Environmental Cooperation and Conflict Prevention at the World Summit on Sustainable Development

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The Environmental Change and Security Project (ECSP)

The Environmental Change and Security Project (ECSP) is part of the Woodrow Wilson International Center for Scholars, a nonpartisan institution supported by public and private funds and engaged in the study of national and world affairs. Since 1994, ECSP has explored the relationships among population, biodiversity, disease, water, economic development, migration, political stability, and violent conflict. ECSP brings policymakers, practitioners, and scholars from around the world to Washington, D.C., to address the public and fellow experts on environmental and human security. The project publishes two annual journals, the Environmental Change and Security Project Report and the China Environment Series, along with a biannual newsletter and original research. Through ECSP’s initiative Navigating Peace: Forging New Water Partnerships (funded by Carnegie Corporation of New York), working groups generate policy alternatives in three areas: balancing water’s social and economic values, analyzing water’s potential to spur conflict and cooperation, and building dialogue between the United States and China using lessons from water conflict resolution. As one of its primary missions, ECSP explores the relationship between population growth and environmental degradation, and examines how population-environment dynamics affect foreign policy and global security.

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Adelphi Research

Adelphi Research is a Berlin-based nonprofit institute active in sustainability science, global environmental change, policy analysis, and public policy consulting. We conduct research, facilitate policy dialogues, and develop research programmes and projects. The programme on environment, conflict, and cooperation comprises more than 50 initiatives, projects, conferences, workshops, and stakeholder dialogues, as well as numerous publications. Adelphi Research has worked with international organisations, bilateral aid agencies, the European Commission, federal ministries, international NGOs, and environmental agencies. Adelphi Research participates in international and interdisciplinary efforts to scientifically examine the important links between environment, development, and peace. The institute promotes dialogue and facilitates platforms for exchange between scientists and decision-makers. It helps develop integrated programmes and cross-cutting projects that address the complex, cross-sectoral nature of environment and security links. Adelphi Research conducts policy briefings and consultations on natural resources, environment, development, and conflict prevention for donors, ministries, aid agencies, international organisations, and the private sector.

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The Mesoamerican Center for Sustainable Development of the Dry Tropics (CEMEDE)

The Mesoamerican Center for Sustainable Development of the Dry Tropics (CEMEDE) is an interdisciplinary academic program at the Universidad Nacional de Costa Rica, located in Nicoya. It works on environmental, economic, social, cultural, and political issues in the Mesoamerican Dry Tropics and facilitates a forum for organisations and academic institutions interested in the region’s integrated and sustainable development. CEMEDE fulfills its mandate through research, education, and outreach that help improve the quality of life for residents of the Mesoamerican region. CEMEDE seeks to support processes with social impact, promote the sustainable management of natural resources in the Dry Tropics, encourage the formation of human capital, rescue and preserve the Mesoamerican cultural inheritance, and strengthen institutions at the local, national, and regional levels. CEMEDE’s priority areas include: integrated management of coastal areas, water resource management, regional integration, food security, managing socio-environmental risks and vulnerabilities, sustainable tourism, strengthening local governance, and socio-environmental conflict prevention and resolution. CEMEDE joined the EDSP Initiative following Alexander López’s earlier work on behalf of the Costa Rican Foundation of Foreign Service for Peace and Democracy (FUNPADEM).

For more information, visit www.una.ac.cr/CEMEDE.

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The Environment, Development, and Sustainable Peace Initiative

The Environment, Development, and Sustainable Peace (EDSP) Initiative is an international effort to bridge the gap between Northern and Southern perspectives on environment, development, population, poverty, conflict, and peace. EDSP was initiated in 2001 by Adelphi Research, the Woodrow Wilson International Center for Scholars, and the Mesoamerican Center for Sustainable Development of the Dry Tropics and is coordinated by Alexander Carius (Germany), Geoffrey D. Dabelko (United States), and Alexander López (Costa Rica).

Between 2001 and 2004, the initiative engaged more than 200 individuals and non-governmental institutions from the global South (practitioners, journalists, and scholars) in a constructive dialogue on environment, conflict, and peace. EDSP invited a core group of international environment and development practitioners and researchers to discuss how natural resources are related to conflict and how environmental cooperation can contribute to stability and peace.

In addition to the EDSP directors, core group members include Michael Ochieng Odhiambo (Kenya); Dennis Tänzler and Esther Schröder-Wildberg (Germany); Okechukwu Ibeanu (Nigeria); Doris Capistrano (Philippines); Dini Djalal, Tri Budiarto, and Agus Setyarso (Indonesia); Aaron T. Wolf (USA); Anthony Turton (South Africa); Pascal Girot (France); and Javier Gonzales (Bolivia). Over the past three years, these members have helped conduct meetings and contributed substantially to EDSP’s debates. EDSP held core group meetings and local stakeholder dialogues in Berlin, Germany, in December 2001; in San Jose, Costa Rica, in April 2002; in Johannesburg, South Africa, in September 2002; and Bogor, Indonesia, in August 2003. Core group meetings, regional stakeholder workshops, informal gatherings, and the continuous exchange of ideas helped establish North-South networks that reach beyond the scope of the EDSP Initiative. The Initiative co-organized an additional workshop in September 2004 at Wilton Park (United Kingdom) on Environment, Development and Sustainable Peace: Finding Paths to Environmental Peacemaking.

