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hen President Siyad Barre fled the Somali capital Mogadishu in January 1991, ending a 22-year rule, the country was flooded with hope for an opportunity to reverse its economic decline and restore a society without oppression and clan patronage. Instead, the government collapsed, and civil strife resulted in mass starvation and as many as 280,000 deaths in 1991-1992.1 Many observers were shocked by the scale of conflict and brutality in the Somali civil war, which lasted from 1988 to 1993. Two decades later, violent conflict is still evident in contemporary Somalia, and we are left with the question of why a "nation of poets"2 embedded in traditional and religious institutions turned to one of banditry and civil strife. Africanists have asked whether Somalia constitutes yet another layer of the continent's worsening social, political, and economic plight.3 Scholars argue that ethnicity, so commonly invoked as an explanation of conflict in contemporary African states, seems less relevant here. But why did Somalia fall into a bloody civil war after the overthrow of Siyad Barre's dictatorial regime? Why did a society that is believed to be extremely resilient and adaptive to its harsh environment become vulnerable to natural disasters, such as droughts and floods?

Gaining momentum after the end of the Cold War, but beginning before it, an academic and policy debate has developed over the contribution of environmental factors to conflict and the outbreak of violence. A review of the environmental security literature reveals two opposing arguments. One holds that conflict arises primarily because of resource scarcity; the other, that it arises out of resource wealth and attending economic agendas. Looking to the Somali calamity for answers, we find that areas of resource wealth are often flash points of conflict, but that other factors, such as ethnicity, economic stake in the perpetuation of war, and the fractured nature of clan relations, are perhaps even more important in sustaining violence.

# Resource Scarcity and Conflict

Norwegian sociologist Johan Galtung, who pioneered the discipline of peace studies, argues that "wars are often over resources" and that the "destruction of the environment may lead to more wars over resources." He suggests that the scarcity of resources, as a common source of conflict, has reached new dimensions through environmental degradation.

Others agree that a shrinking resource base eventually leads to violent conflict when renewable resources such as arable land become scarce. They claim that environmental degradation, scarcity of renewable resources, and population pressures are an increasingly important new source of armed conflict, especially in developing countries. For example, the 1987 report of the World Commission for Environment and Development contained a passage correlating environmental degradation and conflict and developing an expanded definition of security:

The whole notion of security as traditionally understood—in terms of political and military threats to national sovereignty—must be expanded to include the growing impacts of environmental stress—locally, nationally, regionally, and globally.<sup>5</sup>

In response to a request by U.S. Vice President Al Gore in 1994, the Central Intelligence Agency established a State Failure Task Force that examined the factors leading to the collapse of state authority. The resulting study aimed at analyzing the forces that have affected stability in the post–Cold War era. In regard to environmental factors, the research findings state that "environmental change does not appear to be *directly* linked to state failure," but environmental stress affects quality of life.

A range of academic studies, which do not have such explicit links with Western policy discussions, has developed in parallel. <sup>7</sup> While some are clearly polemical, <sup>8</sup> a number have involved careful statistical work or comparative case studies. University of Toronto Professor Thomas

Homer-Dixon, a central figure in the environmental security debate, expanded the definition of scarcity<sup>9</sup> to include analysis of poverty and political exclusion as well as, for example, discriminatory pricing structures of renewables. Homer-Dixon carried out case studies in Mexico, Palestine, South Africa, Pakistan, and Rwanda. The case studies examined the link between environmental scarcity of renewable resources such as cropland, fresh water, forests, and fisheries on the one hand, and violence on the other hand. The key findings of his project state that scarcity can help to generate instability. Homer-Dixon and colleagues identify an indirect causal relationship, while "migration, ethnic tensions, economic disparities, and weak institutions in turn often appear to be the main causes of violence."10 But the core finding of the group was that the bloody wars that exploded in African countries such as Somalia and Rwanda after the Cold War constituted a new global threat: ecoviolence, violence that is caused inter alia by environmental factors, as he argues has happened in Rwanda and Mexico.<sup>11</sup> Along these lines, a statistical analysis from the same year found a significant impact from deforestation, soil degradation, and freshwater access on political violence.12

## Resource Wealth and Conflict

Some recent authors underline that economic interests are significant in the perpetuation of civil war<sup>13</sup> and that war may well be the continuation of economics by other means.14 Small but influential groups thus come to have an economic interest in prolonged conflict. This viewpoint affirms that it can be misleading to associate war with complete collapse or breakdown of an economy-although it may certainly skew economic development. However, two further points arise with respect to such analyses. First, are the initial causes of violent conflict necessarily the same as the factors that perpetuate it? And second, to what extent are more conventional explanations of con-





Starving Somali children line the wall of a relief center a year after Siyad Barre was overthrown and the country sank into lawlessness.

flict in Africa, such as ethnicity, religion, and the unequal distribution of scarce resources relevant in this case? If economic agendas are key to the continuation of civil conflicts, then to what extent do religious and ethnic hatreds or grievances caused by economic inequality matter? A rebellion against a government might well be triggered by socioeconomic problems, but these may not be the main causes of its prolongation.

