

Growing Unrest

The links between farmed and fished resources and the risk of conflict

**Alec Crawford
Oli Brown**

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International Institute for Sustainable Development
161 Portage Avenue East, 6th Floor
Winnipeg, Manitoba
Canada R3B 0Y4
Tel: +1 (204) 958-7700
Fax: +1 (204) 958-7710

E-mail: info@iisd.ca
Web site: <http://www.iisd.org/>

Corresponding author: Alec Crawford, International Institute for Sustainable Development (IISD), International Environment House 2, 9 chemin de Balaxert, Châtelaine, 1219, Geneva, Switzerland. Phone: 0041 22 917 8684, fax: 0041 22 917 8054, e-mail: acrawford@iisd.org.

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Acronyms

ACP	African, Caribbean and Pacific
ARCC	Autorité de Régulation du Café et du Cacao (Côte d'Ivoire)
AUC	United Self-Defence Forces of Colombia
BCC	Bourse du Café et du Cacao (Côte d'Ivoire)
DRC	Democratic Republic of the Congo
EITI	Extractive Industries Transparency Initiative
EU	European Union
FAO	Food and Agriculture Organization
FDPCC	Fonds de Développement et de Promotion des Activités des Producteurs de Café et Cacao (Côte d'Ivoire)
FLEGT	Forest Law Enforcement, Governance and Trade initiative
FN	Forces Nouvelles (Côte d'Ivoire)
GDP	gross domestic product
ICG	International Crisis Group
ICWC	Interstate Commission for Water Coordination of Central Asia
IFIs	international financial institutions
IMF	International Monetary Fund
KPCS	Kimberley Process Certification Scheme
MFDC	Mouvement des forces démocratiques de la Casamance
MNC	multinational corporation
MSC	Marine Stewardship Council
NGO	non-governmental organization
RUF	Revolutionary United Front (Sierra Leone)
SA	structural adjustment
U.K.	United Kingdom
UN	United Nations
U.S.	United States
WTO	World Trade Organization

Summary

Conflict resources are defined by the British NGO Global Witness as resources whose “*systematic exploitation and trade during a conflict contribute to, benefit from or result in the commission of serious violations of human rights and international humanitarian laws.*”¹ Typically, this definition has been applied to a certain set of natural resources (oil, timber, diamonds and other minerals such as coltan) linked to conflict by a number of characteristics, including their high values, lootability, obstructability and location. Agricultural and marine commodities have so far been largely left out of this analysis, deemed irrelevant or of secondary importance to the conflict cycle.

This paper tries to address this research gap by examining the links between the risk of conflict and the production and trade of agricultural and marine commodities. It does so using a series of recent case studies: cocoa in Côte d’Ivoire; bananas and subsequently fisheries in Somalia; and cotton in Central Asia. Like the traditional conflict resources mentioned above, there is strong evidence that fished and farmed commodities can be (mis)used in such a way that their production and trade contribute to the onset or continuation of violent conflict. Research leads us to three main findings:

1. **‘Taxing’ the trade in agricultural and marine commodities can raise funds for conflict.** Rebel group funding is not limited to the so-called ‘traditional’ conflict resources: oil, minerals, timber and narcotics. These groups, along with governments, can get funding from a variety of sources, and these sources can change over time; when the Somali banana market began its collapse in the late 1990s, the country’s warlords turned to fisheries to raise funds. In addition, issues of revenue transparency and accountability are not limited to the oil and minerals sector; governments and multinational companies engaging in the trade of agricultural and marine resources can be complicit in supporting conflict.
2. **The volatile prices of agricultural commodities can contribute to economic and political instability, which can, in turn, increase the likelihood of conflict.** Countries that are highly dependent on the export of a narrow range of agricultural or marine commodities are exposed to increasingly volatile commodity prices and the decisions of international market actors. Understanding these interactions better could help policy-makers tackle some of the root causes of economic and political instability.
3. **Agricultural and marine commodities, as proxies for key natural resources like water and land, can increase the risk of competition (and conflict) over scarce resources.** Trade in agricultural and marine commodities changes the strategic importance of some basic natural resources—fresh water in Central Asia and cropland in Côte d’Ivoire, for example. Looking at trade in agricultural and marine commodities can help us understand the political economy of the management of those resources.

¹ Global Witness (2006) “The Sinews of War”, Global Witness, London

These key findings lead us to make fourteen recommendations for policy-makers (see page 34 for more details):

Tackling price volatility

1. The international community needs to consider how to use tools like supply management, compensatory finance mechanisms, national revenue management and market-based risk management instruments to address more effectively the threat commodity price volatility holds for farmers, fishers and countries alike.

Implementing effective sanction regimes

2. The UN Security Council should impose sanctions on agricultural and marine resources if they can be shown to have a direct link to the financing of conflict. If significant numbers of jobs are at stake, sanctions that do not affect the trade in the commodity, such as travel bans and asset freezes, should be used instead.
3. Secondary sanctions (i.e., penalties for sanction violators) need to be systematized and made uniform so that states are aware of the penalties, and individuals and companies violating sanctions are subject to criminal prosecution, no matter where they are based. The UN should make public governments and companies involved in sanctions-busting, require member states to act against sanctions violators and, if necessary, refer such cases to the International Criminal Court.

Expanding the scope of the UN Expert Panels

4. When appropriate, the mandates of UN Expert Panels should be broadened to look at agricultural and marine commodities as well as more traditional conflict resources. They should also be able to more effectively track the money flows associated with trade in natural resources.
5. The UN Secretariat should create a systematic database of all materials from its Expert Panels, including a subset on natural resource issues, including agricultural and marine commodities, and publish its operational guidelines for expert groups, including on evidentiary standards.

Ensuring that peacekeepers deal with all conflict resources

6. In countries where natural resources have played a role in conflict, the UN should ensure that peacekeeping missions have a mandate to help secure natural resources in order to mitigate conflict and to enforce sanctions where they exist.
7. In countries where natural resources have played a role in conflict, the UN should ensure that peacekeeping missions have a mandate and the capacities and means to monitor the exploitation and trade in natural resources.
8. The UN should map natural resources, including agricultural and marine resources. UN departments often start peacekeeping operations with little or no idea of what natural resources exist in the country in question, nor what role they may play in fuelling conflict. Designating one UN department (perhaps UNEP) to take the lead in compiling and disseminating this information at the operational planning stage would be a huge step forwards in this regard.

Creating an effective Peacebuilding Commission

9. The UN Peacebuilding Commission, which has been set up to support peacebuilding in fragile states, should ensure they address the role of natural resources as a potential driver of renewed conflict.

Ensuring transparency and monitoring

10. Policy-makers should support initiatives for increased transparency in the trade of agricultural and marine commodities to restrict their possible contribution to conflict.
11. UN agencies should look for opportunities to encourage national level NGOs and grassroots groups to monitor resource exploitation.

Building consumer awareness

12. Policy-makers should support consumer-based initiatives for sustainably and legally harvested agricultural and marine commodities.
13. Policy-makers should increase investments in sustainable, conflict-free agriculture and fishing projects.

Defining conflict resources

14. A UN Secretary-General's report should examine the UN's experience of addressing the role of natural resources in conflict and post-conflict scenarios, the lessons that can be learned and the ways in which existing UN approaches may be strengthened. The report should clarify what constitutes a conflict resource as a basis for identifying cases that require action by the Security Council.

Section 1 Introduction

Over the past two decades, the extraction and trade of natural resources have helped incite, fuel and prolong violent conflicts in a number of countries, from the Sudan, Sierra Leone and the Democratic Republic of the Congo to Colombia, Cambodia and Burma. In some cases resource revenues are the object of the conflict; in others they help to fund insurgencies and motivate secessionist movements. Typically, the presence of such valuable commodities complicates the resolution of these conflicts.

The links between natural resources and conflict are established and widely accepted. However it has become ‘received wisdom’ that these linkages only apply to a certain subset of natural resources—oil, diamonds, certain minerals (e.g., coltan), illegal narcotics and timber.² These natural resources are linked to the onset, duration and intensity of conflict by a number of characteristics, from their high values to their lootability, obstructability and location. The international community has focused much attention on these ‘traditional’ conflict resources, trying—with some success—to find ways to take them out of international markets (through mechanisms like sanctions and certification schemes).

Less research and policy attention has been paid to the role that other resources, such as agricultural and marine products, might play in political instability and conflict. With the exception of narcotics, they are typically deemed ‘irrelevant’ by security analysts, or at least of secondary importance, to the conflict cycle. They are less lootable than publicized conflict resources like coltan, a mineral used in cell phones and other electronic products. Their value-to-weight ratio is typically quite low, they are less obstructable than oil, and are typically diffuse, spread out over large areas. Finally, security is intuitively seen as a precondition for agriculture, as cultivation requires an investment of time and patience, both of which can be in short supply in war zones.

Of course what is important is not whether the commodity is a diamond, a cocoa bean or a fish, but rather the way in which it is used or misused, to what ends and with what (human) impact. And while it would be wrong to suggest that agricultural and marine commodities always play a decisive role in conflicts, evidence suggests that these commodities are involved in ways that are still poorly understood.

This paper focuses on the reasons why there might be a closer correlation between conflict and the production and trade of agricultural and marine commodities than is currently assumed. It will begin with short a review of the traditional thinking on conflict resources, and why agricultural and marine resources are typically dismissed from this analysis. It will then examine why there is strong evidence to suggest that agricultural and marine resources can contribute to conflict—the dependence of communities and countries on fisheries and agricultural commodities; their vulnerability to volatile prices in global commodity markets; the expansion of the export-led agriculture; the lack of market access; and the actions of market actors all contribute to the probability and nature of conflict. This is illustrated through four recent case studies: cocoa in Côte d’Ivoire; bananas in Somalia; fisheries in Somalia; and cotton in Central Asia. The paper concludes with a set of recommendations for policy-makers.

² While not strictly a mineral, timber shares some of the traits of profitability and portability of the mineral resources and so is often analyzed in the same group.

Section 2 The received wisdom on traditional conflict resources

Conflict resources are not simply natural resources whose extraction or trade funds a war; states have the right to defend themselves against acts of aggression, so long as they abide by the rules of war laid out in instruments like the Geneva Conventions.³ A conflict resource is rather one that funds a war that is illegitimate, or where the laws of war are broken; when the international community can agree that this is the case, sanctions should usually be imposed on the resource. Global Witness, a U.K.-based campaign group, defines conflict resources as:

“Natural resources whose systematic exploitation and trade in a context of conflict contribute to, benefit from or result in the commission of serious violations of human rights, violations of international humanitarian law or violations amounting to crimes under international law.”⁴

Research suggests a number of characteristics that could influence a resource’s impact on a conflict:

Lootability – The *lootability* of a resource is the ease with which it can be appropriated by individuals or small groups of unskilled workers. The more lootable a resource the more likely it is to benefit rebel groups; whoever controls the territory in which the resource is found can use it for funding. Resources that require high capital investments, like oil and gas, are less lootable when compared to, say, the simple chainsaw and truck needed to harvest illegal timber.⁵ These resources tend to provoke and prolong non-separatist conflicts, and can typically be extracted by the local community and therefore do not require skilled outsiders or capital investment (as with the unlootable oil, for example).

Obstructability – According to Michael Ross (2003), a resource is *obstructable* if “its transportation can be easily blocked by a small number of individuals with few weapons.”⁶ If a rebel organization can control the access of a resource to the market, they can impose taxes and levies on its trade to fund their activities; oil, for example, could be beneficial for a rebel group, as it can either be diverted for sale and/or cut off as a source of government revenue. Conversely, if the government can block the flow of a resource to the market, it is better positioned to control smuggling as a source of rebel finance. Diamonds, due to their small size and high value, are more difficult to obstruct than oil, and have in the past been used as a lucrative source of funding for conflict.

