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Environmental Problems as a Cause for Conflict within the OSCE Region²

Overview

Since the end of the Cold War, policy-makers have been faced with the complexity of an international security system in which non-traditional security threats having local, national, regional and worldwide scope are increasing in intensity and where many processes are beyond the control of individual governments. The Organization for Security and Co-operation in Europe (OSCE) as a regional institution is adjusting to this changing framework through adopting a comprehensive and broad security approach as reflected in its official mandates such as the Helsinki Final Act, the Charter of Paris, the Bonn Document, the Budapest and Lisbon Documents, and the Charter for European Security. In particular, the OSCE has begun to address security challenges in a more comprehensive way to include themes such as the environment since the potential for environmental conflict is a security risk within the OSCE region. One of the most visible examples is the growing tension among Central Asian states over energy and water issues, which are considered as a potential threat to regional stability. Other regions within the OSCE sphere of influence with environmental and security challenges include South-eastern Europe, the Caucasus, and Central and Eastern Europe. Despite the important work of the OSCE in, *inter alia*, the areas of arms control, preventive diplomacy, confidence- and security-building measures, human rights and election monitoring, this article will focus primarily on the OSCE's efforts in the environmental dimension. The purpose of this article is to provide a brief overview of the nexus between environment and security, to examine those regions where OSCE activities take place and there is a risk of environmental conflicts, to describe the various activities and institutional approaches of OSCE work related to the environment, and to discuss political instruments and means to prevent environmental conflicts in the future.

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2 The author would like to thank Tom Price (Co-ordinator of OSCE Economic and Environmental Activities), Harald Neitzel (German Ministry for the Environment, Nature Conservation and Nuclear Safety) and colleagues from Ecologic, Stefanie Pfahl, Alexander Carius, and Andreas March, for their valuable comments and suggestions.

The Environment and Security Nexus

The concept of "environment and security" has gained in importance since the end of the Cold War and has increasingly been placed on the international political agenda. In 1987, the World Commission on Environment and Development (WCED) stressed the connection between environmental degradation and conflict in the Brundtland Report.³ Since the publication of this document, both the scientific and the policy community began to examine the linkages between environmental change and security and in particular to consider the conflict potential of negative environmental trends such as resource depletion, distributional conflicts over scarce resources (i.e. water, soil, wood, etc.) rapid population growth, the growth of migratory movements leading to the danger that immigration regions would be destabilized thus causing societal problems holding a social conflict potential.⁴ The main thrust of this research was to look at cases of violent conflict and then to investigate the environmental factors involved.

This comparative research demonstrated that environmental degradation and resource scarcity could - under certain political, economic and social conditions - contribute to or accelerate the outbreak of violent conflict mainly in the developing countries and countries in transition.⁵ Peace and conflict research has also shown that regions susceptible to environmental conflicts are located primarily in the south either in underdeveloped regions that lack development policy alternatives or regions that are characterized by a history prone to conflict. For example, the civil wars of Rwanda and Sudan, mining conflicts in the Southern Pacific, the water conflicts in the Jordan River Basin and the Euphrates and Tigris River Basins, as well as the intra-state or inter-state tensions on the Indian subcontinent bear testimony to the political volatility of conflicts related to environmental degradation or resource scarcity.

The research also helped to clarify that there is no direct, mono-causal relationship between environmental degradation, resource scarcity and conflict. Instead environmental degradation and resource scarcity is embedded in a broader context of factors, which can contribute to or accelerate the incidence

3 World Commission on Environment and Development, *Our Common Future*, New York 1987.

4 Cf. Alexander Carius/Kerstin Imbusch, *Environment and Security in International Politics - An Introduction*, in: Alexander Carius/Kurt M. Lietzmann (Eds.), *Environmental Change and Security: A European Perspective*, Berlin/Heidelberg/New York 1999, pp. 7-30; Kurt M. Lietzmann/Gary D. Vest, *Environment and Security in an International Context*, NATO/CCMS Pilot Study Report No. 232, Brussels 1999.

5 Research findings are stated in the following projects reports: (1) the Project on Environment, Population and Security, conducted by Thomas Homer-Dixon of the Peace and Conflict Studies Program of the University of Toronto and the American Association for the Advancement of Science (AAAS); (2) the Environmental Conflicts Project (ENCOP) led by Kurt R. Spillmann of the Centre for Security Studies and Conflict Research at the Swiss Federal Institute of Technology Zurich (ETHZ), and Guenther Baechler of the Swiss Peace Foundation; and (3) the Global Environmental Change and Human Security Project (GECHS) of the International Human Dimensions Programme, University of Victoria, Canada, under the Chair, Steve Lonergan.

or escalation of conflict.⁶ Moreover, the research also showed that these contextual factors can predispose a society to instability and make it especially susceptible to environmental problems.⁷ Examples of contextual variables that may lead to a security risk when they interact with other socio-economic and political factors may include the following: unstable economies, unjust social systems, and repressive governments; resource competition over common use of natural resources (i.e. water, fisheries, energy, etc); growing environmental pollution (water and air); ethnic and religious rivalry; and migration or refugee flows, etc.

