

## Environmental Cooperation as a Tool for Local Development and Peace-building in Conflict-affected Areas

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**Abstract** Since the end of the 1990s, scholars and policy makers have spoken about using environmental cooperation as a tool for local development, conflict transformation and peace-building. Environmental cooperation is believed to internalize norms, form local and regional identities and interests, operationalize routine communication, and marginalize the acceptability of the use of violence. The idea of using environmental cooperation as a tool for local development and peace-building has even been reflected in the agendas of international organizations. UNEP<sup>1</sup> has introduced specific science-based internationally applicable instruments for capturing and evaluating the relations between environmental sustainability, development and peace. In particular, the policy instrument of Post-conflict Environmental Assessment is presently used successfully in conflict-prone and post-conflict areas.

**Keywords:** • environmental cooperation • local development • peace-building • environmental peace-building • environmental scarcity

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<https://doi.org/10.4335/978-961-6842-91-4.17> ISBN 978-961-6842-91-4

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Available online at <http://www.lex-localis.press>.

## 1 Introduction

Environmental cooperation as a political issue has a short but rich history. Environmental issues penetrated the political agenda in the mid-1960s in various forms and have since stayed on the agenda of international and national politics. One of the newest ideas is that of using environmental cooperation as a tool for peace-building and development, particularly in post-conflict or conflict-prone areas. This idea arose in the 1990s in connection with efforts to seek more effective tools for fostering sustainable development and conflict resolution. Analyses of environmental cooperation in underdeveloped and conflict-affected areas were first conducted in the first half of the 1990s. The first proponents (e.g., A. Westing) often worked as environmental experts and propagated the idea of so-called natural peace parks. These conservation areas were established with the aim of protecting local ecosystems from the impacts of armed conflict. During the last decade, several peace parks have been established, such as the Sierra del Condor Park between Peru and Ecuador, the Kashmiri Siachen Glacier Park between India and Pakistan, and the Demilitarized Zone between North and South Korea.

The idea of peace parks was elaborated in connection with the resolution of conflicts caused by disputes about natural resources and raw materials. Particular attention has been paid to conflicts over water, diamonds, coltan,<sup>1</sup> and tropical timber (Le Billon 2009; Matthew *et al.* 2002). Later, some authors (for example, Conca and Dabelko 2002; Wallace and Conca 2012) and consequently policy-makers (e.g. within the World Bank, UNDP and UNEP; Westing 2010) began to consider the possibility of using environmental cooperation as a tool for local development, conflict transformation and peace-building.

This deliberation is based on the presumption that conflict and cooperation can coexist and that a cooperative approach to planning, management, and the use of environmental resources can boost development, confidence, communication, and interactions between conflict parties and contribute to the transformation of threats and uncertainties (see Box 1). According to supporters of the idea, environmental cooperation helps to internalize norms, form local and regional identities and interests, operationalize routine communication, and marginalize the acceptability of the use of violence (Brock 1991). In other words, environmental cooperation is perceived as a tool for (local) development, conflict transformation and resolution because it enables institutional and behavioral transformations and changes in the approaches of the affected actors.

**Box 1:** Dominican Republic and Haiti<sup>2</sup>

*UNEP and UNDP accompanied the Governments of Haiti and the Dominican Republic in undertaking a detailed assessment of their border area. Economic and resource inequalities between the two countries are the cause of many of the transboundary problems that have been identified in the border zone. Several of the identified issues related to the environment and the use of natural resources also raise the short-term but significant risk of instability and conflict regarding the relations between the two countries. Fourteen related recommendations were developed with and accepted by the two governments. The recommendations are expected to reduce chronic poverty and hunger in the border zone while promoting more sustainable livelihood practices and enhancing the resilience of the population to shocks and stresses. They also contribute to preserving peaceful relations between the two countries through increased national and local level bilateral cooperation that will reduce tension and the risk of conflict over border zone issues.*

Ideas about the positive effects of environmental cooperation on local development, confidence building and conflict transformation proceed from the fact that there exists a relationship between environmental cooperation and other forms of cooperation, or, better said, that environmental issues can hardly be separated from other problems that local communities are challenged by. Many scholars and policy-makers believe that ecological interdependencies create social relationships upon which local communities can capitalize and that these interdependencies can create win-win circumstances. Environmental issues are closely related to the other areas of life of local communities such as the level of development, the structure of the economy, the culture of the community, human rights policy and the security situation (see Table 1).