Location – The physical *location* of a natural resource can also play a role. Resources that are closer to a country’s capital are generally cheaper to control for the government and at lower risk being captured by outside groups. Forests or mines in remote, periphery areas, on the other hand, are more likely to be overrun by rebel groups and integrated into their war economy.⁷

³ Brack, D. and G. Hayman (2007) “Building markets for conflict-free goods”, in O. Brown *et al.* (eds.) *Trade, Aid and Security: An Agenda for Peace and Development*, Earthscan, London

⁴ Global Witness (2006) “The Sinews of War”, Global Witness, London

⁵ Ross, M. (2003) “Oil, Drugs and Diamonds: The Varying Roles of Natural Resources in Civil War”, in Ballentine & Sherman (eds.) *The Political Economy of Armed Conflict: Beyond Greed and Grievance*, International Peace Academy, New York

⁶ Ross, M. (2003)

⁷ le Billon, P. (2001) “The political ecology of war: natural resources and armed conflicts”, *Political Geography* 20: 561–584

Section 3 Agricultural and marine commodities and conflict: The dismissal

The literature is clear on the impacts of conflict on agriculture and fisheries (see Box 1). Less attention has been paid to the role of agriculture and fisheries in intra- and interstate conflicts. Ross (2003), in a study of 12 civil wars fought between 1994 and 2001 in which resources played a role, found that the resources most frequently associated with civil conflicts were diamonds and other gemstones (seven of 12 conflicts), oil and natural gas (seven), illicit drugs (five), copper or gold (four) and timber (three). Legal agricultural crops played a role in only two conflicts—the civil wars in Liberia and DRC—and in each case other natural resources (such as timber for Liberia and copper and coltan for DRC) played larger roles.⁸

Thomas Homer-Dixon echoes these findings for scarcity-driven conflict; he finds that agriculturally productive land, river water and fish have not driven a major war between states.⁹ His dismissal also extends to conflicts fuelled by conflict resources, as he notes that “modern states do not generally fight over renewable resources: states cannot easily convert cropland, forests and fish seized from a neighbor into increased state power.”¹⁰ By contrast, non-renewable resources like oil and minerals can first “build and fuel the military machines of national aggression.”¹¹

This is illustrative of the place of agricultural and marine commodities in the conflict resource debate. When examined within the parameters of traditional conflict resources laid out in the previous section, it is easy to see how they are so often dismissed as being of secondary importance: they are less lootable; their value-to-weight ratio is typically quite low; they are less obstructable than commodities like oil; and they are typically diffuse. Finally, received wisdom supposes that as peace is seen as a precondition for agriculture (requiring time and patience), the presence of agriculture can provide a strong disincentive to conflict.

However, the case studies presented in this paper suggest that fished and farmed resources should be brought into wider conflict analyses. The case studies illustrate that such resources have contributed significantly to conflict in the past: as funding mechanisms, as sources of tension, and as impediments to peace. Together they imply that we should be taking the role of fish and farmed resources more seriously in our responses to conflict, and where appropriate integrating them into peace negotiations, peacekeeping mandates and post-conflict reconstruction.

⁸ That said, some resources are much more common than others: oil, for example, is found in more countries than copper. Ross, M. (2003).

⁹ Homer-Dixon, T. (1999)

¹⁰ Homer-Dixon, T. (1999)

¹¹ Homer-Dixon, T. (1999)

Box 1: Impacts of conflict on agriculture and fisheries

Many of the countries that have experienced civil wars over the past 15 years are heavily dependent on agriculture. These conflicts can have a devastating impact on the sector and the people who depend on it for their livelihoods. Conflict kills farmers, fishers and labourers, forces abandonment of fertile lands, ruins agricultural lands with landmines, and destroys rural infrastructure, whether roads, irrigation systems or storage facilities. Investment in storage and food processing facilities is discouraged, and capital flees from the affected area. As production declines and farmers' and fishers' access to inputs and markets are broken, food security is threatened, and famine can result; in the past, such conflict-related famines have led to more deaths than those directly associated with the violence.¹²

The estimated losses to agricultural output for developing countries affected by conflict are enormous. Cramer and Weeks (2000) found that for the period 1970–1997, agricultural yields totaling US\$121 billion (at 1995 prices) were lost as a result of conflict—approximately US\$4.3 billion each year. The losses of agricultural output to conflict are greatest in Sub-Saharan Africa, with US\$52 billion of the total loss over Cramer and Weeks' study period. This represents 30 per cent of the region's total agricultural output. For the conflict-affected countries in Sub-Saharan Africa, these losses amounted to 75 per cent of official development assistance for the period.¹³

Section 4 Rethinking the problem: Non-traditional conflict resources

The four case studies presented in this paper seek to highlight some of the ways in which agricultural or marine resources can contribute to the onset and continuation of conflict.

The first case study examines Côte d'Ivoire's dependence on cocoa production, and how this contributed to the onset and continuation of the conflict in that country. During the 1980s, highly volatile world prices for cocoa, a major driver of the country's economic growth, combined with a number of social problems, particularly the disenfranchisement of the country's immigrant population, to kick off a downward spiral into economic decline and social unrest. This culminated in 2002 with ethnic violence and a civil war between government forces loyal to elected president, Laurent Gbagbo, and the 'New Forces' (Forces Nouvelles, or FN), representing northern Muslims and immigrants. Problems were compounded as the government taxed cocoa production and the FN taxed its transport to fund the ongoing hostilities.

The second case study looks at the export of bananas from Somalia in the 1990s, and how the funds generated from this trade contributed to perpetuating that country's conflict. In Somalia, competing groups benefited from the banana trade—not by controlling the means of production but rather by controlling the export trade, allowing them to earn significant returns through extortion and export duties which were in turn used to fund warlords during the country's civil war. This was made possible in part by the presence of ready markets and by the cooperation of multinational corporations operating in the agriculturally-rich Lower Shabelle region.

The third case study looks at present-day Somalia and examines how the trade in false fishing licences is perpetuating instability. Somalia has some of the world's richest fishing grounds. It has the longest coastline of any country in Africa, with a seasonal nutrient upwelling that sustains huge numbers of fish. The fishing has funded some of the

¹² Cramer, C. and J. Weeks (2000) "Conflict and Agriculture in Developing Countries", *Centre for Development Policy & Research Newsletter*, London, School of Oriental and African Studies

¹³ Cramer, C. and J. Weeks (2000)

country's most notorious warlords, who have issued false fishing licences to foreign fishing companies, earning millions of dollars over the past 10 years. This has allowed for their personal enrichment and, to some extent, the payment and re-supply of private militias.

The final case study assesses the production of cotton in Central Asia, and looks into its role in increasing local and interstate tensions in the riparian countries of the Amu Darya and Syr Darya rivers: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. Tensions over water-sharing agreements have affected the countries since their independence, and a high dependence on cotton at the national and local levels, coupled with a decaying irrigation infrastructure and repressive relations between the state and its cotton farmers, threaten social, economic and political stability.

These four case studies illustrate three important ways in which agricultural and marine commodities can influence conflict: a) taxing trade in agricultural and marine commodities can raise funds for conflict; b) the volatility of agricultural commodity prices can undermine political and economic stability; and c) agricultural export commodities, as 'consumers' of key natural resources like water and land, can increase tensions over these resources. We will first outline these three arguments, before moving on in more detail to the four case studies.

1) 'Taxing' the trade in agricultural and marine commodities can raise funds for conflict

Rebel groups are rarely involved in the production of agricultural crops (with the exception of narcotics). What they have frequently been involved in, however, is levying informal taxes on producers and traders to raise the money they need to fund insurgencies. By cutting off access to markets, rebel groups can charge farmers and exporters for passage; setting up blockades along roadways and at ports is an effective way for them to make quick, easy cash. For example, the Revolutionary United Front (RUF) in Sierra Leone started by levying informal taxes on coffee, only shifting its activities to diamonds once the rebel group was well established.¹⁴

This was the case in both Côte d'Ivoire and Somalia (see Case Studies 1 through 3). In Côte d'Ivoire, the Forces Nouvelles (FN) rebel group controlled the north of the country following the 2002 coup attempt; with this they controlled 10 per cent of Côte d'Ivoire's cocoa exports—a vast amount given that Côte d'Ivoire produces 40 per cent of the world's cocoa. Without government interference, the FN has been able to obstruct shipments of cocoa along key transit routes; Global Witness estimates that since 2004 the group has been able to tax the region's cocoa exports for US\$30 million per year to fund the FN's military operations.¹⁵

Rebel groups are, of course, not the only possible beneficiaries; governments can also tax agricultural commodities to raise money to wage war. In many cases this is legal, as long as the taxes are legitimate and the war is legal. However Global Witness reports the diversion of more than US\$58 million from cocoa levies to the Ivorian government's war chest—money that was legally earmarked to support cocoa farmers and regulate the country's cocoa trade, not the war effort.¹⁶ Revenues from cocoa therefore reduced the

¹⁴ Bannon, I. and P. Collier (2003)

¹⁵ Global Witness (2007)

¹⁶ Global Witness (2007)

incentive for both the Ivorian government and FN to resolve the conflict. The atrocities committed by both sides during the conflict led the UN to impose a weapons embargo on each side in 2004—illustrating that the Ivorian conflict was not a straightforward case of resource-derived revenues being used by a government for legitimate self-defence.

Box 2: Extortion in Colombia

In early 2007, U.S. banana company Chiquita Brands International pled guilty to doing business with a paramilitary group in Colombia. The company was accused of paying US\$1.7 million to the United Self-Defence Forces of Colombia (AUC) between 1997 and 2004 through its wholly-owned local subsidiary Banadex in exchange for ‘protection’, despite the AUC being listed by both the EU and U.S. as a terrorist organization; at the time, Banadex was operating in areas with a strong AUC presence. Despite claiming the payments were only made to ensure the safety of its employees, the company was nevertheless fined US\$25 million by the U.S. Department of Justice.¹⁷ According to DoJ Assistant Attorney General Kenneth Wainstein, “Like any criminal enterprise, a terrorist organization needs a funding stream to support its operations. For several years, the AUC terrorist group found one in the payments they demanded from Chiquita Brands International. Thanks to Chiquita’s cooperation and this prosecution, that funding stream is now dry and corporations are on notice that they cannot make protection payments to terrorists.”¹⁸

In Somalia, the absence of a formal government during the civil conflict of the 1990s meant that whoever controlled the ports of Mogadishu and (especially) Merca would control the country’s banana trade. Warlords quickly realized that higher margins could be made by controlling the export, rather than the production, of bananas. This trade was valuable; before the conflict broke out, bananas were the country’s second largest agricultural sector and earned US\$25.6 million in exports.¹⁹ Once the warlord Mohamed Farrah Aidede gained control of Merca, he was free to tax all banana shipments leaving the city.²⁰ When banana production resumed in 1994, Aidede was able to generate an estimated monthly income of US\$150,000 by charging US\$0.04 to US\$0.05 per 12.5kg shipment of bananas.²¹ Webersik (2005) notes that “it is no secret that Aidede was able to finance his powerful militia through the export of bananas”—militia expenditures which bore a price tag of US\$40,000 per week.²² Profits like these can create a new kind of war economy, in which the participants have more interest in maintaining the conflict and continuing to profit from it than in pursuing peace; as David Keen notes when writing of the economic motivations for prolonging war, for the Somali warlords, “the aim of war is not necessarily to win it.”²³

For agricultural or marine commodities to serve as a funding mechanism for conflict they typically require access to international markets; local markets are usually not big enough to wholly finance a conflict. Duffield (2000) notes that these war economies “are rarely self-sufficient or autarchic after the fashion of traditional nation-state-based war economies. On the contrary, though controlling local assets, they are heavily reliant on all forms of external support and supplies.”²⁴ Engagement with international markets does

¹⁷ Department of Justice (2007) “Chiquita Brands International Pleads Guilty to Making Payments to a Designated Terrorist Organization and Agrees to Pay \$25 million fine”, U.S. Department of Justice, 19 March 2007

¹⁸ Department of Justice (2007)

¹⁹ Webersik, C. (2005)

²⁰ Webersik, C. (2005)

²¹ Marchal, R. (1997) “Lower Shabelle Region Study on Governance”, United Nations Development Office for Somalia, Nairobi, cited in Webersik (2005)

²² Norfolk Education and Action for Development Centre (1995) “Banana wars in Somalia”, *Review of African Political Economy*, 64, pp. 274–275.

²³ Keen, D. (2000)

²⁴ Duffield, M. (2000) “Globalization, Transborder Trade, and War Economies” in M. Berdal and D. Malone (eds.) *Greed and Grievance: Economic agendas in civil wars*, International Peace Academy, New York

not require the presence of a state, though. Bradbury (2003), when writing of the Somali conflict, reports that:

“Studies of post-modern war economies suggest that participation in the global economy and the exercise of power no longer requires a modern state. Elites, government, warlords and quasi-state authorities can instead survive on extractive and coercive relations with populations in their own neighbouring countries, or on expanding parallel or illegal economies that do not rely on state institutions.”²⁵

Somali warlords like General Aideed were able to individually engage with multinational corporations, typically through local subsidiaries, to get their produce to European markets. Likewise, millions of dollars have been paid to the country’s factional leaders for fishing permits and licences by foreign fishing interests (including European companies) looking to take advantage of Somalia’s rich coastal waters (see Case study 3). The UN Monitoring Group reports that this has generated “millions of dollars over the last decade” (1993-2003) for the warlords, and that “much of the money is used to pay militias and procure arms and ammunition” for private militias.²⁶

Box 3: Cashew nuts and conflict in Senegal²⁷

The Senegalese province of Casamance, wedged between the Gambia and Guinea-Bissau in the south of the country, is one of the nation’s richest regions in terms of agricultural productivity. A wet area in an otherwise semi-arid country, the province’s forests and farmlands produce a mix of mangoes, citrus fruits, oil palms and cashews. However despite—and perhaps because of—the region’s natural advantages, the majority of Casamançais feel marginalized and suffer from economic stagnation. This is in large part because of the civil conflict that affected the region which was West Africa’s longest-running by the signing of its peace treaty in December 2004.