This research has also demonstrated that environmental change and resource scarcity do not lead directly to violent conflict but very often to co-operation. Therefore it is increasingly understood that environmental change and resource scarcity also create strong incentives for co-operation and collective action. Another general conclusion derived from the research is that co-operation on common environmental issues can establish dialogue and lines of communication that may be valuable in reducing regional tensions also arising from non-environmental problems.⁸

Despite the evidence provided by the peace and conflict research and environmental community to define the close relationship between environmental problems and security risks, the policy areas of environment and security remain largely separate. Although empirical studies have shown that the environment matters in processes of political conflict, there has been limited success in integrating environmental concerns into foreign and security policy. However, there are ongoing political efforts in various national governments and institutions for a more co-operative and integrative approach towards the prevention of environmental conflicts or its peaceful resolution. For example, the German Foreign Office in co-operation with the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and the Federal Ministry for Economic Co-operation and Development recently conducted an international workshop entitled "Environment and Security: Crisis Prevention Through Co-operation" and began the battle of surmounting institutional fragmentation at the national level.

Overall the debate on redefining security over the past decade has added environmental aspects as another element on the security policy agenda. There are now research attempts to analyse the whole constellation of factors that promote or impede violence in order to generate useful policy advice. For example, the Swiss Peace Foundation is undertaking new research efforts to examine the issue of co-operation and confidence building in the context of international environmental co-operation to determine how policy-makers can apply this empirical research to concrete policies targeted at conflict preven-

6 Cf. Carius/Imbusch, cited above (Note 4), Lietzmann/Vest, cited above (Note 4).

7 Cf. Norman Myers, *Ultimate Security: The Environmental Basis of Political Stability*, New York 1993.

8 Cf. Nils Petter Gleditsch, *Environmental Conflict and Democratic Peace*, in: Nils Petter Gleditsch (Ed.), *Conflict and the Environment*, Dordrecht 1997, pp. 91-106.

tion.⁹ This is especially relevant since those factors contributing to conflicts such as environmental degradation and resource depletion are complex and dynamic processes requiring new and innovative policy approaches in conflict resolution and management.

Successful crisis prevention therefore requires that national governments and international institutions endeavour to integrate preventive approaches from the environment- and development-policy sector with those of the foreign- and security-policy sector.¹⁰ This is significant since it is increasingly recognized that each policy sector can contribute, with its specific problem-solving mechanisms and instruments, to the prevention or management of conflict. Policy-makers are now beginning to recognize that new approaches to policy-making will be required to take into account environmental considerations and target the root causes of conflict.

In addition to the OSCE, several institutions are attempting to address environmental issues as a factor on the international agenda in conjunction with traditional security and economic development approaches. These various institutional developments emerged due to the environment and security debate referred to above that gained prominence during the 1990s in North America and Western Europe. Although still in the early phases of development, the following institutions are undertaking activities in the realm of environment and security.

- Since the *United Nations Environment Programme* (UNEP) was established in 1972, it has become the lead agency on environmental matters within the UN. In response to the changing environmental and security agenda, the *Task Force on Environment and Human Settlements* has reassessed UNEP's contribution to environmental conflict prevention and its related tasks. This includes assessing how UNEP can help to prevent environmental disputes and conflicts through utilizing its own instruments and internal capacities such as the following: early warning, environmental monitoring and reporting, developing environmental action plans, initiating new legal instruments and providing assistance to build environmental competence in developing countries.¹¹

9 These research efforts include the following projects: (1) ECOMAN (Environmental Change, Consensus Building and Resource Management in the Horn of Africa) analyses natural resource use and distribution conflicts in river basins, arid and semi-lowlands as well as in highland-lowland interaction systems at the various levels (i.e. local, national and regional). The main goal of the project is to combine traditional mechanisms or knowledge in managing land and water resources with alternative dispute-resolution methods adapted to the specific arenas in the Horn environment. (2) ECONILE (Environment and Co-operation in the Nile Basin) aims to assess the present-day development of international water usage in the Nile Basin. The goal of the project is to intensify already existing co-operation between the countries involved and to complement and expand the intergovernmental search for sustainable water management options.