For example, we have evidence that involuntary migration flows such as the flights that occur before violence or famine have significant negative environmental effects: people who leave their homes without funds and property often loot the localities they move into; they may also cut down trees for fuel and hunt the local animal population for food. In a short time this can lead to the widespread environmental degradation of the hosting area. This was experienced in the Virunga national park on the border between Rwanda and The Democratic Republic of the Congo (DRC); Rwandese fleeing before the 1994 genocide found shelter in the region and within a few months decimated the population of mountain gorillas and cut down a large area of rainforest. Concurrently, the high level of insecurity in the region caused mainly by the ongoing attacks of small militia groups made the protection of the natural park and of the rainforest impossible.

**Table 1:** Examples of the relationship between environmental issues and other thematic areas

	<b>Climate change and global warming</b>	<b>Deforestation and land degradation</b>	<b>Water scarcity</b>
<b>Environment and ecosystems</b>	Change in ecosystems, droughts, floods, loss of animal species	Loss of endemic species, local water scarcity	Change in local climate, droughts, loss of natural environment and endemic species (wetlands)
<b>Security and threats</b>	Rise in ocean level and loss of territory and agricultural land, lack of food	Landslides and torrential rains endanger settlements and infrastructure	Water conflicts
<b>Development and poverty</b>	Hits poorest countries and poor people hardest	Rise in environmental refugees, loss of natural environment	Loss of agricultural land, lower yield, rise in number of environmental refugees
<b>Trade and economics</b>	Change in trade routes, unstable weather conditions	Regional and local resettlement, rise in poverty over long term	Increases in water prices, need to rebuild water and sewage infrastructure

Source: Authors' construction.

As it is evident from Box 1, the idea of using environmental cooperation as a tool for local development, conflict transformation and peace-building has intrigued not only researchers, but also international institutions. It appears on the agenda of the OSCE<sup>3</sup> (under the term “environmental confidence building”), UNEP (under the term “environmental peacebuilding”), and at the World Bank, the Asian Development Bank, the European Union, NATO,<sup>4</sup> international environmental agencies, and many non-governmental organizations (for example, the World Wildlife Fund and MacArthur Foundation) (ADB<sup>5</sup> 2019 and GMS CEP<sup>6</sup> 2019; Van Dijck 2012; IUCN<sup>7</sup> 2013; MacArthur Foundation 2019; OSCE 2012; UNEP 2009).

Despite the growing number of projects that involve the use of environmental cooperation as a tool for local development and peace-building and growing interest among scholars about the issue, the assumptions about the conditions for the establishment of environmental cooperation and its operation in underdeveloped conflict-prone or conflict-affected areas are quite unclear. Little is also known about how the idea of using environmental cooperation as a tool for local development and peace-building developed, and how it is used in practice today. This gap is filled by this chapter. We first present the development of the approach of “environmental cooperation as a tool for local

development and peacebuilding” and offer a critical analysis of the literature on the issue. Second, attention is paid to “environmental assessments” and to “post-conflict environmental impact assessment,” which are the basic practical instruments of UNEP for identifying the links and interdependencies between environment, security and development in specific areas.

## **2 Environmental cooperation as a tool for local development and peace-building: history and criticism of the approach**

In this chapter we will proceed chronologically, analysing how considerations of the relationship between environment, security, conflict and underdevelopment have evolved over time. We cover the most relevant academic texts and documents of international governmental and nongovernmental organizations, as well as those of think tanks and national responsible bodies.