In 1982, the separatist *Mouvement des forces démocratiques de la Casamance* (MFDC) launched its campaign for independence from Dakar, and while the rebels subsequently split into two opposing factions (the North and South Fronts), the conflict continued in the province. To finance their activities, the rebels targeted (in part) cashew production and trade, as the nuts were Casamance’s primary export crop. The rebels, primarily from the region’s dominant ethnic group (the Diola), did at first enjoy a degree of popular support, but this has since been lost. Over time civilians were driven from resource-rich areas with terror tactics, violence and the use of landmines, abandoning land to the benefit of the rebel groups; combatants engaged in the harvest and processing of cashews; and the rebel groups traded the nuts to dealers via intermediaries for cash, food and arms. The army has also benefited from the persistent state of conflict: in areas under its control yet inaccessible to civilians due to insecurity or landmines, the military dominates the local trade. In fact, soldiers from one platoon stationed in Ziguinchor, the provincial capital, may have each earned up to three months salary from the harvest and trade of cashews during the lucrative 2000 season.

Ethnic and historical differences from the rest of Senegal played a significant role at the outset of Casamance conflict. However the war economy that flourished, of which cashews were an important part, allowed belligerents to profit from the continued insecurity—profits which would decrease with peace. In the meantime, an estimated 60,000 people—five per cent of the region’s population—were displaced by the conflict, and 1,000 are thought to have died.

²⁵ Bradbury, M. (2003) “Living with statelessness: The Somali road to development”, *Conflict, Security and Development*, 3:1, cited in Grosse-Kettler (2004)

²⁶ UN (2003) “Report of the UN Expert Panel on Somalia”, 25 March 2003, S/2003/223

²⁷ This box is drawn from Evans, M. (2003) “Ni paix ni guerre: the political economy of low-level conflict in the Casamance”, *Background paper for HPG Report 13*, Overseas Development Institute, February

2) *The volatility of agricultural commodity prices can contribute to political and economic instability, which can lead to conflict*

Collier and Hoeffler (2003) argue that three factors are particularly significant when assessing a country's risk of conflict: economic growth; per capita income; and the structure of the economy—namely, the degree of dependence on primary commodity exports.²⁸ They found that if a country's primary commodity exports make up 25 per cent of its GDP, that country has a 29 per cent chance of conflict over a five-year period. When these exports are only 10 per cent of GDP, that risk drops to 11 per cent.²⁹ Ross (2003) supports this finding with regards to food crops; he finds that once per capita income is taken into account, countries that are highly dependent on food-based agricultural exports run a higher risk of civil conflict than those which are less dependent.³⁰

The explanation for this is tied up with the negative impact of volatile commodity prices on fiscal management at a government level and on livelihoods at an individual level. These impacts are particularly profound for developing country governments that are highly dependent on commodity export tariffs and taxes as a primary source of revenue, and for the billions of workers who rely on commodity production for their livelihoods. UNCTAD estimates two billion people depend on the production of primary commodities, half of those on agricultural commodities. At the national level, 95 of the 141 developing countries derive at least 50 per cent of their export earnings from commodities.³¹ Cotton, for example, accounts for nearly three-quarters of Mali's export earnings.³² A dependence on agricultural commodities opens countries and communities up to increasingly erratic weather patterns and to volatile commodity prices on the world markets.

Volatile prices mean that producing commodities is a real gamble. Commodity prices can vary by as much as 50 per cent in a single year. Between 1983 and 1997 for instance, world market prices for Robusta coffee beans swung between 40 per cent and 195 per cent of the average.³³ To make matters worse, price volatility is increasing across a broad range of commodities. Since the 1970s, there have been as many price shocks across the range of primary commodities as in the preceding 75 years.³⁴ These unpredictable fluctuations can significantly reduce national revenue, increase unemployment and render farmers' cash crops nearly worthless overnight.³⁵

Traditional economic theory argues that simply supply-demand dynamics should act to rationalize prices, with producers quickly cutting output in response to reduced demand and lower prices. The problem is that the world does not march in step with neat economic theory. Producer responses are rarely smooth (for a variety of supply-side

²⁸ Collier, P. and A. Hoeffler (2002) "Aid, Policy and Peace", *Defense and Peace Economics*, 13(6), 435-450. Ethnic and religious composition will also play a role. Bannon, I. and P. Collier (2003)

²⁹ Bannon, I. and P. Collier (2003)

³⁰ Ross, M. (2003)

³¹ South Centre (2005) *Problems and Policy challenges faced by commodity-dependent developing countries (CDDCs)*. Geneva. South Centre

³² 72.7 per cent in 2002-3. Statistics average export earnings across 2002-03. UNCTAD (2005) *Handbook of Statistics*,

³³ ECA (2003). 'Minimizing the impact of commodity shocks in Africa for Debt sustainability', November 2003. Economic commission for Africa, p.2

³⁴ Cashin, P and C. John McDermott (2002) *The Long-run behaviour of commodity prices: small trends and big variability*. International Monetary Fund. IMF Staff Papers, 49:2. p. 176

³⁵ Brown, O., A. Crawford and J. Gibson (2008) *Boom or Bust: How commodity price volatility impedes poverty reduction and what to do about it*, IISD, Winnipeg

reasons) or ‘rational’ (due to market distortions, sunk investments and so on) and the pricing mechanism itself is flawed as it does not internalize the full costs of production. Moreover, speculation and export dumping can exacerbate price peaks and price slumps.

In effect, many of the benefits of price volatility accrue to players in the developed world—investors, producers and importers—who have the information, resources and market power to realize the advantages of quick market adjustments. Meanwhile, the downsides of price volatility are felt primarily by countries and producers in the developed world—those least equipped to adapt to such shocks. The poorest producers, of course, are hurt most: they have fewer resources and social safety nets to rely on when commodity prices slump.³⁶

Unreliable export prices greatly complicate fiscal management in commodity-dependent developing countries, as governments have no way to accurately forecast future earnings. A few commodity-dependent countries have successfully managed revenue fluctuations over the years. However, many others, such as Algeria, Côte d’Ivoire, Nigeria and Venezuela, have fallen into over-optimistic spending habits, using current and future windfall profits to finance politically-expedient domestic programs. Such programs are difficult to terminate once commodity prices drop, since more people tend to rely on new social welfare programs. With revenues and program costs going in opposite directions, commodity-dependent developing countries are often forced to borrow money to cover budget deficits. Nor are such situations easily reversed when prices rise again. There is evidence that negative price shocks tend to reduce personal and national real income, which in turn compounds the initial shock. The cascading effect of price slumps can precipitate economic decline that persists for years after the initial price fall.

While low commodity prices create obvious problems, even high prices can create a trap of sorts, forcing countries and producers to choose between quick profits and future sustainability. When nations and external investors pump money into a booming sector, they risk inadvertently driving real exchange rate appreciation that can make other sectors uncompetitive (a phenomenon known as Dutch Disease). In effect the ‘invisible hand’ of the market treats many countries and producers very roughly: contributing to failed and fragile states, increased dependence on commodities, corruption, poor fiscal management, international flows of economic migrants and environmental degradation. Ultimately price volatility is an important factor behind political and economic instability, which is, in turn, closely correlated with the risk of conflict.

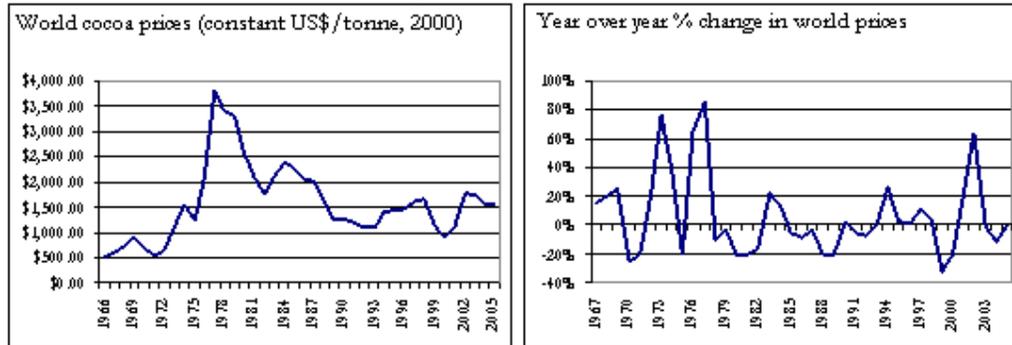
Take again the role of cocoa production and trade in the civil war in Côte d’Ivoire (see Case study 4). Cocoa has always been a major source of export earnings for Côte d’Ivoire. The country is the world’s largest producer, and the crop serves as the primary source of income for roughly a quarter of Côte d’Ivoire’s 16 million citizens. In 2005, cocoa accounted for 30 per cent of Côte d’Ivoire’s export earnings.

As long as prices were high and cocoa production was expanding, the outlook was bright. But when cocoa prices became increasingly volatile in the 1980s and 1990s (see Figure 1), state expenditures remained high, and cocoa producers, migrant cocoa workers, and the Ivorian government all felt the negative effects; export earnings dropped and rural livelihoods were undermined. As the government fell into a cycle of unsustainable debt, it was made to cut public service expenditures by the international

³⁶ Bourguignon, F., S. Lambert and A. Suwa-Eisenmann (2004) “Trade exposure and income volatility in cash-crop exporting developing countries”, *European Review of Agricultural Economics*, 31:3

finance institutions that had stepped in; education, health and the civil service were all eroded. Attempts to increase production to offset the losses in national income caused by the cocoa price slump between 1999 and 2002 led to increased competition for land; this combined with increasing ethnic tensions and revisions to the country's land tenure laws to stoke unrest, and by 2002 these divisions contributed to the start of the civil war.

Figure 1: World cocoa price volatility



Source: Gibson (2007) from the International Monetary Fund IFS online database

Commodity dependence could prove similarly destabilising for Central Asia (see Case study 4). Following independence from the Soviet Union, the five countries in the region (Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan and Tajikistan) inherited a monoculture that is responsible for 6.5 per cent of the world's production and 15.4 per cent of the world's cotton exports.³⁷ For Turkmenistan, Uzbekistan and Tajikistan in particular, a high proportion of national earnings are tied to this one crop, and ensuring its harvest is of the utmost importance to each national governments.³⁸ Cotton accounts for 25 per cent of Turkmenistan's GDP and employs half of the country's labour force; it makes up 60 per cent of Uzbekistan's export earnings; and is grown on 40 per cent of Tajikistan's arable land.^{39,40} Any significant fluctuation in cotton prices has a large knock-on effect on public spending. Meanwhile a lack of cooperation on transboundary water sharing has led to tensions in the past as the priorities of upstream and downstream countries diverge.

On the other side of the equation, volatile prices of agricultural commodities have an impact on consumers. Box 4 examines how recent global price increases for staple crops like wheat and rice have threatened livelihoods and contributed to protest and, in some cases, violence.

³⁷ International Crisis Group (2005) "The Curse of Cotton: Central Asia's destructive monoculture" *Asia Report No. 93*, ICG, Bishkek/Brussels

³⁸ International Crisis Group (2005)

³⁹ International Crisis Group (2002)

⁴⁰ EJF (2005)

Box 4: Price volatility and the food crisis

In the first half of 2008, rapidly rising food prices—driven by increased demand for meat and grain in China and India, a rise in the use of biofuels, market speculation, poor harvests and increased transportation costs—led to widespread protests across Latin America, Asia and Africa. Riots swept through major cities, as people protested against the rapidly increasing price of staple crops; wheat prices climbed 120 per cent between 2005 and 2008, and rice prices were up 75 per cent in just March and April 2008.⁴¹ With poor families spending up to 80 per cent of their budget on food,⁴² the impacts of the rapid price spike were deep and widespread.