10 Cf. Carius/Imbusch, cited above (Note 4).

11 Cf. Sabine Hoefnagel/Aiko Bode, Achievements and Limitations of International Environmental Regimes and Institutions in Positive Dispute Prevention: UNEP's Role, in:

- Various *European Union* institutions have internally addressed the environment and security debate with a diverse array of approaches.
 - The *Committee on Foreign Affairs, Security and Defence Policy of the European Parliament* recently prepared the so-called Theorin Report.¹² This report focuses primarily on the ecological consequences of military activities but also covers the relationship between environmental degradation and its security implications. After publication of the Theorin Report, the European Parliament adopted a resolution on environment, security and foreign affairs¹³ calling for the preparation of a common strategy dealing with the relationship between security, the environment and other EU policies.
 - Within the *EU Commission*, the *Directorate-General for External Relations*, deals with conflict prevention and the environment on a conceptual level. Specifically in the context of environment and security, the Directorate-General for External Relations launched two programmes in 1997. The first programme was the pilot phase comprising work carried out by the *Conflict Prevention Network (CPN)*¹⁴ categorizing conflictual situations and possible political approaches of conflict prevention. The second programme consisted of a series of seminars on "European Security and the European Union's External Economic Policies" launched in 1996/97, which examined new threats to European security. One of these seminars specifically dealt with questions of environmentally related threats to European security.
 - Within the *EU Commission*, the *Directorate-General for Environment* conducted an informal assessment of its present and future policies in order to begin examining the subject of the environment and security. As a first step, the Directorate-General for Environment is undertaking preliminary activities that will complement the work being undertaken in the other directorates (trade policy, development assistance, research and development).
- Since the end of the Cold War, the *North Atlantic Treaty Organization (NATO)* has enhanced its co-operation and dialogue with partners outside NATO and with countries of Central and Eastern Europe and the former Soviet Union. As a result, NATO has expanded its security definitions and approaches in both the regional and global context. In particular, the Strategic Concept of 1991 complements the emphasis on the

Alexander Carius/Eileen Petzold-Bradley (Eds.), *Responding to Environmental Conflicts: Implications for Theory and Practice*, Dordrecht (forthcoming publication).

12 European Parliament/Committee on Foreign Affairs, Report on the environment, security and foreign policy (reporter: Maj Britt Theorin), 1999.

13 Official Journal 1999C128/92, Resolution A4-0005/99.

14 The CPN is a network of academic institutions, NGOs and independent experts.

defence dimension of security and recognizes that security and stability have political, economic, social and environmental elements.¹⁵

- Through the *NATO Committee on the Challenges of Modern Society* (CCMS) framework, Member States conduct pilot studies and projects on a wide range of topics such as transboundary air and water pollution, marine oil pollution, and environmental problems stemming from the use of modern technology. Most recently, a pilot study was completed in 1999 that examined the theme of "Environment and Security in an International Context".¹⁶ This pilot study is unique since it compiles the state-of-the-art research on the relationship between environmental change and security and is directed towards those who hold the stakes politically in different policy sectors. Most importantly, the interdisciplinary nature of the study provided a multilateral forum for co-operation, exchange and dialogue between and among policy-makers from the environmental, development, foreign and security policy communities.
- Within the *NATO Scientific and Environmental Affairs Division* (i.e. the *Science Programme*), several advance research workshops have been carried out on environment and security themes including the following: "Conflict and the Environment"; "Environmental Change, Adaptation and Security"; "Responding to Environmental Conflicts: Implications for Theory and Practice"; and "The Caspian Sea: A Quest for Environmental Security".
- In the framework of the *Organization for Economic Co-operation and Development* (OECD), in 1998, the *OECD Group on Economic and Environmental Policy Integration* (*Environment Directorate, Environment Policy Committee*) issued a scoping paper on the economic dimension of the environmental security problem. More recently the *Informal Task Force on Conflict, Peace and Development Co-operation* has engaged in a policy development and consultative process which is targeted at updating the *Development Assistance Committee's* (DAC) "Guidelines on Conflict, Peace and Development Co-operation" by December 2000.

With this environment and security nexus in mind, it is important to identify what are the potential environment and security risks in the OSCE region, to distinguish how the OSCE is undertaking activities in the environment field, and to determine where the OSCE can strengthen its existing capabilities within its sphere of influence to contribute to the prevention of environmental conflicts.

15 Cf. NATO, Strategic Concept of 1991, at: www.nato.int.

16 Lietzmann/Vest (Eds.), cited above (Note 4).

Environmental and Security Risks in the OSCE Region

Despite the end of the Cold War, the number of security threats has not diminished within the OSCE region. For example in the past ten years, the OSCE has been involved in post-conflict rehabilitation in regions such as Bosnia and Herzegovina, Albania, Kosovo, etc. This includes supporting peace operations involving a variety of new missions (e.g. refugee settlement, humanitarian assistance, nation-building, post-conflict rehabilitation, disaster relief) which all have an environmental component. Helping societies to recover from war, to build sustainable peace, and to foster economic co-operation and development has become a major task for the OSCE.