Environmental issues became a part of security studies during the 1950s and part of the agenda of international politics during the 1960s. During this period authors such as Harrison Brown (1954) studied the relationship between environmental changes and security, but without the explicit use of this terminology. Development studies incorporated environmental issues a decade later, at the beginning of the 1970s. In development assistance and policy-making, both issues have been strongly linked since the 1990s when Finland suggested adding to the existing Official Development Assistance concept a broader concept of concessional resource flows for development, humanitarian and environmental purposes, and when scholars and practitioners started to talk about the environmental assessment of development projects and the “greening of development assistance”.

One of the first pieces of work to connect the environment with development and security was a book published in 1972 by Donella H. Meadows, Dennis L. Meadows, Jørgen Randers and William W. Behrens called *the Limits to Growth*, which predicted that the options for the development of human populations are limited by the amount of resources that are available. The oil crisis of 1973 proved some of Meadows’ theses to be correct and the matter of the relationship between security, resource availability, development, and the state of the environment became a subject of political debate and academic research.

At the turn of the 1970s, the issue of security began to penetrate the debates of ecologists and environment experts. After experiencing the Vietnam War, the world started to pay attention to the negative impact of warfare on the environment. During the 1970s and 1980s environmental topics became a common part of the international agenda. The first Earth Summit took place in 1972; in 1973 the United Nations Environment Programme was established; the United Nations Conference on Human Settlements HABITAT took place in 1975; and in 1982 the UN General Assembly adopted the World Charter for

Nature. In 1980, the UN Commission led by W. Brandt published the report *North-South: A Program for Survival* (ICIDI<sup>8</sup> 1980), which discussed the necessity of connecting development-related considerations with the protection of the environment and natural resources. In 1987, G.H. Brundtland's commission published the report *Our Common Future*, in which the necessity for the protection of the environment and natural resources was articulated in connection with the term "sustainable development" (WCED<sup>9</sup> 1987).

These events, changes, and developments led to the rise of so-called new political ideologies, such as environmentalism, including deep ecology and ecofeminism, and paved the way for debates about the environment and natural resources in security and development studies, as well as policy-making. Since the end of the 1980s the idea of the relationship between the environment, (in)security and (under)development was further developed and resulted in a new approach called environmental security. As noted by Dabelko, "environmental security has emerged as a transnational idea, the core of which was the assumption that environmental degradation and the depletion of non-renewable resources can become a source of threat to the security of individuals, groups, corporations, states, ecosystems and the international system" (Dabelko in Rønnfeldt 1997, 474).

Individual pieces of work devoted to the analysis of the relationship between the environment, security, peace-building and conflict resolution are not presented here in detail; only the approaches which have been gradually generated are summarized. The first wave of researchers (e.g., Mathews 1989; Levy 1995; Buzan *et al.* 1998) focused on researching the relationship between the environment and national security. These authors considered environmental degradation and the lack of natural resources a threat to national interests and values. The second wave of scholars (e.g., Granzeier 1997; Barnett 2001) considered the environment as an independent referent object. They also considered ecosystems, ecological processes and ecological balance to be the same. The third wave of researchers (Gleick 1991; Gleick 1993; Homer-Dixon 1991; Homer-Dixon 1994; Le Billon 2009) claimed that environmental degradation and environmental change and a deficiency of natural resources (so-called environmental scarcity) can become the cause of outbreaks of violence and/or that raw materials can become a driving force behind violent conflict.

It is worth mentioning – from the perspective of our topic – that a numerically smaller critical stream of scientists (e.g., Dudney 1997; Gleditsch 1998) have doubted the causal chain that was postulated; namely: high resource consumption – environmental degradation – deepening of scarcity – higher competition – greater risk of the outbreak of violence. For example, Dudney (1997) and later also other scholars (Borrini-Feyerabend *et al.* 2007; Luzi 2007; Young 2009) argued that environmental degradation and scarcity can lead to the emergence of joint interests and a shared approach to facing environmental problems.

