaging nearly 80% of the workforce. Investment has been made over the years to promote agricultural development, but with little consideration for environmental sustainability.

Some civil society groups who work in Sudan noted that forced removals by the government are common, whether in urban, semi-urban or rural areas. When people are removed from land, they are often not provided with viable alternatives, and tend to lose their means of subsistence and existence (Omondi, 2009; Gideon, 2009). Moving groups to new areas often causes environmental degradation in those areas.

These issues appear to intensify grievances and contribute to the instability of the region.

In the absence of environmental management, large-scale ecological breakdown in the dry land regions of Sudan are considered a "creeping vulnerability" in the medium to long term. This has already occurred, to some extent, in Darfur (UNEP, 2007:190).

> In Sudan, there is desertification that is taking place moving southwards … we thus get hyper-arid areas. They have a lot of cattle/animals and what people then tend to do for security reasons is to crowd in one area. A result of this move is overgrazing, and this very easily leads to deserts. What is happening in Sudan – it has to do with state security. If people had security, they could move around during the dry and rainy seasons – going to the areas that are favourable during the rainy season, and reverting back to their area during the dry season. This will keep the group from staying together on a small patch of land … and causing deforestation.

> (Kipkore, 2009)

Generally, insecurity and inequalities play a key role in the creation of grievances of people at community level, especially when there are no viable alternatives.

In May 2008, the local Sudanese community in Australia appealed to the UN to deploy peacekeeping forces to the Abyei region and that Sudan's President Omar Hassan al-Bashir be held responsible for the killing and displacement of innocent civilians.

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Many Africans are dependent on renewable resources for farming, fishing and animal husbandry – rather than non-renewable resources such as minerals – to make a living.

Concluding observations

This report is a synthesis of ideas, perspectives and issues that emerged from an exploratory study conducted in 2009. The main issues covered focus on natural resources and the environment and conflict in Burundi, the DRC and Sudan. The discussion on these issues was influenced by academic and policy literature, voices on the ground and ACCORD's own reading of this complex problem.

Resource factors: minerals, oil and gas

The exploratory study's assessment of the role, use and management of non-renewable resource factors illustrates the interaction between greed and grievance in conflicts. The presence of non-renewable resources can be accompanied by the involvement of actors at various levels in the extraction and trade of those resources. Non-renewable resources are usually valuable (oil, gas, diamonds, metals, minerals), especially in light of the global demand for energy and the increasing competition for natural resource wealth. It is also possible to approach the greed-grievance relationship through a global lens. Internationally, there is a scramble for non-renewable resources, especially the resource wealth in Africa. The industrialised world needs access to energy resources such as oil and gas, for example, while the industrialising world has the same needs. This leads to competition for the ownership and access to Africa's natural resource wealth, involving a wide array of actors and interests

A woman searches for firewood outside Touloum refugee camp, Chad.

representing MNCs, regional neighbouring states and local actors. The extraction of non-renewable resources also influences environmental degradation. Environmental injustices affect the livelihoods of many people, creating another dimension of resource conflict.

Environmental factors: timber, water, fisheries and land

While this report only touches briefly on timber, water and fisheries, other research shows that the unsustainable use and poor management of these resources creates vulnerabilities or threats to livelihoods. Sustainable resource management, in particular, is critical to preserving livelihoods and preventing local conflicts. Failing which, the struggle for access to resources is likely to intensify, because many Africans are dependent on renewable resources for farming, fishing and animal husbandry – rather than non-renewable resources such as minerals – to make a living. Ordinary civilians, peasants, refugees, returnees or IDPs tend not to have direct access to valuable non-renewable resources, as they are not in positions of power, such as those in government, armed groups or MNCs. They can only take part in the lower extraction and trading hierarchy – for example, by means of manual resource

extraction in mines, or by working for the oil industry. For many, the only alternative to this type of livelihood is to draw on renewable resources from rivers, lakes, forests and hills. Yet, if these livelihoods are not managed sustainably, this can, in turn, lead to degradation of those resources.