There are also security risks that characterize the OSCE region including some more specifically related to the environment. According to section 2.3 of the OSCE Parliamentary Assembly's "Petersburg Declaration" environmental issues within the OSCE region include the following: managing fresh and sea water resources; curtailing emissions of carbon dioxide and the consumption of fossil fuels; reducing the local pollution of rivers, lakes and seas; sustainable use of renewable resources (i.e. forests and land for agricultural use, potable water, fish stocks, etc.); limiting the transport of toxic radioactive waste; and preventing a nuclear catastrophe.¹⁷ These are just a few of the complex environmental problems that are commonly found in the participating States in the OSCE region that - if not addressed appropriately through environmental policy measures - may lead to further security challenges. Highlighted below are further examples of several hotspots in the OSCE region, which have the potential for future conflicts related to the environment.

Central Asia

In the Central Asian region, the main inherent source for potential conflict is managing the water and energy resources derived from the Aral Sea Basin in a collective manner. Resource competition and tensions are increasing among users over issues of water quantity and quality of the two main rivers of the region, the Amu Darya and the Syr Darya.¹⁸ One of the most acute disagreements over resource sharing is related to the "energy-agriculture" trade-off between upstream countries (Kyrgyzstan and Tajikistan) and downstream countries (Kazakhstan, Uzbekistan and Turkmenistan). Since the Aral Sea Basin is now shared by five newly independent Central Asian republics, finding common solutions to managing the basin without resource competi-

17 Cf. Thomas Onken (reporter), Common Security and Democracy in the 21st Century. Draft Resolution for the General Committee on Economic Affairs, Science, Technology and Environment. The OSCE 8th Annual Parliamentary Assembly Session, St. Petersburg 1999, PA(99)II2E.

18 Cf. Erika S. Weinthal, Applying the Lessons from the Aral Sea Basin: The Role of Non-State Actors, in: William Ascher/Natalia Mirovitskaya (Eds.), *The Caspian Sea: A Quest for Environmental Security*, Dordrecht 2000, pp. 295-312.

tion or conflict is the key challenge for the Central Asian states. Another factor compounding tensions in the region is that all the states continue to face many similar political, economic, environmental and social problems.

The main problem for the Central Asian states is that they inherited a system from the Soviet era that gave preference to certain economic activities, which were unfavourable to the environment such as monocultural agriculture. As a result of this system, unsustainable water management strategies such as excessive development of irrigation in the basin for cotton production and uncontrolled water pollution occurred and had a series of negative environmental effects. This included the desiccation of the Aral Sea, the drying of the lake bed, the deterioration of water quality, the increasing salinity of the adjacent land, food scarcity caused by diminishing fish supplies, and the resulting impoverishment of the affected population. Despite these developments, Central Asian states still continue to support an economy based on cotton monoculture and are still largely dependent on their limited water resources for most economic activities. Another point of contention is the fact that most Central Asian states view water as a public good and are reluctant to use market-based solutions such as water pricing to manage their common water resources.

In Central Asia, there is a great potential for enhancing regional security through greater environmental co-operation especially since political tensions among the responsible stakeholders continue to increase in this region. The OSCE is playing a more significant role in fostering peace in the region through utilizing its field offices in Central Asia to promote various confidence-building activities (e.g. organizing regional workshops, fostering dialogue and collaboration between national governments and with other relevant stakeholders such as NGOs, the private sector, etc.) to allow for strengthening political co-operation and increased political and economic stability and environmental co-operation.

Black Sea and Caspian Sea Regions

Two other areas within the OSCE region that are becoming a potential security concern are the Black Sea and Caspian Sea regions. With the opening of new transport links from the Caspian Sea Region to Turkey, Iran and Central Asia, this will offer the opportunity to forge new economic links to Europe from the eastern shores of the Black Sea to the Mediterranean. From the western Mediterranean to the Caspian, the expansion of pipelines for gas and oil is creating new prospects for both co-operation and conflict, with implications for security and prosperity in both the north and the south of the region. The effects of this oil and gas boom and the resulting disputes over new routes for energy transport are beginning to influence economic markets and the future of security in the region.

Within the past 40 years, the Black Sea has been unable to cope with increased ecological demands and to withstand extensive environmental degradation and is today in a state of environmental crisis. The Black Sea ecosystem (especially the coastal waters) has suffered from increased anthropogenic impacts including river drain changes, the use of chemicals for agricultural production, and the pollution of marine water and sediments. All these factors have influenced the physical and chemical properties of the water and the marine ecosystems leading to extensive environmental degradation, economic losses and environmental stress in the Black Sea.¹⁹

Shipping and transport-related problems (*inter alia* discharges near coastal zones, oil spills, shipping accidents, water pollution and excessive transport) also continue to be a primary environmental and security concern for the Black Sea region. Countries within the region are also experiencing environmental tensions over issues such as fisheries disputes, disagreements over the development of transboundary rivers, and regulating shipping and the transport of hazardous materials.