Reflections on environmental scarcity and so-called conflict resources since the mid-1990s have increasingly been influenced by the debate about development – economic as well as sustainable- (see Collier *et al.* 2003; World Bank 2011). This development approach has been called the security–development nexus and is directly associated with the establishment of the human security concept at the UN. It was mainly the UNDP which advocated the concept of human security, including so-called “Freedom from Fear” (protection of the individual against political threats) and “Freedom from Want”. Freedom from Want is outlined in UNDP documents as the interconnection of individual security and the chance for individual sustainable development, which also includes environmental security (UNDP 1994, 25). Environmental security is defined as the protection of the individual against the degradation of local ecosystems and global ecological changes (UNDP 1994, 28–29). The importance and relevance of these themes in practice have been advocated by those who have pointed out the increase in environmental migration and the number of environmental refugees (for example, Westing 1992).

In the mid-1990s, it was not only the academic world that was engaged with the issue of the rise in environmental problems and the need to jointly manage degradation/environmental change, underdevelopment and insecurities. At least five important initiatives emerged with a focus on the environment, development and security nexus: 1. Reducing Emissions from Deforestation and Forest Degradation (REDD+); 2. the Clean Development Mechanism (CDM); 3. the Global Environmental Facility (GEF); 4. the Green Climate Fund (GCF); and, 5. UNEP’s Crisis Management Branch. REDD+ seeks to compensate countries for making emission reductions through reducing deforestation. The CDM allows agents in developed countries to purchase emission reductions in developing countries in the hope of simultaneously reducing emissions and spurring sustainable development. GEF, the World Bank framework, is a more traditional aid vehicle that provides a package of grant funding and technical assistance. The GCF emerged as a major initiative for facilitating financial flows from developed to developing countries to meet climate-related challenges (Arndt and Tarp 2017). UNEP’s Crisis Management Branch conducts field-based assessments, works to reduce the risk of disaster, and promotes environmental cooperation for peace-building, among other activities (UN Environment 2019).

During the following decade, researchers engaged in the study of conflict elaborated the relationship between the environment and natural resources on the one hand, and the causes, courses and conflict resolution on the other, into a multidimensional and complex field, in which four wide streams can be identified. The first stream (for example, Homer-Dixon 1991 and 1994) has worked further with the concept of environmental scarcity and enriched it with ideas about demographic growth, climate change and water wars, claiming that environmental degradation and a deficiency of natural resources and raw materials reduces the adaptive capacity of societies and encourages outbreaks of violence.

The second stream believes that natural resources and raw materials can serve to prolong conflicts as they enable combatants to obtain resources for warfare (compare with the debate about so-called blood diamonds; de Koning 2008). Representatives of the third stream argue that unequal access to resources, denial of access to resources, or insufficient compensation to local communities whose resources are consumed can cause a sense of grievance that becomes the root of violence (Collier and Hoeffler 2004).

The above-mentioned streams gave rise to the fourth one (Brock 1991; Conca and Dabelko 2002; Dabelko 2006; Rustad *et al.* 2012), which comes to the conclusion that the transformation and resolution of conflicts, post-conflict reconstruction and development assistance must take into consideration environmental changes and natural resources.

Some scholars and policy-makers go even further, stating that environmental issues go beyond politics; that it is apparent that unilateral approaches to environmental protection or environmental change solve nothing and that environmental matters have the potential to catalyse cooperation. Significant optimism is created by studies undertaken by Aaron Wolf (1997) who presents evidence that states that share water resources tend to cooperate rather than come into conflict.

The fourth stream consolidated around the year 2000, when a number of studies were published (Matthew *et al.* 2002; Conca and Dabelko 2002) that described the peace-building and development impact of environmental cooperation, and it was also at this time that this idea became established in important international organizations – in particular, the UNEP (see above), OSCE, UNDP and World Bank. It was also at this time when UNEP introduced a new framework for the evaluation of the environmental situation of particular countries or regions to grasp the nexus between environmental sustainability, natural resources, development and security, and to enable the prioritization of needs and the adjustment of policies. Consequently, terms like “greening development assistance,” “environmental governance,” and “greening the blue helmets” emerged.