In a wide-ranging article on conflicts in Africa, Oxford University economist Paul Collier distinguishes between what he calls "greed" and "grievance" as factors that are likely to be linked to conflict.<sup>15</sup> He defines grievance as based on ethnic and religious hatred, economic inequality, lack of political rights, or economic incompetence on the part of governments.<sup>16</sup> Greed-related narratives, by contrast, relate to the wants and aspirations of political groups, militias, and individual leaders.

According to Collier, the importance of economic agendas ("greed") overrides that of religious or ethnic "grievance" as the major factor behind recent civil wars

in Africa. He suggests that in fact there is little evidence that grievance contributes directly to civil war.<sup>17</sup> Instead, he argues that when civil war breaks out, greedmotivated actors, objectives, and agendas seem more important for sustaining and prolonging ongoing violent conflicts than causing them.<sup>18</sup> Environmental and other resource riches play a large part in sustaining conflict, as the availability of lootable resources make longer wars feasible. Angola is a good case where both opposing parties had access to valuable resources to finance their combatants: The government had access to oil, and the former rebel organization National Union for the Total Independence of Angola (União Nacional para Independência Total de Anglola, UNITA) was controlling parts of the rich diamond deposits. UNITA also sold concession rights in anticipation of subsequent control of its territory. 19 It may not matter if resources come from primary commodities, international aid, extortion, or nontraded food items. In Collier's view, large natural resource rents can increase the risk for violence: first, politics become a contest for resource

revenues with potential violent outcomes, and second, governments become detached from their electorate because they no longer rely on tax revenues. He notes that these factors do not directly lead to conflict but may trigger war in combination with other factors, such as the contraction of the economy caused by an appreciation of the real exchange rate. On the other hand, lootable natural resources "not only provide armies with a means for continued fighting, they also become the reward against which they weigh the benefits of peace."

### **Conflict in Somalia**

Explanations of resource wealth or resource scarcity are incomplete without a detailed analysis of the political economy of war, particularly in Somalia (see the box on page 51 for a brief history of conflict in Somalia). Because Somalia is largely an arid country that is highly susceptible to natural disasters, especially drought and floods, and because its people have been victims of severe fam-



ine in recent decades, an obvious starting point in explaining the Somali civil war is to investigate literature on environmental causes of conflict. However, an exaggeration of the environmental causes understates the importance of power relations, class stratification, and distribution of strategic resources among political elites and clan leaders. In addition, the struggle for land involves not only access to valuable resources but also territorial control to achieve political influence; violence in Somalia has become a means to access markets, pursue trade, or participate in political decisionmaking processes.

As discussed above, the fall of Siyad Barre's regime in January 1991 did not bring about an alternative national government. Instead, the country sank into a two-year period dominated by roving banditry. In the years that have followed, self-serving elites have established clanbased patronage networks, resulting in a struggle over strategic resources.

The resilience of the Somali economy without a regulating state is astonishing. Much of the trade and production is concentrated in a few powerful hands, and leaders use military means to control arable land suited for export crops or the livestock trade to serve the international markets. The Somali economy is supported by large inputs from remittances and international aid.

Certainly, it would be misleading to describe the situation in Somalia as anarchic. Clan affiliation has become a necessity for obtaining protection and support. Violence became meaningful where the moral economy broke down and clan-based forms of conflict prevention, such as *xeer*, or customary rule, became inoperable.

But just as some clans gained power, others became the subject of social and economic exclusion, undermining the legitimacy of an effort to create a broadbased government. In Somalia, participation in political decisionmaking processes is entrenched in egalitarian principles. When people feel excluded from political participation, they might take up an armed struggle against the ruling regime when other peaceful means of negotia-

tion break down. For example, a culture of social or clan exclusion prompted the farming communities in two South-Central regions, Bay and Bakol, to take up an armed struggle (see Figure 1 on page 52 for a map of Somalia). Bay and Bakol, together known as Somalia's breadbasket, have been subject to repeated invasions by nomadic clans, especially under the leadership of Hussein Aideed, the son of infamous warlord General Aideed. With the help of the Ethiopians, the Rahanweyn Resistance Army was formed, and in 1999, it recaptured the capital of the region, Baidoa, restoring temporary peace and stability.

Social exclusion severely affects individuals who do not belong to a powerful clan. To be spared from violence, it is crucial to belong to one of six major clans. Belonging to a specific clan defines a birth right to access social benefits according to a clan's wealth. Clan allegiance functions as a social safety net. Coastal inhabitants, especially Bantu farmers, were the most vulnerable to exploitation and violence, because they were not affiliated with dominant clan lineages that would have guaranteed protection.<sup>22</sup> Bantu, commonly also referred to as Jareer, are considered minorities and are largely excluded from access to these social benefits.<sup>23</sup>

The original causes of the Somali conflict—largely the effects of an oppressive and corrupt regime—changed over time and differ from the causes that perpetuate violence in contemporary Somalia. The following four characteristics of the Somali conflict explain why armed conflict continues today, hampering efforts for peace and sustainable development.

First, regions with a concentration of resources, such as Lower Shabelle, Bay, and Mogadishu, became flash points of conflict. In the case of Somalia, those resources are likely to be renewables, such as cash crops in the form of banana plantations in the southern riverine areas, such as Lower Shabelle, or cereals in Bay and Bakol regions. Cash crops are easier to exploit and control than dispersed resources such as livestock. In this respect, trade networks, seaports, and airfields are of strategic interest for clan

leaders, as they seek to expand a source of tax revenue.