In August 2002, the EDSP initiative was endorsed as a project by the Global Environmental Change and Human Security Project (GECHS) of the International Human Dimensions Programme on Global Environmental Change (IHDP).

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Introduction

The World Summit on Sustainable Development (WSSD) in Johannesburg, held from 26 August to 4 September 2002, was attended by over 100 heads of state and tens of thousands of representatives of non-governmental organisations, media, and industries. The WSSD offered a unique opportunity to systematically discuss the complex connections among global environmental change, regional environmental degradation, poverty, and sustainable development.

Environmental conflict and its corollary, environmental cooperation (as a potential instrument for crisis prevention), naturally fit the WSSD’s agenda. This paper assesses how political discussions at the WSSD addressed the topic of environmental conflict and its resolution. Did the WSSD identify environmental degradation and poverty as factors that contribute to conflict and tensions? Which concrete measures and projects did the WSSD adopt in order to address environment, conflict, and cooperation?

This paper does not discuss the environment and conflict debate in detail, but includes a short overview in Section 2.1 Section 3 describes the results of the WSSD from a conflict-prevention perspective. Next, Section 4 discusses two areas with cooperation potential: transboundary water resources and peace parks, using examples from Africa, the WSSD’s main focus. Finally, Section 5 offers conclusions on establishing sustainable peace policies.

1 For further reading, see the in-depth works by Gleditsch (2001); Conca/Dabelko (2002); and Conca et al. (forthcoming).
Since the end of the Cold War, the number of civil conflicts has increased significantly (Pfetsch/Rohloff 2000; Heidelberg Institute on International Conflict Research 2003). For the purpose of this paper, conflict is defined as a situation of incompatible or adverse interests, in which one or more parties pursue, or threaten to pursue, their interests through violent means. Acute conflicts can range from sporadic violent actions to large-scale civil violence and interstate war (Pfetsch/Rohloff 2000: 381). These conflicts are rooted in structural and contextual factors: weak governance, economic and social transition, undemocratic institutions, poverty, and the economic and social marginalization of vulnerable people (Polo 2002: 24). Scientists and policymakers have focused on the link between environment, population, and conflict in conceptual, quantitative, and empirical studies and policy efforts (cf. Homer-Dixon 1994; Gleditsch 1999; Baechler 1999). The results show that environmental factors – such as resource scarcity, environmental degradation, and rapid population growth – can sometimes trigger or accelerate conflict within a complex web of causalities, leading to violence under unfavorable conditions (Carius/Imbusch 1999: 20-22). This complex web makes predicting or preventing conflict extremely difficult.
"Environmental conflict" is not a new concept: since the late 1980s, the prominence of such nontraditional security threats has increased (cf. Mathews 1989). Disputes over the availability, use, and distribution of limited, nonrenewable resources, like minerals or oil, have engendered violent conflicts for more than two thousand years. Today, the sustained degradation and depletion of the natural environment and its renewable resources reveal humanity’s impact on the balance of nature. This interaction has produced severe development crises in the South, demonstrating the links between human-induced environmental degradation and its socio-economic consequences (cf. Baechler 1999).

Global environmental problems (such as global warming, water scarcity, deforestation, soil erosion, water shortages, and rapid population growth) can trigger, accelerate, or contribute to poverty, migration, hunger and starvation, political instability, and ethno-political tensions at the regional or even local level. Hence, any analysis of environmental conflicts should recognize that structural development problems could contribute to these conflicts. This conflict dimension also reflects the shift from state to regional (or even individual) levels in security analysis, giving rise to the concept of "human security." A dimension of global environmental change, human security focuses on concrete problem contexts (Lonergan 1999; Pachauri 2000; Axworthy 2001). The integrated and interdisciplinary concept of human security, as outlined by the UN Development Program (UNDP 1994), includes economic, social health, and environmental aspects (Spector/Wolf 2000; Evans et al. 2000). Human security is achieved “when and where individuals and communities have the options necessary to end, mitigate, or adapt to threats to their human, environmental, and social rights” (Lonergan 1999: 29). Therefore, the main components of human security are fundamental needs – food, health, livelihood, and a personal feeling of security (Spector/Wolf 2000: 415).