### **3 Environmental assessment: The nexus between environmental sustainability, development and peace-building**

A rise in the importance of environmental issues in politics and security was evident during the late 1980s, strengthened by several international events in the first half of the 1990s. The Chernobyl nuclear power plant accident, a series of chemical-related incidents in East European countries, rising water scarcity in Central Asia, and several oil tanker collisions and the related contamination of extensive areas of ocean by oil – to name a few incidents only – confirmed that environmental degradation and sustainability should be the top international priorities and require a coordinated international approach.



It was also crystal clear that environmental degradation progresses faster in poor and developing countries which do not have sufficient resources, technical skills and human capital to face such problems. A number of weak, poor, or post-conflict countries have not been able to conduct environmental assessments at all or to implement systematic environmental policy; either the national authorities lack the scientific expertise or operational capacity to conduct environmental assessments, or there have been serious security problems in the region and the necessary conditions for conducting field research and collecting evidence for environmental assessments have been lacking.

In response, several international bodies have accepted a new approach in an effort to assist countries to cope with environmental problems. The UNDP,<sup>10</sup> UNEP, European Union, World Bank, OSCE and even NATO have introduced new environmental frameworks and initiatives. A series of internationally coordinated programs and platforms have progressively integrated environmental issues into development projects and security topics. As an example, the programme “Environmental-Security Initiative” (ENVSEC) reflects on the interrelated challenges of environmental sustainability, development and security in Central Asia and Eastern post-soviet Europe. ENVSEC has been supported since 2010 by the Regional Environmental Center, NATO, UNDP, UNEP and OSCE.<sup>11</sup> While this initiative is only of regional scope, other international initiatives and support mechanisms have been established (such as the Global Environmental Facility, as mentioned above).

The most problematic issue was how to approach the multi-disciplinarity of the nexus between environmental sustainability, underdevelopment and security, and how to translate these issues into practical policies. Based on these problems and needs, UNEP introduced a framework called “Environmental Impact Assessment” which developed into “the process by which the consequences and effects of natural processes and human activities upon the environment are estimated, evaluated or predicted” in less than one decade (UNEP 2015, 4). In reality, Environmental Impact Assessment (hereafter, EIA) is a toolbox that enables the scrutiny and evaluation of a plethora of interconnected issues and problems, and offers an opportunity to suggest priorities and solutions. It is science-based approach to collecting evidence for improving policy making.

Based on the experiences, lessons learned, and needs of the affected countries, UNEP has developed many different types of environmental assessment methodologies. These include Integrated Environmental Assessment, Ecosystem Assessment, Environmental Valuation Assessments, Flash Environmental Assessment and Post-conflict Environmental Assessment, to name just a few. The particular assessments differ in terms of the scale of evaluation and according to the trends, processes and issues under evaluation (see Table 2). While this chapter particularly concentrates on the possibility of using environmental cooperation as a tool for development and peace-building, the primary focus here is Post-conflict Environmental Assessment.

**Table 2:** Types of UNEP environmental assessments (random sample)

Type	Scale assessment	General information
<b>Integrated Environmental Assessment</b>	Global Regional National Local	Interdisciplinary; aims to identify, analyse and appraise all relevant natural and human processes and their interactions which determine both the current and future state of environmental quality and resources; integrates social, economic and environmental issues.
<b>Ecosystem Assessment</b>	Global Regional National Local	Evaluates the consequences of ecosystem change on human well-being, which provides the scientific basis for the actions needed to enhance the conservation and sustainable use of those systems and their contribution to human well-being.
<b>Risk Assessment</b>	Global Regional National Local	Intended to calculate or estimate the risk to a given target system, region, state or population, including the identification of attendant uncertainties or particular agents; involves steps to determine needs and gaps, hazards, and vulnerability.
<b>Vulnerability Assessment – climate change and disasters</b>	Global Local	Focuses on climate change and disasters; aimed at fostering understanding of the impacts, risks, and hazards associated with adverse effects brought about by climate change, natural hazards, and disasters, combined with economic, social and environmental factors that increase or decrease vulnerability.
<b>Post-conflict Environmental Assessment</b>	National Local	Aims to identify, evaluate, and respond to critical environmental issues to identify environmental risks, during or immediately following conflict situation; provides information on social and economic impacts associated with the use of natural resources.
<b>Thematic Assessment</b>	Global Regional National Local	Focuses on a specific theme, e.g. water, air, biodiversity, cities, land, etc.
<b>Environmental Impact Assessment</b>	National Local	Seeks to identify and evaluate the potential environmental consequences, impacts and effects of a proposed development project in order to minimize, mitigate or eliminate any adverse potential impacts.