The World Bank estimates that two billion people will be affected by the increase in food prices.⁴³ According to the UN's Food and Agriculture Organization (FAO), the 'food crisis', as it has been dubbed, has plunged 36 countries into a state of food insecurity, 21 of which are in sub-Saharan Africa.⁴⁴ This has pushed 100 million people further into poverty over the past two years, and according to Robert Zoellick, President of the World Bank, could mean seven years lost in the fight against poverty.⁴⁵

In Somalia, the UN Food Security Analysis Unit warned in the spring of 2008 that the country faced a major famine due to prolonged domestic drought and soaring food prices.⁴⁶ Cereal prices, both for commercial imports of rice and for locally-produced crops like maize and sorghum, had increased to historic highs by 110 to 375 per cent in the preceding 12 months.⁴⁷ When combined with the dramatic devaluation of the Somali shilling in the first half of 2008, this has pushed the number of people in need of assistance up to 2.6 million—an estimated 35 per cent of the population and an increase of more than 40 per cent since January 2008.⁴⁸ To cope, the UN reports that Somalis are reducing their spending on food by cutting back on the amount they buy, switching to cheaper or lower quality cereals, skipping meals, reducing purchases of soap, firewood and fuel, taking their children out of school and cutting back on their health spending.⁴⁹ Thousands have protested the rising costs of living, taking to the streets of Mogadishu in demonstrations that have turned violent; in early May 2008, the BBC reported that troops opened fire to stop riots in the capital, killing at least two people and wounding four others.⁵⁰ Similar riots have broken out in Cameroon (24 dead, 1,500 arrested over food riots; worst unrest seen in 15 years); Haiti (five dead, including one UN peacekeeper; dismissal of Prime Minister Jacques-Édouard Alexis); and Côte d'Ivoire (one dead, 20 wounded; government suspends taxes on staple goods), among other countries.⁵¹

3) The mismanaged production of agricultural and marine commodities, as 'consumers' of key natural resources like water and land, can increase the risk of conflict over these increasingly scarce, key resources

Water has long been the subject of speculation when it came to predicting future scarcity conflicts. As a key agricultural input, the food security and economic stability of many

⁴¹ World Bank (2008) Food Price Crisis, <http://www.worldbank.org/html/extdr/foodprices/> accessed in 2008

⁴² World Bank (2008) Food Price Crisis, <http://www.worldbank.org/html/extdr/foodprices/> accessed in 2008

⁴³ World Bank (2008) Food Price Crisis, <http://www.worldbank.org/html/extdr/foodprices/> accessed in 2008

⁴⁴ FAO (2008) Crop Prospects and Food Situation, <http://www.fao.org/docrep/010/ah881e/ah881e02.htm> accessed in 2008

⁴⁵ World Bank (2008) '7 Lost Years – The Effect of Rising Food Prices on Poverty Reduction', <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:21728356~menuPK:51416191~pagePK:64257043~piPK:437376~theSitePK:4607,00.html> accessed in 2008

⁴⁶ UN FSAU (2008) "Rapidly Rising Food Prices and Deepening Drought: More than 2.6 Million People Are in Crisis", UN Food Security Analysis Unit-Somalia, April 30 2008 <http://www.fsasomali.org> accessed in 2008

⁴⁷ UN FSAU (2008)

⁴⁸ UN FSAU (2008)

⁴⁹ UN FSAU (2008)

⁵⁰ BBC (2008) "Two die in Somali currency riot", BBC News, 5 May 2008, <http://news.bbc.co.uk/2/hi/africa/7383746.stm>

⁵¹ Earth Policy Institute (2008) "Food Price Unrest Around the World", 16 April 2008, http://www.earth-policy.org/Updates/2008/Update72_data.htm#table1 accessed in 2008

countries crucially depends on the reliable supply of water. However history records very few international wars over scarce resources; despite fears of ‘water wars’ in the future, for example, a historical review reveals only one instance of an outright interstate water war, some 4,500 years ago.⁵²

This may not hold in the future. Homer-Dixon (1999) believes that in a context of population growth, increases in per capita consumption, persistent inequality, climate change and a host of unforeseen environmental challenges, the future will see more scarcity conflicts.⁵³ For water, he believes that interstate conflict will only arise under a narrow set of circumstances: “[the] downstream country must be highly dependent on the water for its national well-being, the upstream country must be able to restrict the river’s flow, there must be a history of antagonism between the two countries, and, most important, the downstream country must be militarily much stronger than the upstream country.”⁵⁴

This is an apt description of the riparian countries of the Syr Darya (see Case study 4). Upstream Kyrgyzstan controls the release of the waters from its Toktogul reservoir. Downstream Uzbekistan depends upon these timely releases for its cotton crop which, as mentioned, accounts for 60 per cent of its export earnings.⁵⁵ Uzbekistan is the larger nation, and has a stronger military.

While no violent conflict has broken out between the two countries over water resources, cooperation has been spotty. Kyrgyzstan altered its water release patterns from 1990–2005, leading to increased winter floods and summer droughts. Uzbekistan has withheld oil and gas transfers to its upstream neighbour, breaking a fuel-for-water barter agreement the countries annually renegotiate. Uzbekistan has carried out exercises that “look suspiciously like practice runs at capturing the Toktogul Dam in Kyrgyzstan,”⁵⁶ and one Uzbek official has stated that “Uzbekistan...will defend [itself] with whatever means necessary” if water supplies from the Syr Darya are cut.⁵⁷

For richer countries, water scarcity is less of an issue; their economies are typically not so dependent on agriculture and they can buy ‘virtual water’ in the form of food imports. But for poorer countries like Uzbekistan, this is less of an option. For them, agricultural resources are proxies for key natural resources like land and water, and should those inputs become increasingly scarce in the future, conflicts may emerge.

Land, another key agricultural input, also lay at the heart of the Ivorian conflict. The country’s generous land laws had initially attracted a large number of immigrant farmers from the neighbouring countries—particularly Burkina Faso, Mali and Togo. Under these laws, anyone who could put the land to productive use was eligible to buy Ivorian land, and many did, using that land for cocoa production. However the drop in international cocoa prices led many farmers to want to increase their production, in a time when exploitable land was increasingly scarce. This increased the competition for land while stoking ethnic tensions between Ivorians and the immigrant population.

⁵² Wolf, A., Yoffe, S. and Giordano, M. (2003) “International waters: Identifying Basins at Risk”, *Water Policy*, Vol. 5, 2003:29–60

⁵³ Homer-Dixon, T. (1999)

⁵⁴ Homer-Dixon, T. (1999)

⁵⁵ EJF (2005)

⁵⁶ International Crisis Group (2002)

⁵⁷ International Crisis Group (2002)

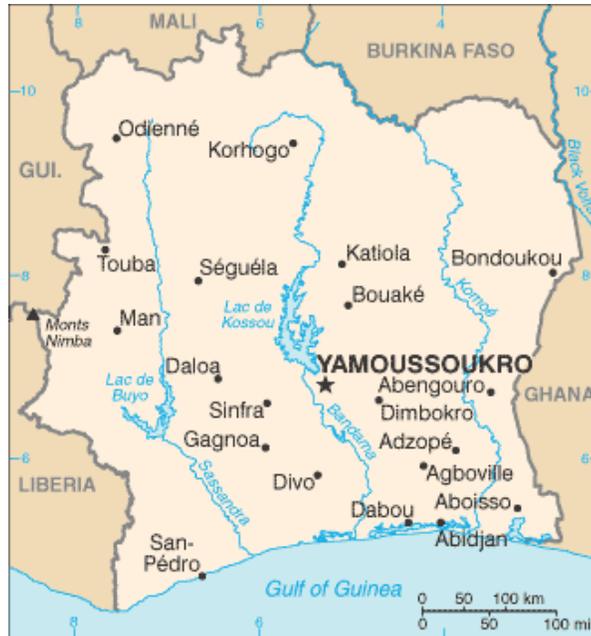
The following section will present the four case studies in more detail. Each is informed—to varying degrees—by some or all of the impacts laid out above.

Section 5 Case studies

Case study 1 Cocoa in Côte d'Ivoire

Background

Once one of West Africa's most stable and prosperous countries, Côte d'Ivoire's position has changed dramatically over the past two decades. During the 1980s, highly volatile world prices for cocoa, a major driver of the country's economy, kicked off a downward spiral into economic decline and social unrest that culminated in 2002 with ethnic violence and a civil war between government forces loyal to elected president Laurent Gbagbo, and the 'New Forces' (Forces Nouvelles, or FN), representing northern Muslims and immigrants. Although the civil war officially ended in 2003 with an accord that placed a buffer zone between North and South, sporadic attacks have continued on both sides. A rocket attack on Prime Minister Guillaume Soro's plane in late June 2007 underscored the country's continued fragility.⁵⁸



Source: CIA (2008)

Cocoa and the land on which it is grown lie at the heart of the Ivorian conflict.⁵⁹ Heavy dependence on cocoa revenues at the national and individual levels, combined with highly variable cocoa prices and declining land availability, drove a wedge between Ivorian groups in the country's South and the largely Muslim and immigrant groups from the North. These ethnic tensions and changes to land rights laws by the government eventually led to open conflict.

Ivorian cocoa dependence and price volatility

Côte d'Ivoire produced nearly 40 per cent of the world's cocoa in 2006.⁶⁰ Accounting for 30 per cent of total exports in 2005, cocoa is a major source of foreign exchange earnings and—through export taxes and levies—of revenue for the Ivorian government (See Figure 1). Accordingly, cocoa has long played a critical economic and political role in the country.

At the individual/household level, cocoa production serves as the primary source of income for roughly four million of Côte d'Ivoire's 16 million citizens. With cocoa producers accounting for large population shares, Ivorian leaders have long used policies

⁵⁸ Soro is the leader of the FN and Prime Minister in the current power-sharing government. The attack took place in FN-controlled territory, raising fears of renewed instability. Green, M. (2007) "Ivory Coast premier survives attack." *Financial Times*, 30 June 2007, p. 11

⁵⁹ Woods, D. (2003) "The tragedy of the cocoa pod: rent-seeking, land and ethnic conflict in Ivory Coast." *Journal of Modern African Studies*, 41:4

governing cocoa production for political gain. For example, Côte d'Ivoire's long-time president, Félix Houphouët-Boigny (1960–1993), used cocoa price support schemes to ensure his popularity among rural farmers.⁶¹

Dependence on a volatile commodity is a double-edged sword. High prices and expanding production meant a strengthening economy, but when cocoa prices became more volatile in the 1980s and 1990s, cocoa producers, migrant cocoa workers and the Ivorian government all felt the negative effects. This was due to the fact that the country relied almost exclusively on cocoa revenues to finance its expenditures, and these expenditures remained high as prices rose and fell dramatically with the increased volatility. As public debt rose, international finance institutions (IFIs) stepped in and asked for cuts in public expenditure (education, health, civil service), further eroding the quality of life.

By 2006, immigrants and migrant workers faced violence in many areas and had been stripped of their rights, internally-displaced persons numbered 500,000,⁶² the poverty rate had risen above 40 per cent and the government had fallen into a cycle of unsustainable debt.⁶³

Timeline of the conflict

A few key events help explain the current instability in Côte d'Ivoire:

Late 1980s Cocoa production begins to reach structural capacity as exploitable forest land is nearly depleted.⁶⁴ Simultaneously, world cocoa prices decline and stagnate.

September 2002 Failed coup attempt leads to civil war between the government and FN, as well as *de facto* partitioning of the country.⁶⁵

July 2003 President Gbagbo and the rebel group, the Forces Nouvelles (FN) declare peace, signing a peace agreement and formally ending the civil war.⁶⁶

September 2003 The FN pull out of the government, accusing President Gbagbo of not honouring the peace agreement.⁶⁷

December 2003 Continuing skirmishes, violence and human rights abuses by both – *December 2004* government forces and the FN.⁶⁸

March 2007 Power-sharing agreement signed between President Gbagbo and Guillaume Soro, head of the FN, who is then appointed prime minister.⁶⁹

⁶⁰ World Bank (2007) "Cocoa Market Brief", updated 27 April 2007, siteresources.worldbank.org/INTGLBPROSPECTSAPRIL/64218944-1111598207001/20911234/cocoa_EN.pdf

⁶¹ Losch, B. (2002) "Global Restructuring and Liberalization: Côte d'Ivoire and the End of the International Cocoa Market?", *Journal of Agrarian Change*. 2:2

⁶² Global Witness (2007)

⁶³ Woods, D. (2003)

⁶⁴ Woods, D. (2003)

⁶⁵ Global Witness (2007)

⁶⁶ Global Witness (2007)

⁶⁷ Global Witness (2007)

⁶⁸ Global Witness (2007)

Land as an instigator

For decades, Côte d'Ivoire's cocoa farms and generous land laws attracted immigrants from other West African countries, such as Burkina Faso, Mali and Togo. The Ivorian immigration and land rights policy at the time were focused on production, so anyone who could put land to productive use could buy Ivorian land. Immigrants from the surrounding countries, who came to make up nearly 40 per cent of Côte d'Ivoire's population,⁷⁰ did just that—often working on cocoa farms until they were able to buy small plots of their own.