In all three case studies, the importance of land in conflicts relates to people's ability to make a living or make a profit. Land scarcity or ambiguous property rights can contribute to grievances and violent conflict. This is particularly the case when alternative livelihoods are absent, and is often exacerbated when communities are armed, such as in Sudan and the DRC. Moreover, when land contains valuable mineral resources, conflicts can arise between local communities and those who seek control over land for resource extraction. Where government structures and legislation are weak, the most powerful political, economic and military actors have an advantage. Population growth and movement, international markets, insecure property rights and legislation, climate change, environmental degradation and a myriad other factors all appear to be variables that need to be tracked in analysing conflicts where land plays a role. Finally, desertification, unsustainable use or drought can bring communities with competing livelihoods into further conflict.

Touloum refugee camp, Chad: Abdu Mohamad Phile, his three wives and 20 children walked three weeks from Darfur into Chad to escape the fighting.

Five main challenges

In reviewing the exploratory study and preparing this report, ACCORD observed five main challenges. The challenges relate first to the problem of natural resources and the environment in complex conflict situations, and second, to the constructive role actors can play in natural resource, environmental and conflict management.

1. **Integrating natural resources and environmental factors in conflict prevention, management and peacebuilding:** Conflict management approaches should increasingly take the environment and natural resources into account when attempting to prevent violent conflict from erupting; negotiating and implementing durable peace agreements; deploying peace support operations; and establishing preventative and post-conflict peacebuilding mechanisms. Yet, integration has been a slow process, particularly since this requires an interdisciplinary and multisectoral approach.

2. **A lack of viable alternatives:** Environmental changes and inequalities in the global economy are not solely responsible for resource exploitation or direct causes of conflict. Rather, it is the lack of alternatives for those reliant on the natural environment for their livelihoods and/or for power and wealth that can contribute to conflict. Limited natural resources that are poorly managed provoke incompatibilities and competition, leading to illicit or conflict-prone scenarios. Illegal mining and land conflicts between agriculturalists and pastoralists are two examples.

3. **Strengthening long-term strategic planning:** The importance of long-term strategic planning on the part of governments, civil society, development partners and the private sector is increasingly prominent in the discourse on the consequences of environmental and climate change. Similarly, the absence of strategic, conflict-sensitive planning that takes into account creeping vulnerabilities and assesses their negative impact on livelihoods undermines conflict management and peacebuilding.

4. **The interdependent role of government and civil society actors in environmental and natural resource governance:** Governments are mandated to oversee the sustainable use and management of resources within their territorial boundaries. Civil society, in turn, has a measure of responsibility for monitoring government intervention, and the management of these same resources. These two actors are vital role players in the equitable management of natural resources, environmental protection and strengthening sustainable livelihoods.

5. **The need to address the role of external actors and resource extraction:** The illegal extraction of resources from neighbouring states contributes to a continuation of conflict on a regional basis. Similarly, MNCs and other non-state actors can benefit from chaotic conflict situations. These actors may gain access to extractable resources because there is a vacuum of state authority. They may avert or subvert systems of state control and taxation – either through direct collusion with state authorities, or by

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The children of fishermen playing in Lake Tanganyika, Burundi

circumventing the state entirely. In other instances, natural resources are purchased in exchange for arms and other goods, which are directly utilised in the conduct of conflict.

The exploratory study yielded a number of critical questions for conflict resolution and management. It opened avenues to explore how conflict practitioners should develop tools that integrate the environment and natural resources in conflict-mapping and interventions. The study highlighted the importance of understanding the links between development and conflict. Finally, it underscored the importance of understanding legal instruments, political power and social and cultural constructions with regard to the use of violence to control natural and environmental resources.

Over the last decades, a number of international, national and local actors have responded to the challenges of resolving and managing conflicts that are underpinned by competition for natural resources such as oil, minerals and metals. These actors, while working to address conflict, will need to increase their attention to the profound challenges of people struggling between daily survival and the might of war economies. In Burundi, the DRC and Sudan, prospects for increasing chances of survival through sustainable livelihoods will depend on whether or not conflicts are bound up in the need for armed actors to exploit natural resources illegally. Conflict resolution processes will thus require the inclusion of incentives for armed actors to end conflict, as well as to participate in creating viable, durable, environmentally sustainable development. Environmental resources, such as water and land, in Burundi, the DRC and Sudan also require better management – from a range of stakeholders. The challenges of coexisting in the midst of scarcity will only be abated by deepening the opportunities for new industries, enterprises and livelihoods, all of which are critical to development for peace.

Organisations and individuals interviewed[4]

(March and April 2009)

Civil society organisations interviewed

Institute for Security Studies, Nairobi, Kenya
Interviews conducted on 9 March 2009, recorded
The ISS is a regional research institute operating across sub-Saharan Africa.