Apart from this conceptual development, environmental conflict research has mostly concentrated on the connection between conflict and resource scarcity, and more recently on abundance of lootable resources such as diamonds, forests, and minerals. However, recent research argues that cooperation in the face of shared environmental stress has been an understudied and infrequently pursued program option. This argument suggests that environmental interdependence among parties can form the basis for proactive confidence-building and cooperative behavior across lines of tension (Postel/Wolf 2001; Wolf 2001; Conca/Dabelko 2002; Conca et al., forthcoming). Of course, “it is not enough just to cooperate: both the form and the content of that cooperation are critical” (Conca 2002: 11). Accordingly, researchers and policy analysts must examine more systematically situations where environmental cooperation has created positive side effects by building trust, creating consensus, and identifying mutual gains (ibid).
The WSSD and Conflict Prevention

In 2002, more than 191 governments sent representatives to Johannesburg to evaluate the progress of sustainable development initiatives established at the Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, and to negotiate the next steps. At the same time, numerous civil society groups, as well as a large number of representatives from the business community, presented their vision of sustainable development (see also IISD 2002; Wapner 2003; Mehta 2003; and Gutman 2003).

Some international officials and U.S. politicians stressed the connections among poverty, environmental degradation, and security before the WSSD. For example, before the 2002 UN Financing for Development conference in Monterrey, World Bank President James Wolfensohn said that addressing poverty increases security and should be part of a multi-pronged response to the attacks on September 11, 2001. Shortly before the WSSD, U.S. Secretary of State Colin Powell wrote that “sustainable development is also a security imperative. Poverty, environmental degradation, and despair are destroyers – of people, of societies, of nations. This unholy trinity can destabilize countries, even entire regions” (Powell 2002). However, nearly all of the agreements reached at the WSSD do not reflect this linkage.

Prior to the Rio Summit, the UN had also emphasized this link: in its 1987 report Our Common Future, which was intended to set the agenda for Rio, the World Commission for Environment and Development (WCED) expanded the concept 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” (WCED 1987: 19). The commission concluded that “environmental stress can thus be an important part of the web of causality associated with any conflict, and can, in some cases, be cata-lytic” (WCED 1987: 291). However, this aspect was barely recognized in Rio, and only regained prominence once attention turned to broader environmental and security debates in the mid-1990s.

2 President George Bush, in his pre-Monterrey announcement of a $5 billion annual increase in U.S. foreign assistance by 2006, also couched the investment in security terms.
The September 11 attacks reinforced the linkages between sustainability and conflict; although the attacks were not an official topic at the WSSD, representatives of many countries deplored terrorism while recognizing the role played by underlying grievances. However, while delegates focused on alleviating poverty, the Europeans and G77/China representatives rarely cast these efforts within a human or military security context. Germany’s deputy minister for environment, Gila Altmann, was an exception: Altmann cited the conflict potential of environmental degradation and unsustainable consumption, but also suggested that “cross-border or regional environment and development projects are particularly suited for developing ‘confidence-building processes’ between neighboring states and within regions marked by tensions and conflicts” (EDSP Initiative 2002: 3).

Results from the WSSD

The WSSD produced two types of agreements: Type-I and Type-II Agreements. The typical results of intergovernmental negotiations, Type-I Agreements include the Millennium Declaration, international environmental agreements (e.g., the Convention on Biological Diversity), and the political declaration and implementation plan for Agenda 21, while Type-II Agreements are public-private or public-public partnerships for sustainable development. However, before analyzing the WSSD’s outputs, the next section will look at the so-called WEHAB papers, which established the basis for negotiations.
WEHAB Papers

The WEHAB papers, which gave the delegates input on water and sanitation, energy, health and environment, agriculture, biodiversity, and ecosystem management, were proposed by UN Secretary-General Kofi Annan and prepared by UN agencies as the framework for working group discussions during the first week of the WSSD. These papers directly address environmental links to conflict and its prevention. The working paper on energy, for instance, describes how energy insecurity could lead to conflict; it also stresses the possibility of preventing these conflicts by diversifying energy consumption and increasing renewable energy sources (WEHAB 2002a: 8). The background papers on water and biodiversity stress that resource scarcity, especially water scarcity, will play a greater role in future conflict. They identify local water scarcity as a cause of conflict between households as well as among communities and countries (WEHAB 2002b: 7). To counter the potential security risks and the devastating effects of water scarcity and water pollution, the papers outline several areas for potential collaboration, such as integrating water resource management and forming partnership initiatives. Biodiversity loss, ecosystem mismanagement, and extreme droughts are expected to increase the potential for conflict, as access to food and water is constrained by environmental degradation (WEHAB 2002c: 8, 12). The WEHAB papers propose that national and regional ecological networks and corridors could help prevent these problems. In general, the WEHAB papers support implementing the Millennium Development Goals and targets, and therefore emphasize the close relationship between structural poverty and conflict.3

Political Declaration

The WSSD’s Political Declaration reaffirms the main goals of the 1992 UNCED in Rio de Janeiro, and points out that the international community is far from achieving these goals (WSSD 2002a). It states, “The deep fault line that divides human society between the rich and the poor and the ever-increasing gap between the developed and developing worlds pose a major threat to global prosperity, security, and stability.” However, the declaration does not outline a vision or strategy for closing this gap.