As Côte d'Ivoire ran out of exploitable forest land during the 1980s, changes in land rights laws and low cocoa prices helped instigate social unrest. Virgin forest land provided higher yields (and thus lower average cost) than older plots that had been through multiple cocoa planting cycles.⁷¹ When virgin forest land became scarce and cocoa prices bottomed out during the 1980s and 1990s, the only way for cocoa producers to turn a profit was to work more land with less labour.⁷² Their incomes have also been adversely affected—since 2000—by an increase in the number and level of levies and taxes imposed by the government.

At the same time, the entire Ivorian economy, heavily dependent on the cocoa trade, began to stagnate. A lack of opportunity in the cities brought young males back to their villages, where they led efforts to stop the sale of family and/or community property and frequently clashed with local immigrant populations.⁷³ Beginning in 1993 the Ivorian government, led by President Bedié, began to shift away from previously flexible citizenship policies, forcing through new laws that stripped immigrants of the rights to vote and own land.

During ensuing administrations, the idea of nationalism, or 'Ivoirité', continued to be a focus, eventually extending beyond immigrant populations to Muslim citizens in the north of Côte d'Ivoire.⁷⁴ Increasingly marginalized, forced out of their own fields, and subject to ethnic violence, it was only a matter of time before immigrant groups and Muslims in the north fought back.

Funding a war with chocolate

According to a June 2007 report by Global Witness, the cocoa trade has been sustaining the abilities of the government and the FN to carry out military operations. According to the UN Panel of Experts on Côte d'Ivoire, cocoa institutions, such as ARCC, BCC and FDPCC⁷⁵—only one of which is a government entity—have purportedly passed on US\$20.3 million in cocoa levies paid by exporting companies to the government for the war effort since 2002.⁷⁶ This transfer falls far outside of the organizations' mandates, which are to support the cocoa sector. Furthermore, the government has reportedly used

⁶⁹ Global Witness (2007)

⁷⁰ Pitman, T. "Cocoa Booms in Divided Land; Ivory Coast is Industry Leader, Despite Five Years of Conflict.", *The Washington Post*, 1 January add year

⁷¹ Woods, D. (2003)

⁷² Woods, D. (2003)

⁷³ Woods, D. (2003)

⁷⁴ Woods, D. (2003)

⁷⁵ The Autorité de Régulation de Café et du Cacao, the Bourse du Café et du Cacao and the Fond de Développement et de Promotion des Activités des Producteurs de Café et Cacao

⁷⁶ Global Witness (2007)

at least US\$38.5 million in government cocoa revenues for military supplies since 2002, although a lack of transparency makes this fact difficult to ascertain.⁷⁷

Meanwhile, the FN controls approximately 10 per cent of Ivorian cocoa exports and uses a transport tax system to finance its military operations. Global Witness estimates that the FN has derived an average of US\$30 million per year from cocoa since 2004.⁷⁸ Despite taking in tax revenues as a sort of *de facto* government, the FN offers practically no public services and refuses to report on how it uses its cocoa revenues.⁷⁹ The rebels have also blocked the transport of cocoa to the country's ports in the south, where the government would otherwise benefit from taxing the exports; cocoa is instead diverted through Burkina Faso to Togo for export from the port at Lomé.⁸⁰

Revenue from cocoa reduces the incentive for the Ivorian government and FN to completely resolve the conflict. Despite a peace deal in 2003, the country is still partitioned into north and south. Meanwhile the status quo offers opportunities for corruption and personal enrichment that may contribute to the lack of progress. In the FN-controlled north, regional commanders run extortion/protection rackets, demanding that trucks carrying cocoa and other export goods pay 'escort fees' for protection in FN territory.⁸¹ Government activities in the sector are only slightly more transparent than FN operations; according to Global Witness, repeated domestic and EU attempts to audit the legal and financial operations (including levies and transfers) of the private and public cocoa institutions have met with little cooperation both from the government and those institutions.⁸²

⁷⁷ Global Witness (2007)

⁷⁸ Global Witness (2007)

⁷⁹ Global Witness (2007)

⁸⁰ Global Witness (2007)

⁸¹ Global Witness (2007)

⁸² Global Witness (2007)

Case study 2 Banana production and trade in Somalia

Background

When President Siad Barre fled Mogadishu on the evening of January 26, 1991, the state his regime had supported for 22 years effectively collapsed. Falling into the hands of a collection of warlords, Somalia became a country of lawlessness, perpetual civil conflict and economic ruin. Over the next two years, 280,000 people are estimated to have died, from a mix of civil strife, drought and starvation.⁸³



Source: BBC (2007)

In the following years, despite a general state of anarchy and great human suffering, some did manage to reap significant economic benefit from the situation, and did so in part thanks to an unlikely source: bananas. In the absence of a formal government and in what amounted to an economic free-for-all, certain groups—primarily those with power, backed by arms—profited from the war-time production and trade in bananas. Some of these revenues went towards personal enrichment; others were reinvested to perpetuate the conflict. This was made possible—in part—by the obstructability of the crop, by the presence of reliable markets and by the complicity of multinational corporations involved in Somalia’s banana trade, who by paying export levies and taxes contributed to funding the conflict in the 1990s.⁸⁴

The Somali banana trade

Banana production in Somalia is concentrated in the Lower Shabelle region in the south of the country.⁸⁵ Italian settlers first began cultivating the fruit there in 1919, building irrigation infrastructure along the Shebelle River to take advantage of its fertile valley. At first, producers were in a good position; Italy had imposed tariffs on all non-Somali bananas, thereby guaranteeing the country’s producers an export market. However this had the perhaps unintended effect of discouraging competitiveness and investment in the sector.⁸⁶

Italian settlers began to leave the country with its independence in 1960. Following the assassination of President Abdirashid Ali Shermarke in 1969, Barre took power and quickly moved to change the structure of the sector. Banana production and the export trade were nationalized, and unclassified and communal lands were expropriated under the 1975 land reform program. Initial production increases rapidly gave way to the sector’s decline; land under cultivation and production yields began to drop for a number of reasons, among them a decrease in plantation farming expertise with the departure of Italian settlers; increased soil salinity due to inefficient drainage systems; and low fertilization application.⁸⁷

⁸³ Hansch, S. et al. (1994) *Lives Lost, Lives Saved: Excess Mortality and the Impact of Health Interventions in the Somalia Emergency*, Refugee Policy Group, Washington, DC

⁸⁴ Webersik, C. (2005)

⁸⁵ Lower Shabelle falls within what remains of the Somali state, i.e., outside of Somaliland (which in 1991 declared itself independent, but has not been recognized any other state) and Puntland (which has declared itself autonomous, also without international recognition).

⁸⁶ Webersik, C. (2005)

⁸⁷ Webersik, C. (2005)

Structural adjustment policies in the early 1980s improved the sector's outlook; transportation networks, market links, credit access and fuel prices all moved in favour of banana producers, and productivity subsequently increased. However the privatization of public assets under the structural adjustment programme also bred corruption, as insiders and elites close to Barre grabbed land and moved to control the sector.⁸⁸ Nevertheless, by the end of 1990, bananas had become the second largest agricultural sector in the country after livestock: US\$25.6 million in exports accounted for 30 per cent of Somalia's total export earnings, and the sector employed an estimated 10,000 people.⁸⁹

Taxing the banana trade

"In the past, land was seized with the pen, today, land is seized at gunpoint"
Prominent Bimal woman⁹⁰

By August 1992, the situation had changed dramatically; conflict had overwhelmed the country and 1.5 million Somalis were threatened with starvation, and a further 4.5 million suffering from acute malnutrition.⁹¹ Companies (including Somalfruit) had left the country due to insecurity and banana production had been suspended. Abandoned farms and irrigation systems were either looted or deteriorated, and land was expropriated throughout the south through violence and without fair compensation. Irrigation systems were further damaged by the farmers themselves, who destroyed the systems to prevent militias from controlling and taxing their irrigation water. Newcomers, having seized land illegally, often lacked the skills required to make it productive, ruining many plantations. As the conflict progressed, productive lands went fallow and irrigation infrastructure became scarce. This artificial scarcity of land and water resources exacerbated tensions.⁹²

These local-level conflicts over agricultural lands undoubtedly had an effect on the rural population of Lower Shabelle: farms were lost and lives were uprooted by violence. However the contribution of the banana sector to the perpetuation of the conflict in Somalia differed from the resource-based conflicts in some other African countries in the 1990s. As Grosse-Kettler (2004) states, "[in] many war economies in sub-Saharan Africa, including DRC, Liberia and Sierra Leone, resources such as coltan, diamonds and gold are fuelling the conflict; control and exploitation of local assets means a monopoly on its profit. In Somalia, in contrast, there is no *strategic* resource as such."⁹³

Instead, warlords quickly learned that higher profits could be made by controlling not the production but the export of bananas. As the UN Panel of Experts on Somalia stated, "[f]ighting in Somalia typically centers on the control of property or income generating infrastructure, such as harbours, airports, markets, bridges or road junctions that can be taxed."⁹⁴ The ease with which militias could obstruct the crop from reaching its markets meant that whichever group controlled the points of export would also be able to extract significant profits from its trade—given the presence of trading partners and reliable

⁸⁸ Webersik, C. (2005)

⁸⁹ Webersik, C. (2005)

⁹⁰ Webersik, C. (2005)

⁹¹ Debiel, T. (2003) UN-Friedensoperationen in Afrika. Weltinnenpolitik und die Realität von Bürgerkriegen. Sonderband der Stiftung Entwicklung und Frieden, Dietz, Bonn, cited in Grosse-Keller (2004)

⁹² Webersik, C. (2005)

⁹³ Grosse-Kettler, S. (2004)

⁹⁴ UN (2003) "Report of the Panel of Experts on Somalia pursuant to Security Council resolution 1425 (2002)", United Nations, March 2003, New York

export markets. For Somalia's bananas, the primary exit points were the ports of Mogadishu and of the city of Merca, in Lower Shabelle.

Obstructable resources and trading partners

"What's happening in Mogadishu is not a political war. It's purely an economic war. A war sparked by an attempt to control the port of Merca and Somalia's lucrative banana trade."
Former Somali Ambassador to Kenya⁹⁵

In 1994, banana production resumed despite the ongoing conflict, and the American multinational corporation Dole entered the market via a subsidiary company (Sombana). This challenged De Nadai's near-monopoly, which at the time was estimated to be worth US\$100 million.⁹⁶ That same year General Mohamed Farrah Aideed, the warlord who drove Barre from Mogadishu, clashed with the rival Hawadle clan for control of the export market and Merca's port.⁹⁷ Once he gained control of the port, Aideed was free to tax all banana shipments leaving Merca; Webersik (2005) reports that Aideed received US\$0.05 per 12.5kg shipment from Dole's subsidiary when exports resumed, and US\$0.04 by 1996 when the company shut down its Somali activities.⁹⁸ Webersik estimates that, given the volume of exports, this banana taxation amounted to a monthly income of US\$150,000, with which Aideed would be able to partially fund the activities of his militia—which bore a price tag of US\$40,000 per week.⁹⁹

Little (2003) notes that the reason "(why) trade figures so prominently in recent events in Somalia relates to the fact that (1) its economy has always been external and market-oriented, and (2) the current statelessness promotes an excessively open and unrestricted economy."¹⁰⁰ Political and economic instability in Somalia created an atmosphere in which profits could be made by whomever controlled the economy's access points; it is therefore unsurprising that warlords like Aideed fostered that instability to maintain their economic lifelines. With a stable government in place, individuals would not have been able to tax exports for their own gain. One of Aideed's rivals, the warlord Ali Mahdi, shut down the deep sea port at Mogadishu in 1995 when it became clear that he could not extract taxes from either exporting company. Heavy fighting broke out in Merca in 1996 when competing warlord Osman Hassan Ali Atto demanded a share of Aideed's banana-tax profits.¹⁰¹

"Injustice was the main accentuating (force) but now (it) appears as if it is a resource conflict"
A Somali employed by the World Bank, November 2002¹⁰²

Banana production picked up under the competition between the local subsidiaries of Dole and De Nadai, reaching 80 per cent of pre-war production in 1997.¹⁰³ However by operating in an insecure environment, the two MNCs opened themselves up to further financial exploitation. Warlords were able to extract cash from both companies by charging them for security; Webersik reports that Aideed charged Dole subsidiary

⁹⁵ Nduru, M. (1996) "No End in Sight to Banana War", NomadNet, 24 April <http://www.netnomad.com/banana.html> accessed in 2007

⁹⁶ Webersik, C. (2005)

⁹⁷ Webersik, C. (2005)

⁹⁸ Webersik, C. (2005)

⁹⁹ Norfolk Education and Action for Development Centre (1995)

¹⁰⁰ Little, P. (2003) *Somalia: Economy without State*, James Currey Publishers, Oxford, cited in Grosse-Kettler (2004)

¹⁰¹ Webersik, C. (2005)

¹⁰² Webersik, C. (2005)

¹⁰³ Marchal (1997)

Sombana for protection when operating in the region's riverine areas.¹⁰⁴ Both firms are reported to have employed militias for securing shipments to ports, and at times these militias even clashed.¹⁰⁵ In early 1995, shots were fired at Dole's staff lodgings, fighting broke out between the companies' militias at the Mogadishu port, and heavy machine-gun fire was directed at a Dole freighter.^{106,107} In fact by 1996 the high costs of maintaining its militia forced Dole to exit the Somali market altogether.¹⁰⁸

In the absence of a functioning government, Somali warlords could continue to profit from instability as long as export markets remained within their reach. During the 1990s, Europe was their principal market. Speaking of the Somali banana trade, a UN Security Council spokesperson noted that "(the) fact that the European Union provides preferential market access to African banana suppliers makes the business quite profitable, which is why there have been recent confrontations to gain control of the area and consequently to monopolize the export market."¹⁰⁹ A 1997 WTO ruling reduced the preferential trade agreements that existed between the two markets, and as demand from the EU dropped due to the liberalization of import markets and the repeal of EU-ACP import quotas in 2006—not to mention the continued insecurity—70 per cent of Somalia's banana trade collapsed and has remained down.¹¹⁰ However clashes for the port of Merca in 2003 signalled that groups were still trying to control trade to export markets beyond Europe, this time to the Middle East.¹¹¹

Bananas were not the driving force of the conflict in Somali, nor did their production or trade spark the hostilities. However, as Grosse-Kettler (2004) argues, the general anarchy of the country has ensured that "(when) purchasing exports from Somalia, profit goes into private hands and not in official budgets or industrial agencies."¹¹² These private hands were typically those of warlords, and their profits—some of which came from the banana trade—went towards personal enrichment or were reinvested to perpetuate the conflict from which they were profiting.