Within the Caspian Sea Region, intense geostrategic, political and economic competition as well as ethnic and environmental challenges are becoming a problem for regional stability.²⁰ All of these complex factors make developments in the region unstable and unpredictable with direct consequences for the economies and societies of the Caspian Sea states. The environmental issues that have potential effects on security include the following: environmental degradation and desertification, over-fishing of Caspian fish stocks (particularly sturgeon) and the loss of biological diversity in coastal areas. Security implications may also arise if oil and gas pipelines were to be built through areas characterized by political tensions and where natural disasters and geological instability are common (i.e. earthquakes, flooding from sea level rises, mudslides and sinkholes, etc). Another challenge is the unresolved legal status of the Caspian Sea hindering the creation of an environmental regime that could contribute to greater environmental co-operation and regional stability. The point of contention concerning legal status is that currently the Caspian Sea, both as a whole and partially, does not definitively come under the jurisdiction of a single littoral state and the boundaries for its offshore resources and water column are still to be demarcated under international law.²¹

As highlighted in the examples above, it is clear that the geographical scope of the OSCE region is quite extensive with various environmental and security challenges. These examples are not exhaustive but are meant to illustrate the factors that have an impact on the environmental conflict potential in the OSCE region. More importantly, the cases highlight how social, political,

19 Cf. Eileen Petzold-Bradley/Irena Rudneva, Environment and Security Challenges: Case of the Black Sea Region, in: Carus/Petzold-Bradley (Ed.), cited above (Note 11).

20 Cf. William Ascher/Natalia Mirovitskaya, Introduction, in: Ascher/Mirovitskaya (Eds.), cited above (Note 18), p. 1-10.

21 Cf. *ibid.*

economic and environmental challenges experienced by most of the countries in these regions are key factors that create both internal and external conflict. Within these regions there is also the common notion that there are a lack of legitimate environmental agreements for resource management and also limited regional co-operation in all policy sectors (energy, industry, agriculture, environment, etc.) for effective regional co-operation between the states affected.

OSCE Activities in the Realm of Environment and Security

The growing importance that environmental issues play in the security equation have led to further developments in the comprehensive and broad security approach of the OSCE as reflected in the Helsinki Final Act of 1975, the Charter of Paris of 1990, the Bonn Document of 1990, the Budapest Document of 1994, the Lisbon Document of 1996 and the Istanbul Charter for European Security of 1999.²²

The OSCE has been progressively integrating environmental issues into its security concept and also undertaking efforts to identify the risks to security arising from economic, social and environmental problems. This has included the appointment of the Co-ordinator of OSCE Economic and Environmental Activities within the OSCE Secretariat, who is responsible for issues such as economic development, science, technology, and environmental protection in relation to international security.²³ The Co-ordinator is responsible for organizing regional workshops on relevant environmental and security themes and also for developing co-operative schemes with other relevant interna-

22 Early on in the Helsinki Final Act, the States participating in the Conference on Security and Co-operation in Europe (CSCE) expressed their conviction that "efforts to develop co-operation in the fields of trade, industry, science and technology, the environment and other areas of economic activity contribute to the reinforcement of peace and security in Europe and in the world as a whole". Final Act of Helsinki, Final Act of the Conference on Security and Co-operation in Europe, Helsinki, 1 August 1975, in: Arie Bloed (Ed.), *The Conference on Security and Co-operation in Europe. Analysis and Basic Documents, 1972-1993*, Dordrecht/Boston/London 1993, pp. 141-217, here: p. 156. At the Lisbon Summit in December 1996, the Heads of State or Government called on the OSCE to "focus on identifying the risks to security arising from economic, social and environmental problems, discussing their causes and potential consequences, and draw the attention of relevant international institutions to the need to take appropriate measures to alleviate the difficulty stemming from those risks". Organization for Security and Co-operation in Europe, *Lisbon Document 1996*, in: Institute for Peace Research and Security Policy at the University of Hamburg/IFSH (Ed.), *OSCE Yearbook 1997, Baden-Baden 1998*, pp. 419-446, here: p. 422. Furthermore, in the Charter for European Security adopted in Istanbul in November 1999, it was acknowledged by OSCE participating States that acute "economic problems and environmental degradation may have serious implications for our security". Organization for Security and Co-operation in Europe, *Charter for European Security, Istanbul, November 1999*, reprinted in the present volume, pp. 425-443, here: p. 427.

23 The OSCE Permanent Council established this office of the Co-ordinator of OSCE Economic and Environmental Activities on 5 November 1997. Cf. PC Journal No. 137, Decision No. 194, PC.DEC/194, 5 November 1997.

tional institutions in evaluating and dealing with environmental risks to security.²⁴ This includes organizing preparatory workshops and follow-ups of the Economic Forum (established as an annual meeting at the Helsinki Summit of 1992).