Source: Authors' construction based on UNEP (2004; 2015).

#### 4 Post-conflict environmental assessment

Natural resources are key to the peace process and development because they often underpin other peace-building and development sectors. From water for drinking and agriculture to forests and wetlands that support livelihoods to high-value natural resources such as timber, coltan and copper that can kick-start economic growth and become an engine for recovery and development, how natural resources are used and how environmental degradation or protection are approached influence development and peace-building endeavors. As evidence from the field shows (e.g. from South Sudan, Darfur, Virunga National Park in the DRC or the Emerald Triangle between Laos, Cambodia and Thailand; more see Waisová 2017), deficiencies in the management of natural resources and in environmental governance and the absence of environmental cooperation are some of the most common sources of underdevelopment and of local unrest and conflict (see also Chart1).

Since 1999, UNEP has offered tailored technical expertise for conducting post-conflict environmental assessments in response to increasing civilian conflict and the environmental degradation and looting of resources that is interconnected with these conflicts. The goal of this activity has been to detect and analyse the environmental drivers of conflicts and the impact of such conflicts on the environment and to suggest solutions for stopping environmental issues becoming conflict drivers or creating victims in the future. UNEP's initiatives in this area of issues and their efforts to intervene in policy making to mitigate environmental degradation, environmental threats such as deforestation or acid rains and the underdevelopment nexus are based on wide-ranging cooperation with academia.<sup>12</sup>

The first Post-conflict Environmental Assessments (hereafter, PCNA) were carried out in 1999 shortly after the Serbia–Kosovo conflict, when the bombing of industrial sites, military bases and public infrastructure raised concern about a potential environmental catastrophe (particularly water and air pollution) resulting from the release of toxic chemicals. UNEP's Crisis Management Branch was officially established in 1999, followed by, in 2001, the UNEP's Post-conflict Environmental Assessment Unit. Since then, more than twenty PCNAs have been written and introduced: e.g. for Lebanon, Iraq, Afghanistan, Sudan and Liberia. PCNAs represent the vision of the nexus between environmental sustainability, development and security, whose goal is to help with collecting scientific evidence about the nexus of these three areas of issues in the field, evaluating data, and suggesting solutions with the aim of supporting environmental sustainability. Moreover, they are designed to enable a form of local development that is also based on the use of local and regional environmental resources, and all this by maintaining peace and security in the long-term.

Development efforts and economic growth such as the rapid (re)construction of infrastructure or booms in the extraction industry and efforts to strengthen food security

for a rising population can sharply contrast with the goals of environmental protection and sustainability. This has been experienced in many countries and regions (e.g., coastal China, Romania, Nigeria and Angola). PCNAs are designed to responsibly evaluate the nexus between environmental sustainability and the chance for development and security, and to propose appropriate strategies for enabling long-term development and the positive interplay of all three sectors.

Scrutiny of the existing PCNAs (e.g. Afghanistan (UNEP 2003), Albania (UNEP 2000), Sudan (UNEP 2007), Côte d'Ivoire (UNEP 2015)) shows that the PCNAs aim to develop the whole-of-government approach based on transparent and good governance, to make all three goals – environmental sustainability, security and development – compatible, and to capitalize on the linkages between environment, peace-building and conflict prevention. All assessments also clearly indicate that adequately reacting to the interdependence between environmental sustainability, security and development requires the coordinated and integrated approach of domestic and international bodies, including non-governmental organizations and development agencies.