Implementation Plan

The Implementation Plan negotiated in Johannesburg lists concrete actions and measures as part of the overall framework for achieving sustainable development. The introduction names peace, security, and stability as preconditions for sustainable development (WSSD 2002b: para 5). The plan stresses that good governance is an important part of the institutional framework required to implement sustainable development: “Sound economic policies, solid democratic institutions responsive to the needs of the people, and improved infrastructure are the basis for sustained economic growth, poverty eradication, and employment creation. Freedom, peace and security, domestic stability, respect for human rights, including the right to development, and the rule of law, gender equality, market-oriented policies, and an overall commitment to just and democratic societies are also essential and mutually reinforcing” (section X, para 120bis). The plan identifies insecurity and conflict as the main obstacles to implementing sustainable development.

Poverty eradication is addressed in the most comprehensive of the plan’s eleven sections. In the ten years since Rio, social issues have gained prominence, as reflected by the UN’s Millennium Declaration in 2000 and the UN Conference on the Financing for Development in the spring of 2002. In Johannesburg, the shift toward structural dilemmas spurred the

3 The Millennium Development Goals are the core of the UN’s plan to reduce poverty and improve lives. World leaders agreed to these goals at the Millennium Summit in September 2000 and set targets to be met by 2015 (see also UN General Assembly 2000).
delegates to adopt goals to improve the poor's standard of living within the next two decades. Most of these goals are also part of the Millennium Declaration, such as halving by 2015 the number of people living on less than $1 a day and lacking access to safe drinking water. In addition, the parties in Johannesburg agreed to improve access to reliable and affordable energy and develop an international regime to promote the fair and equal distribution of profits from genetic resources.

Other sections of the plan address environmental issues, such as natural resources and consumption. The Implementation Plan seeks to reduce the present rate of species extinction by 2010, develop integrated water resource management plans by 2005, ensure the recovery of depleted fish stocks by 2015, and increase renewable sources of power. However, these sections do not set concrete targets or outline steps to obtain funding.

The Implementation Plan focuses on the needs of Africa. It links cooperation and conflict prevention by recommending that sustainable development programs "support African efforts for peace, stability, and security, the resolution and prevention of conflicts, democracy, good governance, respect for human rights and fundamental freedoms, including the right to development and gender equality" (section VIII para 56 (a)). The plan identifies regional cooperation efforts in Africa (like NEPAD and the African Union) as a way to achieve peace, stability, and security.

In summary, the plan only sporadically links environment and conflict or conflict prevention. However, as discussed above, the issue played a role in the WSSD’s decisions. For example, the concept of using transboundary water cooperation to avoid future conflicts was deleted from the draft Implementation Plan after fierce resistance by the Turkish delegation during the final preparatory conference in Bali.

Type-II Agreements: Partnerships for Sustainable Development

Partnerships for Sustainable Development, or Type-II Agreements, can be established by governments, international organisations, non-governmental organisations, and businesses to support the implementation of sustainable development. By August 16, 2002, over 200 partnerships had been announced. (WSSD 2002c). Only general criteria for the partnerships had been established before the summit, and there is still no procedure for monitoring their implementation (Kara/Quarless 2002; Ivanova 2003). A review of the partnerships, published by UNDESA, suggests that this instrument needs improvement.

Nevertheless, these partnership activities could help reduce conflict potential by developing capacity, building confidence, and generating collaborative frameworks. For example, global information systems, which were widely discussed at the summit, could help generate more integrated maps of ecological “hot spots” for decision-makers. Other established partnerships claim to contribute directly to stabilization, conflict prevention, or transboundary cooperation, and thus improve confidence building, especially in the water sector. The following partnerships announced in Johannesburg illustrate the range of activities designed to encourage cooperation and conflict prevention:

◆ The European Union’s "Water for Life" Initiative: Governments, civil society actors, and companies launched a partnership to fight poverty, build capacity, and improve the general quality of life. Representatives from African states and from the Newly Independent States expressed interest in participating in this initiative, which aims to help achieve the Millennium Development Goal to halve the number of people lacking access to safe drinking water by 2015. In addition, the initiative seeks to balance the environment’s water needs with those of economic development and agriculture (European Commission 2003). With strong public involvement, integrated river basin management could help achieve these objectives. The European Commission emphasized that ownership of the initiative will be shared by all partners.
The Initiative on Internationally Shared (Transboundary) Aquifer Resource Management, led by the International Association of Hydrogeologists, seeks to encourage transboundary water cooperation by forming a network for scientific, legal, socio-economic, institutional, and ecological assessments. This initiative aims to strengthen global cooperation through the integrated management of water resources, including internationally shared aquifers, which will be defined by a network of multidisciplinary experts. The initiative will use case studies to identify issues relevant to transboundary water management, and raise decision-makers’ awareness of the significance and importance of transboundary aquifer resources. Sharing scientific tools and water resource management methodologies for aquifers could promote cooperation among nations.