¹⁰⁴ Webersik, C. (2005)

¹⁰⁵ Norfolk Education and Action for Development Centre (1995)

¹⁰⁶ ION (1995)

¹⁰⁷ Webersik, C. (2005)

¹⁰⁸ Grosse-Kettler, S. (2004)

¹⁰⁹ UN (2004) "Letter dated 11 August 2004 from the Chairman of the Security Council Committee established pursuant to resolution 751 (1992) concerning Somalia addressed to the President of the Security Council", UN Security Council, S/2004/604

¹¹⁰ Webersik, C. (2005)

¹¹¹ Webersik, C. (2005)

¹¹² Grosse-Kettler, S. (2004)

Case study 3 Fisheries and warlords in Somalia

*“The roots of the crisis are profoundly parochial and have more to do with practical power, prestige and clan issues than ideology.”*¹¹³

International Crisis Group

Background

As is evident from the previous case, Somalia barely exists as a functioning state. It has not had an effective government since 1991,¹¹⁴ and has been controlled by various warlords for the majority of the time since then. A Union of Islamic Courts took control of the majority of the south of the country in 2006 and brought a degree of peace and stability not seen in Mogadishu for years. Forces loyal to the weak transitional government, with the backing of troops from neighbouring Ethiopia, seized control from the Islamists at the end of 2006. A surge in violence ensued. The current transitional government is the fourteenth attempt to set up a government in the country since 1991.

Conflict fish

*“Some people have suggested that (Somalia) could end up looking like the tribal lands of Afghanistan. Maybe, but there is one saving factor. Unlike Afghanistan, which has opium (and Iraq which has oil), the Horn has little of economic value to fuel a war: its frontline, after all, can barely keep a cow alive.”*¹¹⁵

The Economist, 2006

By 2006, the Somali banana trade had shrunk considerably. And while the *Economist* painted a gloomy picture of Somalia’s prospects, we feel it is wrong in implying that hope for the region’s future lies in its lack of resources. For as the potential for the banana trade to fund Somalia’s conflict dried up, those involved in the conflict looked elsewhere: to Somalia’s rich fishing grounds. The country has the longest coastline in Africa, and a seasonal upwelling of nutrients that sustains huge numbers of fish.¹¹⁶

The fishing industry has funded some of the country’s most notorious warlords, who have issued false fishing licences to foreign fishing interests, including European companies. According to the UN Expert Panel on Somalia¹¹⁷ “All the attempts at managing the Somali fisheries have resulted in a great deal of money—millions [of dollars] over the past 10 years—being paid into the private hands of the faction leaders, allowing for personal enrichment and to some extent the payment and re-supply of private militias.”¹¹⁸ Some fishing permits have been typed out on the previous government’s letterhead while others bear the personal seals of warlords.¹¹⁹ Some owners or operators of fishing vessels have stated that they negotiate the licences before coming

¹¹³ ICG (2006) “Can the Somali crisis be contained?” 10 August 06

<http://www.crisisgroup.org/home/index.cfm?id=4333&l=1>

¹¹⁴ Though Somaliland has declared itself to be independent and Puntland has declared itself autonomous, neither entity has any international recognition. They both have a more stable form of government than that described here for the rest of Somalia.

¹¹⁵ Economist (2006) “The path to ruin – the Horn of Africa” *The Economist*, 12 August 06

¹¹⁶ UNEP (2005) *The state of the environment in Somalia: a desk study*, United Nations Environment Programme,

http://www.unep.org/depi/programmes/Somalia_Final.pdf

¹¹⁷ A series of UN Expert Panels (subsequently known as UN Monitoring Groups) were mandated by the UN Security Council to gather information on violations of the UN arms embargo.

¹¹⁸ UN (2003) “Report of the UN Expert Panel on Somalia”, 25 March 2003, S/2003/223

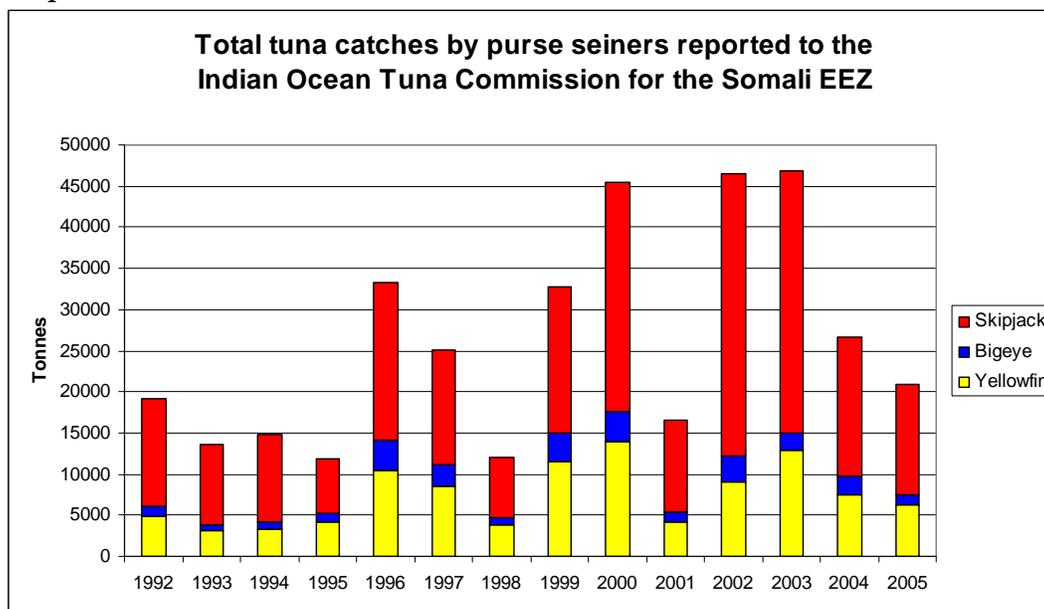
¹¹⁹ UN (2006) “Report of the UN Monitoring Group on Somalia”, 4 May 2006, S/2006/229

to Somali waters; others make their way to Somali ports in the hope of making some sort of arrangement with the local warlord for commercial quantities of fish.¹²⁰

The number of vessels fishing in Somali waters and potentially in need of such ‘licences’ is large. The Food and Agriculture Organisation (FAO) estimates that in 2005 there were 700 foreign-owned vessels engaged in unlicensed fishing in Somali waters.¹²¹ The UN Monitoring Group, which refers to Somali waters as a “free for all among the world’s fishing fleets”,¹²² suggests that there can be 500 vessels off of the country’s coast in any one season.¹²³ There are said to be so many ships off some stretches of the Puntland coast that the glow from their combined lights at night can be mistaken for a well-lit city.¹²⁴

The amount of fish caught by these vessels is significant. Graph 1 shows the *reported* tuna catch of purse seiners (a specific type of fishing boat) inside Somali waters for years in which there was no functioning Somali government and consequently no authority from which vessels could obtain legal fishing licences.¹²⁵ These figures amount to 5–10 per cent of the total *reported* Indian Ocean tuna catch. The total figure, including the unreported catch and species other than tuna, is likely to be considerably higher.

Graph 1



Source: Indian Ocean Tuna Commission

The map below shows the *reported* tuna catch by purse seiners between 1990 and 2002 in the western Indian Ocean, which is likely an underestimation of the actual catch. It can

¹²⁰ Report of the UN Monitoring Group on Somalia. 4 May 2006. S/2006/229

¹²¹ According to the FAO, Spanish, Italian and Greek boats (as well as many non-European boats) have been fishing in Somali waters. FAO, Fishery Country Profile. January 2005

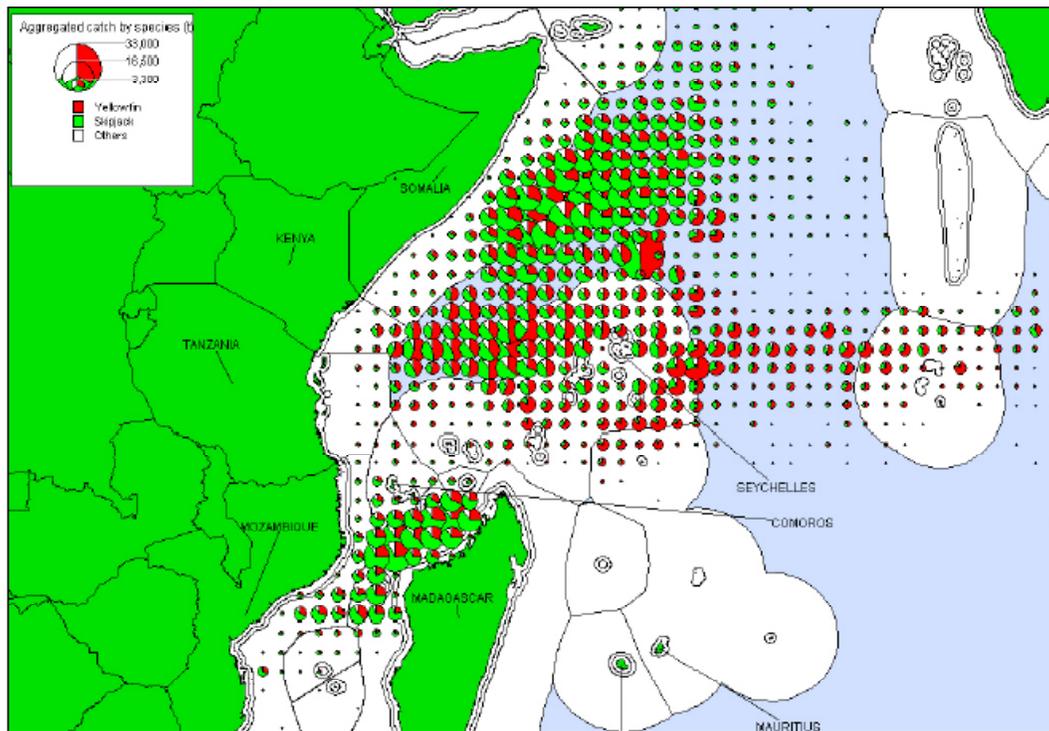
¹²² UN (2003) “Report of the UN Expert Panel on Somalia”, 4 November 2003, S/2003/1035

¹²³ Report of the UN Monitoring Group on Somalia. 4 May 2006. S/2006/229

¹²⁴ Kulmiye, A. (2001) “Militias or Trawlers: Who is the Villain?”, *The East African*, 9 July

¹²⁵ Data from the Indian Ocean Tuna Commission; graph prepared by MRAG. Presented are purse seiner catch data for one degree squares. For squares which overlap the edge of the Somali EEZ, it has been assumed that the catch was evenly spread throughout the square

clearly be seen that a substantial number of tuna, of different varieties, were caught in Somali waters.