This may explain why the southern part of the country, which is considered to be relatively rich in resources, has experienced continuous insecurity over the past decade, while the relatively arid northern regions, in particular the breakaway state Somaliland, where livestock are the main economic base, have been more stable. Clan factions that overthrew Siyad Barre's regime in early 1991 used their military strength against one another to gain control over fertile land, cash crops, commercial centers, and valuable infrastructure. This view would concur with University of Pennsylvania African Studies Center Director Lee Cassanelli's claim that war in Somalia was not a means to defeat rival clan or faction leaders but to capture valuable resources:

"Warlords," it turned out, were not simply clan leaders intent on destroying their rivals but competitors using weapons, alliances, and propaganda to gain access to productive land, port facilities, and urban real estate, which in turn could be used to sustain networks of patronage and support. In the process of redistributing resources, some groups benefited greatly while others suffered tragically. There was a brutal logic to all of this, and it derived from struggles over land and labor that were rooted in Somalia's recent past.<sup>24</sup>

However, it is not absolute scarcity or abundance that eventually leads to armed conflict; it is often unjust distribution of the benefits. Somalia reflects the emergence of "elite wars," in which small, urban-based elites struggle to access valuable resources. Conflict arises when national elites are competing for key pockets of wealth, such as the production and marketing of cash crops. In turn, violent conflict leads to diminished domestic production and foreign assistance, thus creating scarcity. When domestic economic and natural assets become scarce, divergent views of the elite result in a struggle for power to access these critical resources.



#### **SOMALI HISTORY**

- **1897:** United Kingdom, France, Italy, and Ethiopia partition Somali-inhabited territories.
- **1955:** Western British Somaliland Protectorate and Reserve Area are annexed to Ethiopia.
- **1960, 26 June:** British Somaliland Protectorate gains independence.
- 1960, 1 July: United Nations Trusteeship of Southern Somalia gains independence from Italy.
- **1960, 1 July:** The two territories unite as the Somali Republic.
- **1969, 15 October:** Somali President Abdirashid Ali Sharmarke is assassinated.
- **1969, 21 October:** The army, led by Major General Mohamed Siyad Barre, overthrows civilian government, establishing a socialist state.
- **1977**, **July:** Somali army, with the support of the Soviet Union, invades the disputed Ogaden region of Ethiopia.
- **1977**, **November:** Soviet Union switches its support to Ethiopia.
- **1978, March:** Somalia withdraws its forces from Ogaden after defeat by the Soviet and Cuban-backed Ethiopian army.
- **1981, April:** Somali National Movement forms overseas to overthrow the Barre
- 1988, May: Somali National Movement briefly captures Burco and Hargeisa. Somali government responds with aerial bombing of Hargeisa, killing thousands of civilians and forcing 650,000 people to flee to Ethiopia.
- **1990, December:** Somali government forces lose control over most of countryside. United Somali Congress enters Mogadishu.
- **1991, January:** Siyad Barre flees Mogadishu as United Somali Congress forces capture the city. Ali Mahdi is elected president, but others reject the appointment. The "presidency" goes unrecognized internationally.
- **1991, May:** Somali National Movement proclaims independence for Republic of Somaliland.

- **1991:** Intraclan and factional fighting in southern Somalia kill, wound, and displace hundreds of thousands.
- **1992:** Famine rages through much of southern Somalia.
- **1992, April:** United Nations Operation in Somalia (UNOSOM I) is created.
- **1992, July:** UN "Operation Provide Relief" launched to airlift food aid to southern Somalia
- 1992, December: "Operation Restore Hope" launched with U.S.-led multinational peacekeeping force, United Nations Task Force.
- 1993, May: Mohamed Haji Ibrahim Egal is selected president of Republic of Somaliland by assembly of elders at the Grand Boroma Conference.
- **1993, 24 June:** UNOSOM II Pakistani troops are killed in ambush by supporters of General Mohammad Farrah Aideed and Somali National Alliance.
- 1993, October: United States announces withdrawal of its troops following death of 18 U.S. Special Forces and hundreds of Somalis in clashes in Mogadishu.
- **1994, March:** U.S. military forces withdraw from Somalia.
- 1995, June: General Aideed declares a "broad-based" government but is unable to administer effective control even in Mogadishu. The government is not recognized internationally.
- 1995, September: General Aideed's forces occupy Baidoa, toppling Digil-Mirifle Governing Council and displacing civilians. Aid agencies withdraw from the region. Rahanweyn Resistance Army (RRA) formed.
- **1996, August:** General Aideed dies of gunshot wounds sustained in a battle. His son, Hussein Aideed, takes over his leadership.
- 1998, August: Garowe Constitutional Conference is held. Leaders in northeastern Somalia form nonsecessionist "Puntland State of Somalia." Abdullahi Yusuf Ahmed is president.
- **1999, May:** RRA recaptures Bay and Bakol from occupying forces and