Sustainable Water Management in the Balkans and Southeast Mediterranean plans to develop and implement integrated water resource management on the regional and local levels. An interregional database will facilitate transboundary decision-making. The initiative intends to involve organisations that have already worked on this problem at a regional level, thus using shared knowledge to facilitate water management.

The Italian State Department announced a partnership with Bolivia, Brazil, and Peru, as well as The World Conservation Union (IUCN), named System Planning and Management of Transboundary Ecosystem Resources in the Southwestern Amazon towards the Sustainable Development of Local Communities and Regional Stability. This partnership seeks to improve social conditions and reduce the unsustainable exploitation of natural resources in local communities of the Southwestern Amazon. To increase stability in the region, the partnership plans to establish a transnational framework to integrate institutions and information networks.

The Asian Forest Partnership to Decrease Illegal Logging is led by the governments of Japan and Indonesia, the Center for International Forestry Research, and The Nature Conservancy. The partnership aims to avoid crises and reduce the potential for conflict by proposing concrete measures to counter illegal logging, prevent and fight forest fires, and rehabilitate and reforest degraded land.

The partnership on Sustainable Forest Management in the Congo Basin Region (CBFP), led by the U.S. Department of State, seeks to preserve forests by promoting sustainable use while protecting communal interests. The partnership is a comprehensive, long-term program to promote economic development, alleviate poverty, improve governance, and conserve forests. It supports a network of national parks, protected areas, and well-managed forestry concessions, and assists communities in six Central American countries that depend upon forest and wildlife resources. By encouraging community-based management, combating illegal logging, and enforcing anti-poaching laws, CBFP could prevent conflicts arising over forest use.

It remains to be seen whether these partnerships will play a central role in implementing sustainable development. However, the examples listed above include cooperative approaches and could be ways to develop stable regional networks of environmental cooperation. Sharing information, encouraging institutional collaboration, and establishing participatory processes will play crucial roles in promoting peace and stability. These aspects are, of course, not only components of the "official" partnerships but are also central to any initiative that seeks to enhance confidence building and cooperation.
The WSSD and Conflict Prevention
Beyond the Official WSSD Negotiations

Partnerships to implement sustainable development policies were not limited to those officially announced at the WSSD. At meetings held on The World Conservation Union-IUCN’s “Human Security and Environment Day,” which focused on the environmental roots of tension and conflict, attendees discussed alternative approaches (cf. IUCN 2002). Presentations, such as those by the Environment, Development, and Sustainable Peace Initiative (cf. EDSP Initiative 2002) and others at the water-related meetings in the Water Dome, emphasized the role played by cooperation in nature conservation. Thus, discussions outside the official WSSD negotiations analyzed the linkages between environment, conflict, and cooperation, and the mutual dependence of conflict prevention and sustainable development.

Participants, especially those from the global South, stressed the importance of establishing local resources to protect the environment and support development. Involving local communities in partnership activities by protecting their property rights and including them in the development of institutional arrangements is an essential part of developing and implementing sustainability and could help to ensure the legitimacy of these activities (see EDSP Initiative 2002). Transboundary protected areas can help build confidence and trust, if local populations are involved in developing and administering them. Eco-tourism, for example, could help integrate economic, social, and environmental activities in these regions, since local populations may benefit from new employment opportunities and integrated environment/population approaches. And finally, the UNESCO/Green Cross initiative “From Potential Conflict to Cooperation Potential: Water for Peace”, for example, illustrates how river basin cooperation promotes stability.

Taking a closer look at the peacemaking effects of river basin cooperation reveals a serious challenge: initiatives often lack representatives from the global South, which are necessary to successfully integrate lessons learned from other basins (EDSP Initiative 2002; Turton 2003: 82). Some lessons, however, cannot easily be integrated; the success of the Rhine River basin, for example, is based on specific regional conditions, such as a relatively high degree of wealth (see Durth 1996: 168–202.). Other challenges identified by participants included maintaining traditional mechanisms for avoiding conflict, which often erode as urbanization increases, as Patricia Kameri-Mbote of the African Centre for Technology Studies stressed at the IUCN meeting. Many participants suggested that decentralized decision-making would address this issue.

Other suggestions for implementing environmental peacemaking included collecting and exchanging regional environmental data, such as hydrological data, to help dismantle regional tensions (EDSP Initiative 2002; 4 Though water was an important issue at the WSSD, it was the main topic of other meetings, such as the International Freshwater Conference in Bonn in December 2001 and the 3rd World Water Forum in Kyoto in March 2003.)
Building common knowledge can reduce the perception of threat. In addition, the effects of environmental degradation on different social groups should be considered. For example, women play crucial roles in managing environmental crises such as water or food shortages. Particularly in rural areas women – as managers of land, water, forests, energy, and human settlements – are key actors in any conflict prevention strategy (EDSP Initiative 2002). Finally, informal and formal partnerships might facilitate understanding the private sector’s contribution to conflicts and their resolution; the role that companies play in existing conflicts should be analyzed in more detail.