Source: Marine Resources Assessment Group, 2005¹²⁶

Fishing in Somali waters is highly lucrative. Hart Nimrod, an offshoot of a British private military company, estimates that each international purse-seiner, longliner and trawler catches US\$2 million of tuna per month.¹²⁷ This matches an estimate from the Marine Resource Management Project Somalia, a Somali NGO, which says that in 75 days of fishing, each ship catches up to 420 tonnes of fish, worth roughly US\$6.3 million.¹²⁸ With hundreds of foreign vessels fishing in Somali waters every month, hundreds of millions of dollars—possibly billions if the higher estimates are used—of tuna are caught in Somali waters each month during the August to November tuna season.¹²⁹ The fact that vessels continue to fish in Somali waters, given the high risk of piracy and kidnapping-for-ransom, is further indication of how lucrative the trade is.

Fishing is not the only lucrative business in the region; fishing licences have also generated millions of dollars for Somali warlords since 1991. The UN Monitoring Group says that a fishing permit issued by ‘Jubbaland State’ costs US\$80,000, and that fishing permits in 2006 cost as much as US\$150,000 per year per boat.¹³⁰ This has generated ‘considerable’ funds for the warlords—“millions of dollars over the last decade” (1993–2003), and that “much of the money is used to pay militias and procure arms and

¹²⁶ Map taken from MRAG “Review of impacts of illegal, unreported and unregulated fishing on developing countries”, July 2005, p.140. “Total aggregate catch of yellowfin and skipjack tunas (one degree squares) by purse seine vessels in the Indian Ocean 1990-2002” (Source: ICCAT purse seine catch and effort data).

¹²⁷ Hart Nimrod (2001) “Africa’s fishing crisis”, letter to *African Business*, January 2001

¹²⁸ Somali Centre for Water and Environment (1999) “Local fishermen battle foreign trawlers”, 26 March 1999 <http://www.somwat.com/fishmen.html>

¹²⁹ IOTC (2001) *Indian Ocean Tuna News*, Indian Ocean Tuna Commission, January–March 2001, http://www.iotc.org/files/iotn/IOTN_2-6_E.pdf

¹³⁰ UN (2006)

ammunition” for private militias.¹³¹ In 2006, the Monitoring Group listed fishing licences and charcoal as being the two key revenue generators for what they euphemistically call the ‘local administrations’ (i.e., warlords) in Lower Juba, Lower Shabelle and Middle Shabelle.¹³²

One way in which the licensing has funded warlords is through a company called Africa Fisheries Management (Afmnet). According to the UN Expert Panel, Afmnet licensing profits were funnelled into the account of warlord Hussein Ali Ahmed (the ‘Mayor of Mogadishu’), who then distributed them to five other warlords: Hussein Aideed, Ali Mahdi, Abdullahi Yusuf, Mohamed Abshir and General Morgan.¹³³ Despite the fact that these men represent the main opposing factions in Mogadishu, Afmnet has brought together battlefield enemies to cooperate in order to split the profits from the fish ‘licensing’.¹³⁴

Further funding can be gained by warlords through ransoms; Somali waters have been classified as some of the world’s most dangerous by both the International Maritime Bureau and the International Maritime Organisation.¹³⁵ The UN Monitoring Group said that the fishery situation along the Puntland coast sometimes resembles naval warfare, and that fishing boats are typically mounted with heavy anti-aircraft cannons and that many of the crews are armed.¹³⁶

The UN Monitoring Group recommended in 2005 and 2006 that the Security Council impose sanctions on fish from Somalia; so far none have been imposed. As such, these conflict resources pose a significant threat to international peace and stability and remain linked to gross human rights abuses.

¹³¹ UN (2003b)

¹³² UN (2006)

¹³³ UN (2003b)

¹³⁴ Afmnet itself admits generating revenue of US\$600,000 to US\$1 million per year from 1996 to 1998, and about US\$300,000 in 2002 (UN 2003b). It has been reported that fees were originally set at US\$30,000 for the four-month fishing season (Africa Analysis 1998).

¹³⁵ Kulmiye, A. (2001)

¹³⁶ UN (2003c)

Case study 4 Cotton in Central Asia

Background

“The cotton monoculture is more destructive to Central Asia’s future than the tons of heroin that regularly transit the region.”

International Crisis Group, 2005¹³⁷

In 1991, the Soviet Union collapsed. By Christmas of that year, five new independent states had been recognized in Central Asia: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. Among other things, independence meant that for these new countries, resources that were once communal no longer were, and orders from Moscow no longer held. For a regional economy built on irrigated agriculture, particularly cotton, cooperation on shared water resources and agricultural inputs would be crucial to ensuring economic and political stability for Central Asia.

As waters once considered internal became international, the new states were faced with overnight changes in the management of a highly strategic resource. For example, Uzbekistan found upon becoming an independent state that 91 per cent of its water resources originated outside of its new territorial borders; for Turkmenistan, this figure was 98 per cent.¹³⁸ In all, 18 transboundary rivers were now shared between the Central Asian states, and with their neighbours.¹³⁹

Principal among these are the Syr Darya and the Amu Darya. Both rivers flow towards the Aral Sea, with the Syr Darya rising in the Tian Shan Mountains of Kyrgyzstan and flowing through Uzbekistan and Kazakhstan, and the Amu Darya flowing along the Afghan/Tajik border before entering Turkmenistan and finally Uzbekistan.



Source: Musser (2008)

Kyrgyzstan and Tajikistan account for only 20 per cent of the Aral Basin’s land area, but 80 per cent of the basin’s water is generated on their territory.¹⁴⁰ Despite being rich in water resources, both countries practise less agriculture than their downstream neighbours, and neither is rich in fossil fuels. By contrast, Uzbekistan, Turkmenistan and Kazakhstan are much bigger countries, each rich in energy sources and more dependent on irrigated agriculture—for which they rely on water flow management in the upstream countries.

¹³⁷ International Crisis Group (2005)

¹³⁸ Weinthal, E. (2006)

¹³⁹ Weinthal, E. (2006)

¹⁴⁰ International Crisis Group (2002)

Water problems

Water is one area of potential conflict surrounding cotton cultivation in the region. In the absence of transfers from Moscow, the Central Asian states had to ensure their own food security. They also needed to increase their export earnings. The initial solution to both problems was to increase the extent of irrigated agriculture. Cotton was already a mainstay of the regional economy; Central Asia was responsible for 90 per cent of Soviet cotton cultivation.¹⁴¹ To produce this thirsty crop required a substantial Soviet investment in irrigation infrastructure, especially given the aridity of the region. As a result, 84.9 per cent of cropland in Uzbekistan is still irrigated; for Turkmenistan, that figure is 79.4 per cent; for Kyrgyzstan, 76 per cent; and for Tajikistan, 68.3 per cent.¹⁴² Only Kazakhstan approaches the European average of 11.2 per cent. Cotton production therefore translates into a significant contribution to the national economies: it accounts for eight per cent of GDP in Kazakhstan, 23 per cent in Tajikistan, 25 per cent in Turkmenistan, 35 per cent in Uzbekistan and 39 per cent in Kyrgyzstan.¹⁴³

Water conflicts were expected by many following independence, given this dependence on agriculture. This is not so much an issue of absolute scarcity of water; the region has enough to meet its needs at the moment. However, from the 1960s onward, decayed irrigation infrastructure and poor management resulted in substantial waste, and meant that, by 2002, the Central Asian states were using 50 per cent more water than they required.¹⁴⁴ Over time this unsustainable model led to the shrinking of the Aral Sea, one of the century's great environmental disasters.

By the 1970s, so much water was being inefficiently diverted from the Syr Darya for irrigation that it no longer reached the Aral; by the late 1980s, the same was true of the Amu Darya.¹⁴⁵ Without the water of its two primary rivers to feed it, the Aral shrank dramatically: once the world's fourth-largest lake, its volume decreased by two-thirds, its surface area was cut in half and water levels dropped 15m.¹⁴⁶ Salinity levels tripled and pollution increase substantially due to fertilizer and pesticide runoffs. In time the Aral split into two smaller lakes. This destroyed the livelihoods of the 3.5 million people who lived near the Aral Sea.

The Aral Sea crisis alerted the world to the issue of water in Central Asia, and gave many reason to worry over the ability of these new states to peacefully manage shared water resources immediately following independence; localized conflicts were already festering along the Kyrgyzstan-Tajikistan border and the Kyrgyzstan-Uzbekistan border.¹⁴⁷ Despite this, the five countries did come together in 1992 to form the Interstate Commission for Water Coordination (ICWC), an institution designed to determine water usage levels for the individual states and for the region as a whole. And in 1992 they came together to sign a water-sharing agreement based on the previous Soviet allocations. However this agreement did not include a dispute resolution mechanism, and simply enshrined the downstream water rights of Uzbekistan and Turkmenistan, in the interest of maintaining irrigation schemes for cotton.¹⁴⁸

¹⁴¹ Weinthal, E. (2006)

¹⁴² World Bank (2007) *Little Green Data Book*, World Bank, Washington DC

¹⁴³ World Bank (2005) *World Development Indicators*, <http://devdata.worldbank.org/wdi2005/index2.htm>

¹⁴⁴ International Crisis Group (2002)

¹⁴⁵ Rakhimov, E. (1990) *Sotsialno-ekonomicheskie problemy Arala i Priaralia*. FAN.

¹⁴⁶ Weinthal, E. (2006)

¹⁴⁷ Weinthal, E. (2006)

¹⁴⁸ Weinthal, E. (2006)

Under such a scheme, upstream countries (Kyrgyzstan and Tajikistan) are, according to Erika Weinthal, “less likely to abide by water allocations that perpetuated a regional economic system based upon cotton monoculture.”¹⁴⁹ No longer beholden to commands from Moscow, these water-rich countries began to reassess their situation.

For the countries downstream on the Syr Darya, the cotton harvest depended on the release of water from Kyrgyzstan’s Toktogul reservoir in the summer. According to post-independence barter agreements, in return for managing this release, energy-poor Kyrgyzstan would receive a certain amount gas and coal from Uzbekistan and Kazakhstan. This barter agreement continued immediately after independence. However within a few years, Uzbekistan—no longer receiving energy transfers from Russia—began to think about becoming energy self-sufficient. The country increased production for domestic consumption and began to charge world prices for energy exports to Kyrgyzstan. As Kyrgyzstan lacked the hard currency needed to buy the energy, this resulted in energy shortages in the winter.¹⁵⁰

This pushed Kyrgyzstan, a water-rich country, to consider its options for generating hydroelectricity. To increase its energy generation, however, would disrupt the schedule of water releases from the Toktogul: more would be released in the winter, less in the summer, thereby running against the seasonal water requirements of the cotton farmers downstream. From 1990 to 2000, water releases from the reservoirs on the Naryn (a tributary of the Syr Darya, upon which the Toktogul reservoir lies) declined in the summer months from 75 per cent of the annual discharge to just 45 per cent, with winter discharges increasing in the opposite direction.¹⁵¹ When Kyrgyzstan runs its hydro plants in the winter, the downstream population in the Fergana Valley has experienced winter floods and summer droughts; these actions could inflame tensions in the most ethnically diverse and densely populated part of Central Asia.¹⁵²

Any reduction in summer flows will have a significant impact on Uzbekistan’s cotton production. And while the energy issue was finally brought into water negotiations between the riparian states of the Syr Darya in 1998, cooperation remains spotty: Uzbekistan still periodically cuts its gas deliveries to Kyrgyzstan, and in 2003 and 2004 the riparian countries were unable to conclude their annual water agreements due, in large part, to Uzbekistan’s increasingly unilateral stance on water management.¹⁵³

Threats to water supply and cotton cultivation could stoke conflict. Uzbekistan, which has the largest military presence in the Syr Darya’s Fergana Valley, has carried out exercises that, according to the Brussels-based International Crisis Group (ICG), “look suspiciously like practice runs at capturing the Toktogul Dam in Kyrgyzstan.”¹⁵⁴ In 1996 a report released by the Royal Institute for International Affairs suggested that the country would be willing to use military force to seize the dam if its water security was threatened.¹⁵⁵ Echoing this, one Uzbek official noted to the ICG that “Uzbekistan,

¹⁴⁹ Weinthal, E. (2006)

¹⁵⁰ Weinthal, E. (2006)

¹⁵¹ World Bank (2004) *Water energy nexus in Central Asia: Improving regional cooperation in the Syr Darya basin*, World Bank, Washington, DC

¹⁵² Weinthal, E. (2006)

¹⁵³ Abbink, K., L.C. Moller and S. O’Hara (2005) “The Syr Darya River Conflict: An Experimental Case Study”, *CeDEX Discussion Paper No. 2005-14*, The University of Nottingham

¹⁵⁴ International Crisis Group (2002)

¹⁵⁵ Horsman, S. (2001) “Water in Central Asia”, Roy Allison, Lena Jonson (eds.), *Central Asian Security: The New International Context*, RIIA, London, p. 76 cited in ICG (2002)

Tajikistan and Kazakhstan will defend themselves with whatever means necessary” if water supplies from the Syr Darya are cut.¹⁵⁶

Cotton conflicts

“Everyone says that cotton is the wealth of the nation. But it's not our wealth. It's our curse.”
Human rights activist in Samarkand, Uzbekistan¹⁵⁷

The nature of the cotton industry in Central Asia also holds the potential to cause tensions and drive conflict.