- installs its own administration.
- 2000, May: On the initiative of the Djibouti government and Inter-Governmental Authority on Development, Somali National Peace Conference is convened in Arta, Djibouti, resulting in the formation of the Transitional National Government, with Abdiqasim Salad Hassan as president.
- 2001, March: Somali Reconciliation and Restoration Council, comprising faction leaders opposed to Transitional National Government, is formed in Awasa, Ethiopia. Base is established in Baidoa.
- **2001, May:** Somaliland's constitution, which affirms Somaliland's independence, is subjected to referendum. Officials claim 97 percent of voters endorse constitution.
- **2001, 11 September:** Terrorists attack New York and Washington. Somalia is named a potential terrorist sanctuary.
- **2002, 21 October:** Eldoret Declaration is signed by 22 Somali leaders, marking the beginning of the Somali National Reconciliation Process.
- **2004, 14 October:** The internationally recognized Transitional Federal Government is formed with Abdullahi Yusuf Ahmed as president, previously president of Puntland.
- 2006: Conflict broke out between forces of the Transitional Federal Government and militias loyal to the Islamic Courts Union who gained control over large areas in southern Somalia.
- 2006, December: Ethiopia, with the support of the Transitional Federal Government, launched air strikes against troops of the Islamic Courts Union. By January 2007, and with the Ethiopian and U.S. involvement, the government largely defeats the Islamic Courts Union.
- SOURCE: United Nations Development Programme, *Human Development Report, Somalia 1998* (Nairobi: United Nations Development Programme Somalia, 1998).



Second, individuals have a stake in the continuation of violence in southern Somalia. Some businessmen and faction leaders benefit from the lawlessness in Somalia, doing well out of war, particularly with regard to the charcoal export business. Without a functioning authority that could restrict the trade, charcoal is being produced in Somalia on a large scale, leading to forest cover loss and sand dune encroachment. Most of the charcoal is exported for a large profit to Arab countries. Largely urban-based elites benefit from the trade, while local communities are left out from this lucrative business but suffer most from its adverse environmental impact.

Others, including hotel managers and shipping agents, make large profit margins with aid contracts. Airports charge humanitarian flights fees but do not offer services such as air traffic safety or logistical support. Foreign companies and aid agencies have to calculate up to half their budget for security services. In this respect, they have a role in shaping conflict in Somalia. Additionally, aid money is often diverted and used for the acquisition of arms and ammunition. Many businessmen, largely from the Hawiye clan, enriched themselves during the era of the United Nations Operation in Somalia in the early 1990s.

Above all, countries that participate in the arms trade have little interest in a politically stable Somalia. Rather, some countries have deliberately jeopardized peace processes in the past. Unless the current Transitional Federal Government proves that it does not pose a threat to neighboring countries or harbor members of the Islamist militant group *al-Ittihad* within its cabinet, countries such as Ethiopia are likely to continue interfering in the reconciliation process.

Third, the instrumental use of ethnicity in conflict is a key feature in contemporary Somalia. In the absence of a functioning government, which could have distributed wealth and power, clan affiliation has become a sine qua non for daily survival. Faction leaders, businessmen, and political leaders alike have benefited from this lawlessness, using clan identity

Figure 1. Map of Somalia CEERIGAABO SANAG W. GALBEED BAR SOOL TOGDHEER SAROOWE NUGAL MUDUG GALGADUD GEDO LOWER LOWER JUBA SOURCE: Data Information Management Unit, United Nations Development

as an instrument in the pursuit, employment, and perpetuation of power. These mainly urban-based elites have hijacked clan identity for their vested interests. For example, individuals have used the clan as a political unit to mobilize military force, and recruiting a clan constituency can help to gain access to resources where the *Haber Gedir*, one of the powerful clan groups that overthrew the Barre regime, allied with the *Jareer* to control local clans and their sources of wealth.

Programme Somalia.

Finally, the broad-based clan alliances of the early 1990s have fragmented into sub-subclan units. Today, conflicts are articulated within clans rather than between clans. The fragmentation of the society can be observed even on the family level. In foreseeing a scenario for the way forward for southern Somalia, it is worth noting that an administration rooted in a clan-based power-sharing arrangement as adopted at the 2000 Arta conference and the Somalia National Reconcilia-



tion Process (that led to the formation of the former and current Transitional Federal Government, respectively) has its limitations. The rationale behind this assumption is twofold: Most importantly, the advanced social fragmentation of the Somali society has made it difficult or even impossible to base an administration on clan representation. Today, personal

In spite of the radical fragmentation of society, however, kinship remains important in Somali politics. Clan representation can also mean a fairer power-sharing arrangement between all six major as well as the minority clans. For this reason, a functioning administrative arrangement has to be based both on constitutional or formal rules that are widely accepted, as

functioning government have responded to this situation. When excluded from profitable kin and patronage networks, social groups began claiming their fair share—often resorting to violence. In other cases, political exclusion led to the emergence of localized governance with astonishing resilient institutions.

Western prescriptions for conflict resolution and peace building are often doomed to fail because Somalia is unique in its social fabric and history. It displays contradicting features, such as Somaliwide ideas and values like Islam, on the one hand, and the pursuit of insular and individual interests on the other. Many people see southern Somalia at the brink of chaos and anarchy. But there are also signs of hope. Individual initiatives are creating hope for many people. Doctors are willing to work in provisional hospitals, the Somali diaspora supports many people, and traders guarantee the availability of food items and fuel. When streets are lit at night in the war-torn city of Mogadishu, it is the result of a private initiative.