In summary, on the global level, delegates did not include conflict and conflict prevention in the WSSD’s central documents. However, the relationship between environment and conflict is particularly relevant to sustainable development at the regional or local level. Partnership initiatives that focus on these levels can make sustainability a central element of peace-making efforts. The Johannesburg negotiations focused on fighting poverty by increasing access to fundamental resources like safe water or affordable energy. Action on the regional and/or local level can integrate activities addressing poverty, inequity, and global environmental change.
Protecting Transboundary Resources in Africa

The WSSD focused on Africa’s pressing problems: the regional impacts of global environmental change, together with enormous poverty, civil violence, and state collapse, illustrate the failure to implement sustainable development across the continent. However, as discussed below, regional environmental cooperation may help reduce conflict.

Transboundary Water Cooperation

Fifty-nine of the world’s 263 transboundary rivers, some of which have up to ten riparian states, are located in Africa (TFDD 2002; UNEP 2002: 2). Due to the natural distribution of water in Southern Africa, the fifteen international river basins in that region have a high potential for conflict (Turton 2003). At the same time, these river basins are essential for socio-economic development, providing irrigation, navigation, fishing, and hydroelectric power. Hence, they could offer enormous political, economic, and social opportunities, if institutions to integrate and coordinate transboundary water use could be fully developed. Although institutional arrangements, in the form of river basin organisations (RBO), already exist, less than 10% of the river basins have reached the initial stages of intergovernmental cooperation (UNECA 2000).

The WSSD called for international river basin organisations to resolve conflict in Southern Africa, by identifying the potential for conflict and preventing it. As research on transboundary watersheds indicates, “International waters, despite their complexities, can also act as a unifier in basins where relatively strong institutions are in place” (Wolf 2002: 6/7). Therefore, developers of institutional arrangements need to understand the specific regional, cultural, political, and historical context. In addition, affected communities and stakeholders should be included to ensure the institution’s legitimacy (e.g., as in the Nile, Zambezi, and Lake Victoria basins).
Approaches

As African states obtained independence, they recognized that commonly used water resources required intergovernmental coordination. Hence, many river basin organisations (RBOs) were formed in the 1960s and the 1970s, including the Niger (1963), Lake Chad (1964), Senegal (1964), and Gambia (1969). The Niger Basin Authority (NBA) has demonstrated increasing institutional competency: in the beginning, the organisation's function was limited to controlling navigation and traffic. Later, the NBA expanded its activities to include compiling studies, collecting data, and distributing information. In 1973, the commission was transformed into an implementation agency. In 1980, the NBA's responsibilities expanded to include planning and executing sub-regional and bilateral programs, which were financially supported by different foreign donor institutions (USAID, UNDP, FAO). Finally, in 2004, the NBA met in Paris to adopt a declaration entitled "Principles of Management and Good Governance for Sustainable Development of the Niger Basin."

This record illustrates the range of potential activities RBOs can take on, including those that balance riparian states' use of the river basin. Despite the fact that so far no member nation has ceded any sovereignty over their resources to the authority, the NBA demonstrates how transboundary cooperation can substantially contribute to the peaceful settlement of conflicts and disputes, as in the case of the Benue River basin: in 2000, Nigeria and Cameroon adopted a protocol to integrate sustainable water resource management through the mediation of the NBA. Such regular intergovernmental consultations can build confidence. One of the most effective examples of transboundary river cooperation, the Senegal River Development Organisation (OMVS), was created in 1972 not only to encourage economic development by producing hydroelectric power, but also to protect the environment and manage water quality.

Problems

RBOs must manage increasing environmental stress from droughts, ongoing environmental degradation, or changing precipitation patterns. On the other hand, a region's high degree of susceptibility to such environmental stresses could be exacerbated by the lack of economic development, political instability, and increasing poverty. These conditions affect not only the respective states but also impact the stability of RBOs; for example, unrest forced the Lake Chad Basin Commission (LCBC) to move its head office. Some of these institutions, like the Senegal River Basin Organisation or the NBA, have always been able to mobilize the necessary resources and successfully implement projects, while others have limited political and financial support. Other problems include administrative, technical, and financial issues, and the overall design of cooperative arrangements. States have different levels of interest, leading to complex hydro-political dynamics (see Turton 2003). The lack of consistent political support can destabilize institutions, which then are unable to provide financial resources and institutional stability.
Problem-Solving

RBOs can help identify obstacles to cooperation and ways to build confidence and mutual understanding. Despite different structures, lessons learned from successful and unsuccessful institutional arrangements could help others establishing RBOs avoid such problems. Less than 10% of the transboundary rivers have cooperative institutions, and new initiatives are likely to be developed in the near future. Effective information sharing requires international organisations (such as UNDP, the World Bank, and the recently reorganized African Union) to make a long-term commitment. By exchanging technical data about development projects, donors could more effectively coordinate their activities. Finally, to ensure institutional stability, international organisations must make a long-term financial commitment. However, as demonstrated at Johannesburg, development financing continues to be extremely controversial.