## 5 Summary and conclusions

Scientific knowledge, as well as lessons learned from the field, offer evidence that interdependence exists between the state of the environment, underdevelopment and poverty, and the security situation. Rash projects that take into consideration only one area of issues may have extensive and irreversible effects on other areas, and in some cases might even create local unrest and conflict. Although development projects such as large dams, hydroelectric power stations and high-voltage power networks increase the production of electricity, reduce the number of blackouts and enable industrial development, they may also irretrievably change the landscape (e.g. annihilate wetlands and destroy rain forests), eradicate endemic species, increase CO<sub>2</sub> emissions and also force the resettlement of local populations, changing not only the lifestyles of local communities, but also ethnic and religious maps.

The rise of knowledge about the interdependence between the state of the environment, access to natural resources and the development and security situation have resulted in innovative approaches in science as well as policy making. Numerous scientists have suggested that environmental scarcity and the need for sustainability should not be a source of conflict but rather a source of cooperation, arguing that environmental issues must be dealt with in coordinated ways; in other words, a unilateral approach has only negligible effects. Environmental cooperation is thus needed. Environmental cooperation may be the bridge between conflict communities and the way to strengthen development, as well as security. These ideas have been widely reflected in international politics. Since the end of the 1990s an increasing number of frameworks, initiatives and projects have been implemented that have operationalized the nexus between environment, development and security. Environmental assessment has emerged as a practical

methodology and practice of evaluating this nexus and its effects in particular issue areas and policies.

The pioneer of this approach has been UNEP, which, based on needs and on lessons learned, has established several types of assessment mechanisms. Post-Conflict Environmental Assessment is the mechanism specifically designed for use in parallel with peace-building, development and environmental sustainability efforts. This mechanism has already been used in more than twenty countries; assessments have been introduced for Sudan, Afghanistan, Bosnia and Lebanon, to name just a few. These assessments indicated that good and transparent environmental governance and cooperation about environmental issues are prerequisites for development as well as security in the long-term, and that there will be no environmental sustainability without a sensitive approach to development and the careful maintenance of peace.

#### Notes:

<sup>1</sup> UNEP (the United Nations Environment Programme) is an agency of the United Nations which coordinates the organization's environmental activities and assists developing countries to implement environmentally sound policies and practice.

<sup>1</sup> Coltan is a metallic ore, the base material of tantalum which is widely used in the manufacture of batteries for electric cars, capacitors, and other electronic products.

<sup>2</sup> UNEP (2019): "Environmental Cooperation for Peacebuilding". Available at: <http://web.unep.org/regions/rolac/environmental-cooperation-peacebuilding> (15 March, 2019).

<sup>3</sup> OSCE: The Organization for Security and Co-operation in Europe is the world's largest security-oriented intergovernmental organization. Its mandate includes issues such as arms control, the promotion of human rights, freedom of the press, and fair elections.

<sup>4</sup> NATO: The North Atlantic Treaty Organization, also called the North Atlantic Alliance, is an intergovernmental military alliance between 29 North American and European countries.

<sup>5</sup> ADB: The African Development Bank Group or *Banque Africaine de Développement* is a multilateral development finance institution.

<sup>6</sup> GMS CEP: The Greater Mekong Subregion Core Environment Program.

<sup>7</sup> IUCN: International Union for Conservation of Nature.

<sup>8</sup> ICIDI: Independent Commission on International Development Issues.

<sup>9</sup> WCED: World Commission on Environment and Development.

<sup>10</sup> UNDP: United Nations Development Programme.

<sup>11</sup> For more, see <http://www.envsec.org> (15 March, 2019).

<sup>12</sup> See above, and also <https://environmentalpeacebuilding.org/about/> (15 March, 2019).

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