In particular, the seventh OSCE Economic Forum was dedicated to the theme of "Security Aspects in the Field of the Environment" and several preparatory seminars were held in Tashkent, Istanbul, Malta and Warnemünde as preparation for this Forum covering the following topics: pollution issues, biodiversity, water and energy management, nuclear safety and waste disposal, energy and climate protection, public participation and sustainable development. During the Economic Forum, the following subjects were addressed in working groups and emphasized as important to the long-term stability and security in the OSCE region:²⁵

Working Group A: This group discussed the importance of sustainable energy development, the relevance of institutional and legal settings (i.e. the European Energy Charter to facilitate energy co-operation), and the implementation of international conventions and instruments. In particular, OSCE participating States highlighted that ensuring secure energy supplies, competitiveness and efficiency, together with reconciling energy developments with environmental obligations is essential for security in the OSCE region. Furthermore, it was stated that the OSCE has the potential for facilitating international co-operation and the sharing of best practices in this field, encouraging transfer of technology and development of stable framework conditions for commercial investments.

Working Group B: This group focused on the sustainable management of scarce freshwater resources as of utmost importance to security in the OSCE area. It was reiterated that existing conventions for water resource management should be signed, ratified and effectively implemented in order to prevent potential conflict. Building on existing international instruments, it was suggested that the OSCE could, in the appropriate forums, give political impetus to and promote further consensus building on general principles and rules to apply to scarce water resources and/or transboundary water resource situations. It was agreed that the OSCE should play an important role in encouraging OSCE participating States to engage international and local organizations, NGOs and private-sector organizations dealing with the issue, in concerted efforts towards a constructive political co-operation process.

Working Group C: This group re-emphasized that public participation and the role of civil society is crucial in preventing conflicts. It was seen as instru-

24 Cf. Secretariat of the Organization for Security and Co-operation in Europe (Ed.), OSCE Handbook, Third Edition, Vienna 1999, p. 133-136.

25 For the following cf.: Tom Price/Stuart Mast, Security Aspects in the Field of the Environment: A Review of the 7th Annual OSCE Economic Forum, Prague 1999. See also: OSCE Economic Forum (Senior Council), 4th Day of the Seventh Meeting, Chairman's Summary of the Seventh Meeting of the Economic Forum, 7-EF(SC).JOUR/4 of 28 May 1999, Annex.

mental and essential that all OSCE participating States ratify and implement the Aarhus Convention (*UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*). It was recommended that the core principles of the Aarhus Convention should be incorporated in the main body of the forthcoming Charter for European Security and to include these principles in the Istanbul Summit Declaration of November 1999.

"Environment and Security" Special Working Group: The relevance of environmental aspects of security within the context of the OSCE was also highlighted in this working group which based their research on the NATO/CCMS Pilot Study: "Environment in an International Context". This report was well received as a substantial assessment of the links between environment and security, illustrating the need to develop preventive and remedial policy responses in the areas of environmental, developmental, foreign, and security policy. The report also constitutes the first comprehensive policy paper that builds the ground for a conflict prevention strategy in the different policy areas, i.e. within the OSCE and the UN framework.

The following year, participants in the Eighth Meeting of the OSCE Economic Forum focused on the general theme "Economic Aspects of Post-Conflict Rehabilitation: the Challenges of Transformation", with an emphasis on the relationship between economics and politics. In preparation for this Forum, the Co-ordinator of OSCE Economic and Environmental Activities organized preparatory seminars in Tashkent, Sarajevo, and Tbilisi. During the Economic Forum, it was stressed that the OSCE's role in both conflict prevention and post-conflict rehabilitation is both unique and important. In this context, the role and work of the OSCE's field missions were highlighted as requiring further reinforcement and development. The following subjects addressed in the working groups were also emphasized as important to the long-term stability and security in the OSCE region:²⁶

Working Group I (Economic rehabilitation and further steps in the transition: institution-building, rule of law and the role of civil society): In this group, the importance of confidence building between governments and minorities, transparency, good governance and strong institutions to combat corruption was highlighted. It was proposed that in the framework of the respective mission mandates, future OSCE activities might include monitoring the actual state of implementation of initiatives to combat corruption as well as the identification of programmes and training needs.

Working Group II (Environmental impact of conflicts and rehabilitation measures): The importance of environmental co-operation, both as a concrete conflict prevention measure and an indispensable element of post-conflict reconstruction and rehabilitation, was emphasized throughout the meetings of

26 Cf. to the following: OSCE Economic Forum (Senior Council), 4th Day of the Eighth Meeting, Chairman's Summary of the Eighth Meeting of the Economic Forum, 8-EF(SC). JOUR/4 of 14 April 2000, Annex.

this working group. For example, the working group underscored the impartial and independent fact-finding technical assessment (e.g. the Balkans Task Force Report) which has helped to provide a useful and common frame of reference. The working group reiterated support for the *Regional Environmental Reconstruction Programme* (RERP) for South-eastern Europe. The RERP was cited as being probably the first example of a co-ordinated regional environmental response to a conflict where transboundary environmental projects played an important role in fostering regional security. The working group also recognized the importance of the stabilization and association process now launched between the EU and countries of South-eastern Europe as an important step in fostering peace and stability in the region.