Somali women flee their homes in the Lower Shabelle, where flooding in late 2007 swept villages and destroyed crops.

economic interests override clan affiliation, as a Somali development worker rightly observes: "Somalis are only loyal to their own interests." In addition, the creation of an administration by a small urban-based elite would exclude those clans who lack the political or economic means to access valuable resources, so that the probability of renewed civil conflict remains.

well as on "traditional" forms of representation. Any formal government has to be complemented by a forum that draws its legitimacy from authorities based on kin, age, sex, experience, and expertise. This could be in the form of an Upper House of elders that already exists in neighboring Somaliland.<sup>27</sup>

Those who are politically and economically excluded in the absence of a

## A Critique of Resource-Based Explanations of Conflict

Using southern Somalia as a case study to research the relationship between environmental scarcity and conflict in Africa makes it clear that this analytical framework is too limiting. A critical review of the literature on environmental security suggests that there is not strong comparative evidence for the argument that prolonged civil conflicts in Africa are caused by environmental scarcity, although this view does not preclude the idea that moments of intense scarcity, such as acute droughts, can help trigger civil conflicts.

### The Resource Scarcity Thesis

Although environmental regulation has been the subject of international relations for many decades, the question arises as to why scholars are increasingly studying the correlation between environmental scarci-





Transitional Federal Government soldiers patrol Somalia's capital city after defeating the Islamic Courts Union in January 2007.

ty, population movement, global security, and conflict. Elizabeth Hartmann, director of the Population and Development Program at Hampshire College, claims that since the fall of the Berlin Wall, countries have been forced to redefine their military policies.<sup>28</sup> The end of the Cold War period, when the interests of two opposing superpowers dominated global and regional conflicts, has resulted in new sources and explanations of conflict. Military interventions in the 1990s were often legitimized by appeals to national interest based on issues other than political and economic systems. Hartmann argues, "While 'rogue states' such as Iraq have replaced the Soviet Union as the enemy, globalization has ushered in an era of more amorphous threats, and environmental problems rank high among them."29

Yet it would be a mistake to see recent emphasis on environmental security simply as a justification for continued funding and expansion of military establishments in the West. An earlier source for such concern emerged from a quite different source—environmentalists themselves. This goes back to key texts of the 1960s and 1970s environmental movement. It is present in such works as The Population Bomb<sup>30</sup> and How to be a Survivor;<sup>31</sup> the Club of Rome report, The Limits to Growth;32 and Only One Earth.33 Galtung's book, The True Worlds, is a more measured account, which also predates the end of the Cold War.34 He and other critics of the world order see the potential conflict over environmental resources resulting from inequity. He certainly predicts environmental crisis, the depletion of nonrenewable resources, and increasing pollution and population pressures in a finite environment. But he notes, "Some people would have us believe that the root crisis is primarily a resource crisis, that our earth is not richly enough endowed to support us all with raw materials and energy."35 He argues instead that the root

cause of environmental crises and the threat of violence are to be found in the asymmetry of the world structure. Although Somalia is much less affected by such external geopolitics compared to Angola or the Democratic Republic of the Congo, for instance, the problem of unequal resource distribution is similar there.

More generally, the invocation of environmental distress, such as droughts, is ubiquitous in historical literature on Africa as a means of helping to explain social conflict and rebellion. It is intriguing that environmentalist scholars, sometimes on the left, and scholars of global security, more often on the right, have both identified similar patterns of linkages and causes between scarcity and violence, although their methodologies and their recommendations about addressing these problems are not always the same.

But as the case of Somalia shows, to ascribe conflict largely to environ-



mental factors is too simplistic. In fact, natural disasters, such as the 1990-1991 drought, did not play an important role in causing the severe famine in the Bay and Lower Shabelle regions. Rather, the devastation inflicted upon the interriverine population was rooted in their inability to defend themselves based on historical power relations. Moreover, the fertile interriverine land attracted looters and militias: a war economy developed. Lastly, aid deliveries were disrupted and never reached the people in need. Certainly, an economy that relies on the export of primary commodities, such as livestock, bananas, sorghum, maize, and fish is vulnerable to environmental disasters, such as droughts and floods. But other variables, such as low incomes, low GDP, and poor educational standards, can also weaken the economy.<sup>36</sup>

One key problem in the environmental scarcity literature is that most of the case studies are selected on the value of the dependent variable—that is, violent conflict.37 A deductive model leading from environmental scarcity and population movement to armed conflict is epistemologically misleading, as too many other variables have been omitted from the research design. A more effective approach would require inclusion of countries that have experienced environmental stress of some kind but had not experienced state collapse or civil conflict. It would also be useful to compare countries with similar environmental and social backgrounds but which have had different experiences with respect to violent conflict.38

Besides, the notion of environmental scarcity tends to focus on the decline of natural resources as a key element in providing potential for conflict rather than analyzing environmental problems from an "end-of-pipe" perspective—that is, where human activities, in particular in industrialized countries, overload natural sinks that absorb human waste products. However, these assumptions should not lead to the conclusion that environmental scarcity in developing countries is the major risk and major cause of conflict. Nor should it be assumed that social mechanisms for resolving environmental

shortage are absent in non-Western societies. In fact, this is one of the major weaknesses of the literature.