Regional Resource Protection: Peace Parks

Establishing “peace parks” to encourage regional cooperation and sustainable resource protection was a popular topic at the WSSD. Since ecological regions do not follow political borders, and many animal species rely on natural resources in neighboring countries, protected areas must often cross national boundaries to be effective. Transboundary protected areas can also promote regional economic development and contribute to peace, stability, and cooperation. However, transboundary protected areas have a long but often inglorious tradition in Africa, as most projects rarely balance the needs of local populations with those of endangered species (Koch 1997: 214-238; McIvor 1997: 239-269).

Approaches

In 1997, Africa had 39 peace parks, and hundred of regions were identified as potential parks (Matthew, et al. 2002: 47). The Peace Parks Foundation was created in 1997 to support the implementation of the peace park concept in Southern Africa, and is supported by donor institutions, including governments, international organisations, environmental foundations, and companies.

There are different types of peace parks; some transboundary protected areas focus on nature conservation, whereas others also support the needs of the local population. Some use a cooperative process to bilaterally or multilaterally set goals. However, for peace parks to fulfill their conflict prevention potential, they must integrate local communities into the overall process. Otherwise, new conflicts could arise over the access to and/or use and distri-
bution of natural resources. In addition, as demonstrated by the difficulties faced by the parks in Southern Africa initiated by the Peace Parks Foundation, dialogue with local communities is essential, as ownership of these protected areas is often extremely complex. For example, the Limpopo/Shashe area crosses the borders of Botswana, South Africa, and Zimbabwe (see Peace Parks Foundation 2001).

Expanding the peace parks concept and other similar approaches (biological corridors, biosphere reservations, “hot spot” areas) can provide many benefits (see van der Linde et al. 2001). First, the natural ecological cycle can be maintained or re-established to support the sustainable development of natural resources, as in the Krueger and Limpopo parks, which were combined to form the Great Limpopo Park. In the future, this park will expand to include areas in South Africa, Mozambique, and Zimbabwe, allowing elephants to return to their original habitat from the densely populated Krueger Park. Secondly, such expansion can renew the social and cultural ties of reunited groups and strengthen patterns of cooperation. Third, expansion can bring new economic possibilities, particularly in the tourism sector; the additional revenues can provide greater regional stability. Sustainability impact assessments could help avoid unintended side effects, such as negative impacts from intensified tourism. Finally, on the political level, transboundary cooperation in border areas can enhance security: conflict negotiations on the local level can be channeled through these processes to reach common objectives within cooperative frameworks.

◆ Problems

As suggested earlier, the success of the peace park concept depends on pursuing a sustainable, integrated, and coherent approach to protection. To avoid conflict, obstacles to local participation, arising from one-dimensional approaches pursued under colonial rule, must be eliminated and regional integration and development should be taken into account. Civil society groups and political parties must build or intensify dialogue with local authorities and communities, and understand the specific regional and national conditions. However, not all social groups (particularly marginalized groups) are organized in a way that can be represented in stakeholder forums. For example, at Phola Park near Johannesburg, marginalized groups reacted violently when they were excluded from the dialogue (see Koch 1997: 232). In addition, transboundary approaches should supplement or extend existing initiatives, not replace them. Accordingly, the international community must provide additional human and financial capital.
Problem-Solving

Although transboundary peace parks can contribute to conflict prevention or resolution, peace parks are not a panacea. In some cases, separate administration of adjacent protected areas may prove more useful. Despite regional differences, lessons learned from established parks could provide valuable input, not only for the African continent, but also for the Balkan region. Supporting peace parks and integrating them into regional economic agreements can help transfer the concept to other regions. Analyzing the possible interrelations between individual cooperation and political circumstances could help develop a long-term perspective and ensure the continued commitment of these actors and institutions. Therefore, linking transboundary resource protection to other regional cooperative efforts can generate further stability.
Integrating Environmental Protection in Regional Cooperation Arrangements: NEPAD and the African Union

Transboundary environmental cooperation can build confidence and improve living conditions, and international forums can further this by implementing sustainable development. Regional examples, such as the Southern African Development Community (SADC), the New Partnership for Africa’s Development (NEPAD), and the reorganized African Union, were prominently discussed at the WSSD. For example, South Africa’s Environment and Tourism Minister Mohammed Valli Moosa called the peace park concept, as implemented by NEPAD, an example for the entire continent: “The GLTP [Great Limpopo Transfrontier Park] is a demonstration of what can be achieved through regional economic cooperation, the vision behind the New Partnership for Africa’s Development” (BBC News, 2002). Accordingly, this cooperative approach is one of the eight priorities for NEPAD’s environment initiative (NEPAD 2001, section 141). NEPAD also emphasizes improving transboundary water cooperation, as demonstrated by the SADC Water Secretariat (NEPAD 2001: section 116/117). Regional cooperation and creating peaceful, stable conditions are key aspects of NEPAD’s strategy to create a “new” platform for African states (see Gelb 2002). Nevertheless, given the great importance of water resource development in Africa, NEPAD must outline steps to increase cooperation in transboundary river basins (see Turton 2003: 83).