The working group discussion also underlined the role of the OSCE in developing shared understanding on various aspects of environmental issues in the context of conflict (e.g. immediate cleanup of environmental damages, the organization of rapid intervention in environmental emergencies, developing parameters for successful regional environmental co-operation). The working group also held in-depth discussions on those water and energy issues affecting economic performance and posing a security challenge in the Central Asian states. This workshop discussion re-confirmed that water management is one source of tension in the region requiring the immediate attention of the OSCE. It was stressed during the discussions that there is a need for framework agreements to strengthen co-ordination including the creation of a dispute settlement mechanism to reconcile the competitive interests of the countries concerned.

Working Group III (Experiences with post-conflict rehabilitation efforts): This working group pointed out that post-conflict societies are often split along gender lines, in that women tend to be affected in a different and more dramatic way than men. The discussion also focused on the social and environmental consequences from the large flows of refugees within the Balkan region. In some cases it was emphasized that the impact of the refugee influx was overwhelming and costly for the recipient country. In the case of Albania, it was stated that the refugee crisis helped to channel aid directly into rehabilitation efforts to restore the environment and infrastructure leading to a situation there better than before the crisis. It was also reported that in a post-conflict situation, economic projects and co-operation initiatives could be used as instruments for conflict resolution and confidence building.

The OSCE Role in Environmental Conflict Prevention Activities

As a regional security organization, the OSCE has the authority to mandate peacekeeping operations, conflict prevention and management, and foster economic co-operation and development throughout its area of responsibility. This makes the OSCE indispensable for comprehensive security in Europe,

while at the same time restricting its range of action. In terms of determining the OSCE role in environmental conflict prevention activities, it is important to distinguish how the OSCE should build upon existing strengths and how it can best utilize its existing capacities to address regional and sub-regional environmental problems that pose a security risk.

According to its official mandate, the OSCE should build networks of regional co-operation and promote political synergies to avoid duplication of efforts. This includes co-operating at the local, national, regional and international levels with other relevant institutions in order to expand on the policy approaches necessary in the foreign and security, economic, technical assistance and environmental sectors for OSCE participating States. The most recent example of such an approach was the OSCE Economic and Environmental Co-ordinator's role in facilitating dialogue and co-operation among the various institutions working on the Environment Sub-Table of Table II of the Stability Pact which included the Regional Environmental Centre for Central and Eastern Europe (REC), United Nations institutions (UNEP and the UNECE), the European Commission and several environmental ministries from the Stability Pact countries.

However the specific role the OSCE could play in actively promoting co-operation, collaboration and dialogue in responding to environmental and security challenges in the OSCE region still remains to be determined. Since there are other institutions already designated to working in the realm of environmental co-operation in the OSCE region, it is critical to determine how the OSCE can be a value added in the field of environmental diplomacy and co-operation. As stated in the OSCE Parliamentary Assembly "Petersburg Declaration":

"The OSCE's role as mediator in economic, social and environmental conflicts should be carefully enhanced. In situations where other international organizations have not already assumed a mediating role, or where the OSCE appears particularly suitable for the task, the Chairman-in-Office must take greater advantage of the opportunity to appoint the Coordinator or other suitable personalities to mediate in situations of acute tension or in disputes, to seek solutions and make recommendations".²⁷

With its present capacities, the OSCE could help to promote the use and further development of existing policy instruments and strategies in respective policy areas to address environmental security risks. This could also involve enhancing ongoing bilateral and multilateral initiatives to promote the harmonization of European and international environmental policy standards and to guarantee the successful implementation of international environmental agreements. The OSCE might be able to further elaborate its approach to as-

27 Onken, cited above (Note 17).

sist OSCE Participating States in addressing environmental concerns related to security through the following measures:

- 1) identifying the different instruments available for preventing and resolving conflict (i.e. legally binding agreements, conventions, protocols, and non-binding "soft laws" and norms);
- 2) exploring and clarifying the underlying principals of these instruments; and
- 3) facilitating the development of "soft laws" and the sharing of information and experiences between OSCE countries (OSCE 1999).²⁸

In the case of transboundary environmental issues, the OSCE could play an instrumental role in encouraging regional co-operation in the various fields of environmental protection that can ultimately strengthen confidence-building mechanisms among neighbouring countries in pre- or post-conflict situations. This might include building on the positive experiences with existing transboundary river commissions and bilateral and multilateral conventions on international rivers and transferring them to countries with tensions over water or energy resources. Lessons learned through similar transboundary projects such as the Rhine and Danube Conventions and the process of exchanging know-how between the various sub-regional organizations (i.e. Council of the Baltic Sea States, Black Sea Economic Cooperation, Barents Euro-Arctic Council, etc.) could be communicated and transferred to other regions experiencing similar environmental challenges.