Cotton was initially cultivated in Central Asia to reduce the Soviet Union’s reliance on imports. Investments were made to expand cultivation regardless of the environmental and social impacts.¹⁵⁸ Production remained high after independence; for the 2004/2005 season, the region accounted for 6.5 per cent of the total world production and 15.4 per cent of the world’s cotton exports.¹⁵⁹ As a result, the region has become heavily dependent on the crop: cotton accounts for 25 per cent of Turkmenistan’s GDP and employs half of the country’s labour force; it makes up 60 per cent of Uzbekistan’s export earnings; and is grown on 40 per cent of Tajikistan’s arable land.^{160,161}

The ICG reports that the countries in the region that are most heavily reliant on cotton cultivation remain the most politically closed; in contrast, Kyrgyzstan and Kazakhstan have both experienced more progress on economic reforms, and have seen more open political systems emerge.¹⁶² Uzbekistan and Turkmenistan, on the other hand, both wield a significant degree of top-down control over cotton cultivation, harkening back to the Soviet system.

In Uzbekistan, the region’s largest producer, farmers have no permanent control over the land they farm, and no real choice in the crops they grow or to whom they sell their produce and at what price.¹⁶³ Land can be confiscated from the farmers by the state—usually as punishment for not growing enough cotton.¹⁶⁴ The ICG reports that millions of rural poor work for little or no reward on the crop, and that forced and child labour are still common, with school children required to spend up to two months in the fields at harvest time.¹⁶⁵

Once the harvest is in, the crop is bought from the farmers at artificially low prices set by the state; for example, farmers in Uzbekistan will earn US\$50–80 per tonne of cotton, compared to US\$250–320 in Kyrgyzstan.¹⁶⁶ The state then sells the cotton on the world market for significant profit. Unsurprisingly, this repressive structure and unfair pricing scheme generates grievances among the rural population. As the ICG notes,

¹⁵⁶ International Crisis Group (2002)

¹⁵⁷ International Crisis Group (2005)

¹⁵⁸ International Crisis Group (2002)

¹⁵⁹ International Crisis Group (2005)

¹⁶⁰ International Crisis Group (2002)

¹⁶¹ EJF (2005)

¹⁶² International Crisis Group (2005)

¹⁶³ International Crisis Group (2005)

¹⁶⁴ International Crisis Group (2005)

¹⁶⁵ International Crisis Group (2005)

¹⁶⁶ International Crisis Group (2005)

“The cotton industry in Uzbekistan, Tajikistan and Turkmenistan contributes to political repression, economic stagnation, widespread poverty and environmental degradation...If those states, Western governments and international financial institutions (IFIs) do not do more to encourage a new approach to cotton, the pool of disaffected young men susceptible to extremist ideology will grow with potentially grave consequences for regional stability.”¹⁶⁷

Dependence on the crop at the farm-level, combined with a continued lack of investment in improving each country’s irrigation infrastructure, could also lead to problems. According to a World Bank study, “Many areas (fed by pumps) appear not to be inherently profitable, and millions of people rely on irrigated agriculture in these areas. If they let the infrastructure in those areas degrade, governments may face large scale social upheaval and possibly conflict.”¹⁶⁸ In addition, dependence on the crop has ensured that any switch from a cotton monoculture could seriously disrupt the rural economy, with the subsequent unemployment threatening social stability.

The countries of Central Asia have, to date, avoided interstate conflicts over water, the chief input to their primary agricultural commodity. Localized conflicts have arisen, but by and large, the five riparian states “have tended to find last-minute agreement when the issue has become acute.”¹⁶⁹ That said, significant challenges remain: the energy question has to be fully integrated into negotiations on water resources; significant investments must be made to upgrade the efficiency of cotton cultivation; the working conditions, land tenure rights and market access of cotton farmers has to improve; and dependence on cotton must be addressed at the local and national level.

¹⁶⁷ International Crisis Group (2005)

¹⁶⁸ Bucknall *et al.* (2003) *Irrigation in Central Asia: Social, Economic and Environmental Considerations*, World Bank, Washington DC

¹⁶⁹ Bucknall *et al.* (2003)

Section 6 Recommendations for policy-makers

In recent years, much attention has been paid to the links between conflict and the extraction and trade of traditional conflict resources like minerals, fossil fuels and timber, and significant policy responses have followed. Liberian president Charles Taylor's support of the RUF rebel group in neighbouring Sierra Leone helped perpetuate that country's brutal civil war; in response, the UN imposed sanctions on both diamonds and timber from Liberia (in March 2001 and July 2003, respectively), effectively choking Taylor's regime of its funding and forcing him into exile in August 2003.

Outside of sanctions, the best known policy response is perhaps the Kimberley Process Certification Scheme (KPCS). Established in 2003, the KPCS aims to stem the trade in conflict diamonds while protecting the legitimate diamond industry. Rough diamonds certified under the scheme are guaranteed by KPCS members (of which there are now 48, representing 74 countries and 99.8 per cent of the world's rough diamond production) to be 'conflict free', and members must work to prevent conflict diamonds from entering legitimate markets. Through the KPCS members can ensure that the stones have been mined with respect for human rights and that the revenues they have generated have not been used to fund conflict. The EU's Forest Law Enforcement, Governance and Trade initiative (FLEGT) is a similar scheme designed to bar illegal and conflict-related timber from consumer markets. The British government's Extractive Industries Trade Initiative (EITI) and the NGO-led "Publish What You Pay" campaign are two more attempts to increase the transparency of resource revenue management.¹⁷⁰ Such initiatives do, of course, have limitations: the KPCS, for example, only targets rebel groups, whereas the FLEGT initiative is only about illegality, when legal resources can also be a conflict driver.

Traditional conflict resources continue to attract the most international attention and the most effective policy responses. UN sanctions on Liberian diamonds and timber, starting in 2001, were very effective at bringing about change in that country; similar peacemaking opportunities may have been missed with the unfettered trade in Somali fish in recent years, and with the trade in Ivorian cocoa since 2002.

As this report demonstrates, there is abundant evidence to suggest that the production and trade of agricultural and marine resources can contribute to conflict. In short there is more to the resource-conflict story than is typically accepted. By continuing to concentrate solely on minerals, oil, timber and other traditional conflict resources, policy-makers are missing opportunities for conflict prevention, for peacemaking interventions during conflicts and for post-conflict reconstruction; we have to expand our approach.

We are not interested in simply listing those agricultural and marine resources we see as problematic, nor of limiting action to the commodities presented in the case studies; cocoa, bananas, tuna and cotton are just four of the many non-traditional conflict resources that deserve attention. As mentioned in the opening section of this paper, it is not the type of resource that matters, but rather how it is produced and traded, to what ends the revenues are put, and what the associated impact is on people and their environments.

¹⁷⁰ Smilie, I. (2007) "Developing Conflict-sensitive Aid: The Relationship between Aid and Conflict", in O. Brown *et al.* (eds.) *Trade, Aid and Security: An Agenda for Peace and Development*, Earthscan, London

This leads us to fourteen recommendations for policy-makers:

Tackling price volatility

1. Policy-makers should address the threat commodity price volatility holds for farmers, fishers and countries alike, as this volatility can translate into political and economic instability (see Case study 1, for example). Strategies to diversify away from a dependence on agriculture and fisheries should be pursued. As a first step, policy-makers should work to stabilize not commodity prices but rather commodity revenues—the income producers and countries earn from the production and trade in farmed and fished resources. This can be done using a basket of well-tested tools, as appropriate: supply management, national revenue management, market-based price risk management instruments, compensatory financing and alternative trade initiatives like Fair Trade and organic certifications.¹⁷¹ Stable, predictable revenues provide a more solid foundation upon which to base strategies for diversification.

Implementing effective sanction regimes

2. The UN Security Council should impose sanctions on agricultural and marine resources that can be shown to have a direct link to the financing of conflicts that violate the Geneva Conventions or other international agreements. As mentioned in Case study 3, the UN Monitoring Group recommended that the Security Council impose such sanctions on Somali fisheries in 2005 and then again in 2006. Unfortunately none were imposed. If significant numbers of jobs are at stake, sanctions that do not affect the trade in the commodity, such as travel bans and asset freezes, should be used instead.
3. Secondary sanctions (i.e., penalties for sanction violators) need to be systematized and made uniform, so that states are aware of the penalties and individuals and companies violating sanctions are subject to criminal prosecution, no matter which state they are based in. The UN should make public governments and companies involved in sanctions busting, require member states to act against sanctions violators and, if necessary, refer such cases to the International Criminal Court.

Expanding the scope of the UN Expert Panels

4. When appropriate, the mandates of UN Expert Panels should be broadened to look at agricultural and marine commodities as well as more traditional conflict resources. Expert Panels should also be able to more effectively track the money flows associated with the trade in natural resources.
5. The UN Secretariat should create a systematic database listing all information gathered by its Expert Panels. This would include a subset of information pertaining to natural resource issues, which would include agricultural and marine commodities, and should be published with its operational guidelines for expert groups, including on evidentiary standards.

Ensuring that peacekeepers deal with all conflict resources

6. In countries where natural resources have played a role in conflict, the UN should ensure that peacekeeping missions have a mandate to help secure natural resources in order to mitigate conflict and to enforce sanctions where they exist.

¹⁷¹ Brown, O., A. Crawford and J. Gibson (2008) *Boom or Bust: How commodity price volatility impedes poverty reduction and what to do about it*, IISD, Winnipeg

7. In countries where natural resources have played a role in conflict, the UN should ensure that peacekeeping missions have a mandate and the capacities and means to monitor the exploitation and trade in natural resources.
8. Peacekeeping missions should have the capacity to map natural resources, including agricultural and marine resources. UN departments often start peace-keeping operations with little or no idea of what natural resources exist in the country in question, nor what role they may have played in fuelling conflict. Designating one UN department (perhaps UNEP) to take the lead in compiling and disseminating this information at the operational planning stage would be a huge step forwards in this regard.

Creating an effective Peacebuilding Commission

9. The UN Peacebuilding Commission, which has been set up to support peacebuilding in fragile states, should ensure they address the role of natural resources (including agricultural and marine commodities) as a potential driver of conflict.

Ensuring transparency and monitoring

10. Politically support initiatives for increased transparency in the trade of agricultural and marine commodities to restrict their possible contribution to conflict. The Extractive Industries Transparency Initiative (EITI), for example, aims to strengthen governance in the extractives sector by improving transparency and accountability, by setting “a global standard for companies to publish what they pay and for governments to disclose what they receive.” Applying similar standards to agricultural and marine conflict resources could restrict their possible contribution to violence.
11. UN agencies should look for opportunities to encourage the monitoring of resource exploitation by national-level NGOs and grassroots groups.

Building consumer awareness

12. Politically support consumer-based initiatives for sustainably and legally harvested agricultural and marine commodities. Integrating conflict considerations in initiatives like the Marine Stewardship Council (MSC), a non-profit organization working to promote responsible fishing practices, is one way of ensuring that consumers can choose between sustainably and legally harvested commodities and those that could be contributing to conflict. Such initiatives also allow participating companies to promote the ethical nature of their value chain and business operations. For those companies unaware or unconcerned with the contribution of their operations to conflict, ‘naming and shaming’ campaigns can be used to try to persuade them—through threats to public perception—to change their practices.
13. Increase international support for sustainable agriculture and fishing projects in a conflict-sensitive way, which is crucial not only to poverty alleviation but also to rebuilding communities in post-conflict situations (see Box 1). There has been positive movement on this front: World Bank investments in agriculture for the 2006 fiscal year were stable at US\$2 billion, with a notable lending increase for the Africa region as investments rose from US\$295 million in 2005 to US\$685 million in 2006. This increase represents the highest level of lending in agriculture for Sub-Saharan Africa since 1990.¹⁷²

¹⁷² World Bank (2007) “Agriculture and Rural Development”, *World Bank Issue Brief*, March, <http://www1.worldbank.org/publicsector/pe/pfma07/ARDBrief.pdf> accessed in 2008

Defining conflict resources

14. A UN Secretary-General's report should examine the UN's experience in addressing the role of natural resources in conflict and post-conflict scenarios, the lessons that can be learned and the ways in which existing UN approaches may be strengthened. The report should clarify what constitutes a conflict resource as a basis for identifying cases that require action by the Security Council.

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