New Sudan Women Federation (NSWF), Nairobi, Kenya
Interview conducted on 10 March 2009, not recorded
The NSWF is an NGO that mobilises resources for the improvement of the status of women – their legal status, health, leadership potential and development.

Penykou Agency for Relief and Development (PARAD)
Interview conducted on 10 March 2009, recorded
PARAD is an NGO that undertakes water-drilling projects in South Sudan.

Sudd Development Agency (SUDA), Nairobi, Kenya
Interview conducted on 10 March 2009, recorded
SUDA is an NGO that undertakes food security projects in Sudd, South Sudan.

FEWER Bujumbura, Burundi
Interview conducted on 11 March 2009, recorded
FEWER International is a global coalition of non-governmental and governmental agencies and academic institutions working to promote coordinated responses and analyses to violent conflict.

The Association for the Protection of Human Rights and the Rights of Detained People (APRODH), Bujumbura, Burundi
Interview conducted on 12 March 2009, recorded
APRODH is a human rights organisation operating in Burundi.

The Observatory for Government Action (OAG), Bujumbura, Burundi
Interview conducted on 12 March 2009, recorded
The OAG is a collective of Burundian NGOs that works to promote transparency, justice, equity, good governance and harmonious development.

Observatory for Fighting Against Corruption and Economic Embezzlements (OLUCOME), Bujumbura, Burundi
Interview conducted on 12 March 2009, recorded
OLUCOME is an independent non-governmental anti-corruption watchdog working in Burundi.

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4   Certain interviews were not voice-recorded, because recording equipment was not allowed or the interviewee preferred not be recorded.

Ligue Iteka (*Ligue Burundaise des Droits de l'Homme "ITEKA" association sans but lucratif*), Bujumbura, Burundi
Interview conducted on 12 March 2009, recorded
Ligue Iteka is a national human rights organisation that educates, does advocacy and also works with the reintegration of refugees.

Projet de Renforcement Des Capacites de la Societe Civile dans la Prevention et la Gestion des Conflicts en Afrique Centrale (**Progesco**), Kinshasa, DRC
Interview conducted on 31 March 2009, not recorded
The main goal of Progesco is to improve economic and social governance in the Great Lakes region through the active and effective participation of civil society in conflict prevention and management.

Greenpeace Africa, Kinshasa, DRC
Interview conducted on 1 April 2009, recorded
Greenpeace is an independent global advocacy organisation that acts to change attitudes and behaviour, to protect and conserve the environment and to promote peace.

Communautaires Francophones d'Appui au Développement (**ROCFAD**) and **Conseil National des ONG de Développement** (**CNONGD**), Kinshasa, DRC
Interview conducted on 1 April 2009, recorded
ROCFAD is a development NGO that focuses on culture and development. CNONGD works in partnership with other NGOs to promote good governance.

International organisations interviewed

United Nations Environmental Programme (**UNEP**), Nairobi, Kenya

Interview 1 conducted on 9 March 2009, not recorded

Interview 2 conducted on 9 March 2009, recorded

United States Agency for International Development: East Africa, Nairobi, Kenya

Interview conducted on 9 March 2009, not recorded

United Nations Development Programme, Bujumbura, Burundi

Interview conducted on 9 March 2009, not recorded

United Nations Development Programme, Kinshasa, DRC

Interview conducted on 1 April 2009, not recorded

United Nations High Commissioner for Refugees, Kinshasa, DRC

Interview conducted on 2 April 2009, not recorded

Government agencies interviewed

National Commission on Land and other Properties (**CNTB**) (*Republique du Burundi Commission Nationale des Terres et Autres Biens),* Bujumbura, Burundi

Interview conducted on 13 March 2009, recorded

Individuals interviewed

Recordings in ACCORD's possession

Akyeampong, V., Kinshasa, 2 April 2009.

Antony, M.N., Nairobi, 10 March 2009.

Gasana, J., Bujumbura, 11 March 2009.

Gideon, K., Nairobi, 10 March 2009.

Mabala Kasongo, R., Kinshasa, 1 April 2009.

Muchai, A., Nairobi, 9 March 2009.

Ngongo, R., Kinshasa, 1 April 2009.

Omondi, K., Nairobi, 10 March 2009.

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