Moreover, the neglect of political and economic causes of violent conflict can lead not only to a simplified analysis but, as some suggest, to the notion that violent conflicts are the almost inevitable result of global environmental problems. As a result, modern conflicts within states might be labeled as "green wars," with environmental degradation and scarcity seen as the prime source of these conflicts and the responsibility of politicians, international corporations, and politicohistorical factors left aside. Moreover, the resource scarcity literature can give conflicting parties an excuse for evading responsibility for causing human suffering and could even be counterproductive in attempts to initiate mechanisms for conflict resolution.39

In this context, a discussion of what are sometimes seen as environmental resistance movements in Africa might also be relevant. According to one hypothesis, these conflicts often concern "struggles over the means to exploit resources," such as controlling labor forces, capital, and access to international markets, rather than the protection of the environment per se. 40 For example, local tribes in Somalia violently resisted trade in charcoal. It may be inaccurate to see such environmental factors as deforestation and soil erosion as a sufficient to trigger the disputes. The main accentuating force behind the localized conflict is economic exclusion. Accordingly, local communities hardly benefit from the trade since the highest profit margins are at the wholesale and export level. But these communities bear the brunt of adverse environmental effects, such as sand dune encroachment, loss of grazing areas, and environmental degradation.

In other cases, environmental processes such as deforestation or environmental degradation, have been misinterpreted. For example, the interpretation of Guinea's landscape being "half empty" with forests was not founded in historical data. Instead, research suggests that farmers' land-use practices have enriched and increased Guinea's forest cover. 42

#### The Resource Wealth Thesis

Apart from conflicts over oil, the impact of natural resource wealth on conflict onset is also disputed in the literature. For instance, in Sierra Leone, geographic studies show that there is no strong statistically significant relationship between registered mines and the incidence of violence against civilians. It is, rather, past natural resource production that is associated with conflict onset, supporting a weak-state thesis. If resource-rich states rely on neopatrimonial mechanisms to distribute wealth, it is unlikely that resource-rich, post-conflict states are more likely to achieve sustainable development.

As evidenced in Somalia and other African nations, it is not the absolute level of natural resource availability that causes civil war but low per capita incomes and economic growth that make civil war feasible.<sup>44</sup> Along these lines, researchers at the World Bank and Yale University find that areas with extreme levels of poverty are at high risk of civil war. When economic incomes increase, the risk of war decreases irrespectively of the levels of ethnic diversity, they argue.<sup>45</sup>

Others also argue that a correlation between primary commodities and conflict onset does not imply a causal relationship. It may be that conflict, or the prospects of conflict, can cause other economic activities, such as the manufacturing industry or tourism, to cease, whereas the extractive industry remains intact.<sup>46</sup> Further, oil-exporting countries on average have weaker state structures to redistribute wealth and are less reliable and competent to provide public goods given their high income levels. In turn, weak states are at higher risk to experience civil war.<sup>47</sup>

If rent-seeking incentives that natural resources provide for governments and rebels alike are not sufficient to explain the onset and recurrence of civil conflict, other factors need to be considered. One explanation relates to the structure of the economy and its dependency on agriculture. Research demonstrates that countries that lack economic integration with largely agrarian economies regardless of



oil and diamond deposits have an elevated conflict risk.<sup>48</sup> Countries such as Somalia and Sierra Leone have not gone through a process of industrialization; instead, clusters of agricultural communities have arisen with weak commercial ties.

Other scholars argue that "wealthier societies are better able to protect assets, thus making violence less attractive for would-be rebels." In the same vein, influential political scientist Indra De Soysa, at the Norwegian University of Science and Technology, argues that because wealthier states have higher state revenues, they are better able either to pacify or to crush a violent rebellion. It has also been suggested that the relationship could be "spurious in the sense that there are other features of a country, such as a democratic culture, that make it at once more prosperous and less violent."

Once conflict breaks out, negative economic growth can be explained by other factors. Armed clashes are often accompanied with the destruction of property, destruction of industries, and disruption of farming systems. As a result, it is more difficult to observe the direction of the relationship between economic growth and civil war. To avoid the problem of reversed causality, researchers from University of California, Berkeley, and New York University designed a study in which they replaced economic growth with the variable rainfall and found that a negative growth shock of five percentage points increases the likelihood of conflict in the following year by one-half. 52 Rainfall is a plausible instrument, as most African societies rely on rain-fed agriculture. Only 1 percent of African agriculture is irrigated, making this sector of the economy vulnerable to rainfall variability.<sup>53</sup> This instrumental variable approach makes the claim credible that the relationship between negative economic growth and the onset of conflict is not just a correlation but has causal implications.

Another dimension to this finding is that if rainfall is shaping economic conditions in sub-Saharan African countries, then changes in rainfall patterns induced by either anthropogenic or natural interference can be associated with the outbreak of civil violence. A recent article published in *Atlantic Monthly* argues in favor of an "ecological origin of the Darfur crisis," making human-induced climate change responsible for the death of thousands of people.<sup>54</sup>

# An Uncertain Future for Somalia

Conflict in Somalia tends to support the assertion that the longevity of this and similar conflicts has not least been caused by a struggle to establish control over valuable resources. Given the prominent argument that "greed" for sectional control over such resources is a main contributory factor to recent prolonged civil wars in Africa, some argue that conflict is more likely to arise where there is abundance of resources, rather than scarcity. Agricultural regions in the conflict-ridden Shabelle Valley, for instance, are considered among the richest in the country. The seaports, airports, and rich agricultural areas in southern Somalia will remain flash points of conflict until a lasting political solution for the whole of the country is found. In contrast, aside from livestock, the more peaceful north and the semiautonomous state of Puntland provided only a small proportion of the GDP before the collapse of the government. However, absolute abundance of resources cannot be considered a main cause of conflict. Unjust distribution of access to precious resources, such as land, water, charcoal, and bananas and other agriculture, is causing grievances on the local level.