This sentiment also applies to the reorganisation of the African Union: the Durban Declaration in July 2002 set a new agenda for Africa that requires a fundamental political change. Adhering to this agenda will also require adjusting the historical balance of power; national sovereignty must be redefined to achieve integration (see Ajulu 2002). Similarly, transboundary cooperation will depend on political will and public participation in the political process. In addition, the political and economic elite in individual member states must be persuaded to participate in the intensified regional cooperation efforts planned by NEPAD. As described above, existing approaches can provide both positive and negative models.
Conclusions

The WSSD’s agenda did not explicitly include conflicts over natural resources, or more generally, the connection between environment and conflict. International discussions of sustainable development have paid little attention to this issue, with the exception of Our Common Future, (the “Brundtland Report”) in 1987. However, the role of resource conflicts on a regional or local level, as well as the potential for cooperation and conflict prevention, arose during discussions of the peacemaking or peace-promoting effects of transboundary water cooperation and peace parks. Nevertheless, the WSSD’s Implementation Plan does not prominently address crisis prevention or conflict resolution. The controversial negotiations on transboundary water cooperation at the last preparatory conference in Bali demonstrated the political sensitivity of this topic. According to the Brundtland Report, sustainable development also affects foreign and security policies; however, sustainable policies can be inadequate tools for dealing with sensitive security-related issues and questions of national sovereignty.

The importance of environmental cooperation for developing peace cannot be denied and was accordingly mentioned in various contexts before and during the WSSD. However, some government institutions and civil society groups are still skeptical of framing environmental problems in security terms. In particular, using transboundary cooperation as a tool for avoiding conflict is perceived as a threat to national sovereignty. Others fear that environmental policy will be militarized. In addition, the increasing complexity of multilateral negotiations that cross thematic and resource-specific boundaries creates tremendous challenges for environmental and development policy, as global summits simultaneously address a variety of (often contradictory) issues such as global environmental problems, poverty, and governance deficits.

However, the WSSD demonstrated that even if the environment, conflict, and cooperation link was not a subject of the official negotiations, a variety of initiatives emerged from the summit that address this issue in the regional context. Indeed, global environmental challenges are most effectively matched at the regional level, where the potential benefits of cooperation are more easily identified. Also, for purely practical reasons, “human security” projects must be implemented on the local or regional level, where it is easier
to involve stakeholder groups directly affected by environmental problems. A long-term dialogue among national and non-governmental actors in environment, development, and foreign and security politics could create ownership for a wide range of participants, including local communities. Thus, a regional approach can increase the involvement of diverse groups. Furthermore, the regional level provides measures for reconciling interests and capacities. In this regard, international organisations can help ensure the stability of emerging transboundary and regional cooperative institutions, and facilitate dialogue. In addition, scientific, political, and civil society actors in donor states need to intensively and systematically discuss a comprehensive and coherent strategy for preventing and solving resource conflicts.

Confidence building allows groups to jointly address transnational or regional environmental problems; environmental cooperation, particularly between states, can build peace over the long term. To do this, the elements of environmental cooperation that promote peace most effectively (e.g., information, reports, consultations, and the incentives to cooperate) must be identified and used to increase confidence and stability. To date, there are already examples of successful environmental cooperation between states that had previously engaged in a political or violent conflict such as Norway and Russia (Hønneland 2004). During the preparations for the World Water Forum in March 2003 in Kyoto, Green Cross International and UNESCO’s "Water for Peace" program tried to prove this notion. Much work remains to be done, however, to determine precisely how to use environmental cooperation as a tool for peace development or conflict prevention. The examples of shared water resources between Turkey and Iraq, or between Uzbekistan and Kyrgyzstan, help illustrate some of the difficulties environmental cooperation faces in the light of foreign or security interests (cf. Kibaroglu/Ünver 2000; Weinthal 2002).

Promoting transboundary cooperation over shared natural resources presupposes identifying potential areas of conflict and crisis in which environmental cooperation is conceivable. In these areas, cooperation must be promoted and progress must be monitored on a regular basis. Reliable political recommendations for using shared natural resources to promote peace can be made only after a comprehensive evaluation based on theoretical assumptions and empirical examples. Translating objectives adopted at the WSSD into concrete projects and initiatives can promote sustainable peace policies. To date, the progress of Type-II partnership agreements indicates that further political engagement is needed in order to meet the expectations of the Johannesburg negotiators (UNDESA 2003). In addition, the WSSD’s focus on Africa’s problems and the proposals to encourage environmental cooperation in African countries show that regional cooperation is necessary and possible. However, the impact of these initiatives on security and stability can only be assessed over the long term.
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