The OSCE could intensify its current efforts in assisting OSCE participating States to implement conventions such as the UNECE Convention on the Law of the Non-Navigational Use of International Watercourses and the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention). The OSCE could also play a significant role in encouraging inter-state and regional co-operation on transboundary issues in developing principles for the equitable sharing of water resources, and in promoting the full and rapid implementation of these principles.²⁹

It is also expected that areas for future co-operation in the OSCE regional context might include co-ordinating the work among the OSCE regional field missions and the multitude of other organizations (especially NGOs reaching across boundaries) in the various fields of environmental, economic, technical assistance, foreign and security policy. Through enhancing the role of field missions in OSCE participating States, this could contribute to greater environmental conflict prevention. For example, the OSCE field missions could provide additional early warning, on-the-ground monitoring and mediation assistance according to their respective mandates. Field missions

28 Cf. OSCE Handbook, cited above (Note 24).

29 Cf. Price/Mast, cited above (Note 25).

could accomplish this by regularly identifying national and transboundary environmental issues through reports in which both economic and environmental matters intersect with security and stability concerns. These reports could also be shared with other regional institutions and national governments in order to design more effective preventive policy measures and to provide more political and technical support leading to greater co-operation. The OSCE also has the potential to play a more proactive role in regional co-ordination among academics, scientists, NGOs, and officials from the business and government sectors in order to transfer the required knowledge for responding to environment and security challenges. In this way, the OSCE could help co-ordinate interagency co-operation among foreign and security policy actors and institutions with relevant development and environmental organizations. This is extremely important in order to bring all policy stakeholders together in a more co-ordinated and integrated fashion at both the international and regional levels to improve policy-making.

Outlook

It is important that the momentum gained during the past two years to address environmental and security challenges leads to more concrete measures both within the OSCE and in its field missions. However to further strengthen its environmental conflict prevention capacities, the OSCE has to clarify its role and future agenda to respond to environmental and security challenges. As an important step, the OSCE needs to formally assess those environmental problems that are relevant to its own security concerns and to determine whether it can take further action within its mandate. Since the OSCE does not have an "environmental mandate" per se, any activity in this regard would need to be co-ordinated between the OSCE and the appropriate and competent institutions in this policy arena (i.e. mainly the UNECE and EU).

Once this has been achieved, the OSCE can further develop its unique capabilities to respond to environmental problems that are directly related to security. This may include utilizing its internal capacities to systematically analyse and evaluate the root causes of environmental conflict, identifying potential "hot" spots within OSCE regions in order to improve its capability to prevent future conflicts, and designing policy approaches that promote environmental and economic stability. This may also include strengthening the role of the relevant OSCE bodies responsible for environment and security activities such as the office of the Co-ordinator of OSCE Economic and Environmental Activities through providing additional staff and budgetary resources. It is also necessary that other OSCE departments such as the Conflict Prevention Centre (CPC) and the Parliamentary Assembly more effectively co-ordinate their activities and interact more frequently with the Co-

ordinator of Economic and Environmental Activities to have a common security approach to environmental conflict prevention.

To become more operational, the OSCE should expand on its comparative advantage by building on its field missions and its internal and external capacities. The OSCE could more effectively devise its own strategies for preventive projects and activities (i.e. such as elaborating this in codes of conduct) with relevant partner organizations that have a mandate for the environment (i.e. UNECE and EU) and security and stability (i.e. NATO). The OSCE should also continue to strengthen its internal capacities and efforts to enhance security, to foster greater co-operation and peacemaking, and prosperity throughout the OSCE region. This might include deploying more *ad-hoc* groups for crisis management particularly in areas where mediation does not exist. The recent UK initiative to send an OSCE fact-finding mission to Central Asia in March 2000 is a good example of such an approach.

In conclusion, the OSCE still has a potential for development in preventing crises with environmental policy components. This is particularly true for the office of the Co-ordinator of OSCE Economic and Environmental Activities. Since it has only been in existence for approximately three years, it is still in the process of defining its role in this capacity. The work carried out so far on environment and security in regional workshops and the Economic Forums have been important initial steps in shedding light onto this theme within the OSCE. The work undertaken within the OSCE and its field missions in the Balkans, Central Asia and other regions are exemplary efforts that have helped to enhance security and stability in regions that are experiencing tensions (i.e. political, socio-economic, environmental, etc). It now remains up to the OSCE and its participating States to re-examine the operational tasks of the OSCE in its environmental dimension and to determine how to best integrate the areas of security and environment to foster peace and stability throughout the OSCE region.