The political future of Somalia remains uncertain. The emphasis is on traditional peace-building mechanisms succeeding in resolving or preventing conflicts. It is now argued that they are more appropriate than international official ("first track") diplomacy, and more familiar and trusted by local populations. The promising case of Somaliland demonstrates that traditional conflict resolution mechanisms can survive severe civil disruptions and social transformation and play a useful part in peace-building efforts. Unfortunately,

this hardly applies to southern Somalia. Instead, as William Reno at University of Wisconsin states,

When formal and informal institutional frameworks favor old informal patronage networks and clandestine economic channels...the successful intervention of clan (or ethnic) entrepreneurs is less likely, reducing the risks of violence.<sup>55</sup>

That is, as customary law and clan elders lost political weight, new institutions and channels of resources, such as nongovernmental organizations and foreign peace initiatives or globalized organized crime, posed new threats to local governance in Somalia, offering new niches for political entrepreneurs.

Many Somalis are persuaded that only an international military intervention can disarm Somalia. The former interim President Ali Mahdi expressed the wish of many Somalis, pleading for even U.S. intervention:

Somalia did not have a government for eleven years. I remember one day in 1992. I spoke with the American Ambassador... and I asked him to assist my government. After three hours of discussion he lost his diplomatic fashion and said: "Look Ali, Somalia will not have a government for the coming years."... I am appealing again to the international community to help Somalia to bring peace and stability and establish the government of Somalia. Just to have peace.... This is what I want. 56

This view stands in sharp contrast to the notion that a debate about a new Somali government should come from within the country. The federal system of the recently established government cannot serve the interests of the wider local communities. The risk remains that federal institutions will come under the thumb of a ruling elite as experienced in Ethiopia undermining the principle of decentralization and devolution of power. Ultimately, only those people who truly represent their people and are able to deliver peace and economic prosperity



can claim legitimacy and authority. Inside Somalia, it is common that "political leaders" lack popular support and confidence among the population, such as the new government. Living conditions have not improved.

Given the discussion of what causes and sustains conflict in Somalia, there are several points worth mentioning about a possible way forward.

First and foremost, the future of Somalia depends on the political will of the members of the Transitional Federal Government, Ethiopia, forces of the former Islamic Courts Union, and other key actors to cooperate and support a prospective representative government, whether

and members of the League of Arab States can overcome their differences and are able to form a united and firm position regarding the core issues of the reconciliation process. The deployment of peace-keeping troops, whether with an African Union or United Nations mandate, may reduce the risk of conflict recurrence as proven in other cases in Africa.

Lastly, it may be more appropriate to elect Somali government officials based on merit rather than aiming at achieving fair representation of all clans through the adoption of a clan quota system. Many analysts argue that this formula cannot work since the Somali society is too fragmented.



Without a governing authority to restrict trade, Somali businessmen are profiting from large-scale exportation of charcoal, contributing to environmental degradation.

its structure will be federal, confederal, or central. In this respect, the question of effective leadership is crucial.

Second, the country's future depends on whether the proposed strategy at the Somali peace talks can work to co-opt military leaders and warlords into a civil government. Many analysts have their doubts if warlords can become civil servants. To counterbalance the influence of faction leaders, it is especially important to bring professionals and civil society leaders on board.

The path forward also depends to what extent Djibouti, Ethiopia, Eritrea, Kenya,

Perhaps one way forward is to accept Somalia's position of statelessness. The past 17 years led to the development of stable forms of nonstate administrations and decentralized forms of organization that have proven to be fairly resilient. While some Somali nonstate administrations have created wealth and power for some Somalis, vulnerabilities, inequalities, and poor health and educational standards remained as paramount social problems. Development in Somalia depends on localized institutions. They must be an integral part of the international efforts to reconstruct the country. In an interview

with social analyst Mark Bradbury in the *Journal of International Affairs*, he said, "Given the limited aid program in Somalia it is not difficult to conclude that development processes in Somalia exist not as a result of official development assistance, but in spite of it." <sup>57</sup> Bradbury suggests in an article written the same year, "We may need to recognize statelessness in Somalia, therefore, not as a 'failure' but as a response to social, economic, and political exclusion." <sup>58</sup>

Statelessness is a "response," but most Somalis pledge for the creation of a government that can reverse social, economic, and political exclusion. A nation without a state in a world of ever-increasing interdependencies is neither politically nor economically viable in the long term. The challenge of a national government, whether centralized, federal, or confederate, will be the just distribution of wealth and power. And without a continued dialogue between the conflicting parties, prospects of peace will diminish. As a Somali saying foretells: Aan wada hadalno waa aan heshiinno-let us talk means let us reconcile.

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## NOTES

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tary Activity: Towards Alternative Security Doctrines (Oslo: Norwegian University Press, 1982), 99.

- 5. World Commission on Environment and Development, *Our Common Future* (Oxford: Oxford University Press, 1987), 19.
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- 8. See R. D. Kaplan, "The Coming Anarchy," *Atlantic Monthly* 243, no. 2 (February 1994): 44–76. In this often-quoted article, Kaplan argues that overpopulation coupled with environmental scarcity, crime, and disease are "rapidly destroying the social fabric of our planet."
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- 10. T. Homer-Dixon and J. Blitt, eds., *Ecoviolence, Links Among Environment, Population, and Security* (Oxford: Rowman & Littlefield Publishers, 1998), 223.
  - 11. Ibid.
- 12. W. Hauge and T. Ellingsen, "The Causal Pathway to Conflict: Beyond Environmental Scarcity," *Journal of Peace Research* 35, no. 3 (1998): 299–317
- 13. M. R. Berdal, D. Malone, and International Peace Academy, *Greed & Grievance: Economic Agendas in Civil Wars* (Boulder, CO, London, and Ottawa: Lynne Rienner Publishers, International Development Research Centre, 2000).
- 14. D. Keen, "Incentives and Disincentives for Violence," in Berdal, Malone, and International Peace Academy, ibid., page 27.
- 15. P. Collier, "Doing Well Out of War: An Economic Perspective," in Berdal, Malone, and International Peace Academy, note 13 above, pages 91–112.
  - 16. Ibid, page 96.
  - 17. Collier, note 15 above.
- 18. See K. Ballentine and J. Sherman, *The Political Economy of Armed Conflict: Beyond Greed and Grievance* (Boulder, CO: Lynne Rienner, 2003); D. Keen, note 14 above; and J. Sherman, *The Economics of War: The Intersection of Need, Creed, and Greed* (Washington, DC: Woodrow Wilson International Center for Scholars, 2001).
- 19. P. Collier, "Natural Resources and Conflict in Africa," *Crimes of War Project Magazine*, 2004, available at http://www.crimesofwar.org/africa-mag/afr\_04\_collier.html (accessed 11 March 2008).
  - 20. Ibid.
- 21. G. Downs and S. Stedman, "Evaluation Issues in Peace Implementation," in S. Stedman, D. Rothchild, and E. M. Cousens, eds., *Ending Civil Wars: The Implementation of Peace Agreements* (Boulder, CO: Lynne Rienner, 2002), 57.
- 22. United Nations Development Programme, Human Development Report, Somalia 1998 (Nairobi: United Nations Development Programme Somalia Country Office, 1998), 121.
- 23. Most of the *Jareer* are descendants of former slaves. As they were integrated into the clan system by being taken into the clan family that owned their parents, they became divided among different clans. Since few Bantu or *Jareer* own land, they have been dependent on

wage labor, largely working on the plantations in southern Somalia. They are poorly paid, coming last in the Somali social hierarchy. Racial discrimination is based on physiological stereotypes and descent. Although they account for a large part of the overall population, in particular in the riverine areas, they are considered a minority by Somalis. They live as adopted members, or *sheegad*, under "ethnic" Somali clans.

- 24. L. V. Cassanelli, "Explaining the Somali Crisis," in C. L. Besteman and L. V. Cassanelli, eds., *The Struggle for Land in Southern Somalia: The War Behind the War* (Boulder, CO, and London: HAAN Associates Publishing, Westview Press, 1996), xi, 222.
- 25. E. J. Hogendoorn, A. M'Backe, and B. Mugaas, Report of the Panel of Experts on Somalia Pursuant to Security Council Resolution 1425 (2002) (New York: United Nations Security Council, 2003).
- $26. \ \,$  Interview by the author in Nairobi on 15 August 2002.
- 27. In the case of the Republic of Somaliland, the sudden death of the former President Mohamed Haji Ibrahim Egal in April 2002 was a critical test for the fragile administration. The Vice President Dahir Riyale Kahin, who represents a minority clan, the *Gadabursi (Darod subclan)*, became acting president in summer 2002. Although several analysts predicted a collapse of the fragile administration, the government of Somaliand remained functioning and, hence, gained political credibility.
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  - 29. Ibid., page 113.
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  - 35. Ibid., page 2.
  - 36. Collier, note 15 above.
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  - 40. Ibid.
- 41. J. Fairhead and M. Leach, "Rethinking the Forest-Savanna Mosaic: Colonial Science & Its Relics in West Africa," in M. Leach and R. Mearns, eds., The Lie of the Land: Challenging Received Wisdom on the African Environment (London: The International African Institute, James Currey, Heinemann, 1996), 105–121.
  - 42. Ibid.
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New Evidence from Sierra Leone," African Economic Development 96, no. 2 (2006): 396.

- 44. See P. Collier and A. Hoeffler, "On the Incidence of Civil War in Africa," *Journal of Conflict Resolution* 46, no. 1 (2002): 13–28; J. D. Fearon and D. D. Laitin, "Ethnicity, Insurgency and Civil War," *American Political Science Review* 97, no. 1 (2003): 75–90; and W. E. Nafziger and J. Auvinen, "The Economic Causes of Humanitarian Emergencies," in W. E. Nafziger, F. Stewart, and R. Väyrynen, eds., *War, Hunger and Displacement: The Origins of Humanitarian Emergencies Volume I* (Oxford: Oxford University Press, 2000), 91–146.
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