

Environmental Conflicts and Regional Conflict Resolution

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Article Info	ABSTRACT
Keywords: Environmental conflicts; Regional cooperation on renewable resources; Human interaction with the environment; Resolving conflicts related to the environment; Conflicts related to fresh water; fishing conflicts	This article examines when and how environmental scarcity and degradation lead to conflicts, and how countries resolve conflicts over the sharing of renewable resources between different states. Two research programs related to environmentally-based conflicts are reviewed, and about thirty activities for resolving environmental conflicts are listed. A single example of the Nile Basin Initiative is dealt with in particular detail. Three main conclusions can be drawn: First, scarcity of renewable resources and environmental degradation can lead to conflict when they interfere with each other under certain political and socio-economic conditions. Such conflicts can become serious in the internal settlement process, often in the context of political instability and poverty. International environmental conflicts, however, very rarely lead to military action. Yet the lack of international cooperation when sharing resources, based on the interests of various states, it really prevents the adequate development of these resources, thereby leading to overuse or underutilization of the resource, or to obvious "natural" disasters such as droughts and floods. These negative consequences, in turn, can collectively lead to poverty, migration and conflict. Second, there are indications that the assistance of a third party, usually an International Government Organization (IGO), is often more effective in reducing international tensions and enhancing environmental sustainability than conflicts governed solely by the conflicting parties themselves. Moreover, examples further demonstrate that conflict resolution efforts are likely to be more successful when they place a strong emphasis on common interests, focus on efficiency and require external resolution, and when they are jointly involved in sharing costs and revenues. Third, the above examples of conflict resolution show that International Governmental Organizations should strengthen their role as mediators from an independent third party. IGOs must support the participants without taking responsibility for the process itself or the results. A "cross-cutting" settlement, that is, measures to link the government with middle and lower-level leaders, is necessary to avoid shifting the problem from the international arena to the national level.
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INTRODUCTION

When and how can scarcity of renewable resources and environmental degradation lead to serious conflict, and how can large groups of people share scarce renewable natural resources? These two questions are at the heart of an expanding field of research called “environmental conflicts”, “environmental conflict management” or more broadly “environmental security”. It is in part through such conflicts that identities and (exclusionary) social ties become consolidated. The first question looks at serious conflicts caused from an environmental point of view. The second question considers the surrounding environment as an obvious problem in an attempt to jointly resolve the conflict (Rikoon, 2006). As well as “distant others”, such as slugs, with Ginn asking how many of the 20 billion slugs in British gardens are slaughtered every year by humorous garden-lovers following a still discriminating more-than-human ethics of gardening (Ginn, 2013).

The non-human can include “close others”, such as furry little monkeys captured from tropical forests to be traded as pets, or returned to the wild after going through processes of (de)commodification and alienation from humans (Collard, 2014). Post-political spaces can thus be characterized as the “house of reasonable politics within which only “minor” differences amenable to compromises are allowed, with the threat of expulsion should differences become “unreasonable (Blaser, 2013).

The criminalization of small-scale mineral exploitation by local communities and regional migrants which undermines livelihoods and coping mechanisms (Zalik, 2011) while “scarcity-induced” conflict arguments have received the most attention, the new paradigm of the resource curse has also come under some attention (Robbins, 2012). Exposing societies to economic shocks, and exacerbating tensions over the distribution of resource rents and more generally the costs and benefits of dominant resource sectors (Le Billon, 2012), in this regard, ethnographic approaches within political ecology allow identifying divides along gender lines (e.g. the vulnerability of matrilineal inheritance to resource capitalism), between generations (e.g. the selling-out and squandering of birth rights entitlements to land), and modes of production (e.g. advocates of large-scale exploitation versus traditionalist resource users) (Hall et al., 2012). The end of adversarial politics, from this perspective, would thus represent the end of politics in its possibilities of radical outcomes and the pursuit of utopias (McCarthy, 2013). This involves studying variations in property rights and documenting “movements of resistance to resource capitalism and the legitimacy of the state in matter of resource access and control (Allen, 2013).

Many communities in the world signify their natural environment, and then use it, in ways that markedly contrast with the more commonly accepted way of seeing nature as a resource external to humans and which humans can appropriate in any way they see fit. Yet it is increasingly challenged by affected communities, which in part explain the prominence and frequency of environmental conflict – as seen for example in the case of resistance to large-scale mining in the Andean region and the prioritization of a certain types of economic activity (such as large-scale mining or logging) over local livelihoods, as well as environmental and cultural practices. Wars over non-renewable resources such as oil are usually referred to as “resource conflicts”, differ from “environmental conflicts”, over

renewable natural resources, and will not be discussed here. The devastating impact of severe conflicts and environmental warfare are also not explored in this section. Global environmental conflicts are dealt with elsewhere in this publication (see International Cooperation to Address International Pollution Problems). This chapter focuses more on regional conflicts and cooperation, for example between neighboring countries sharing river basins. In addition, emphasis will be placed on conflict dynamics and the means of communication involved, rather than on longer-term legal policy issues and mode of operation (see International Environmental Agreements and the Climate Change Statement). Humanity is still in the early stages of learning how to deal with the equitable distribution of scarce resources and relatively serious conflicts (Escobar, 2006; Le Billon, 2008; Bebbington et al., 2009).

Notably with respect to the dispossession of “smallholders” by large-scale agro-industrial investments and food production regimes, this is expressed in the constant use of incomprehensible terminology regarding this. Thus, to avoid confusion, there will first be regional conflicts and cooperation, for example between neighboring countries sharing river basins. In addition, emphasis will be placed on the dynamics of conflict and the means of communication involved, rather than on longer-term legal policy issues and mode of operation. (see International Environmental Agreements and Global Warming Climate Statement). Humanity is still in the early stages of learning how to deal with the equitable distribution of scarce resources and relatively serious conflicts. This is expressed in the constant use of incomprehensible terminology regarding this. Thus, to avoid confusion, some of the basic terms will be defined first. The term Conflict will be used as defined by Lewis Coser: “... the fight for fair valuation and claims for scarcity, energy and natural resources wealth, while the goals of opponents are to neutralize, harm or eliminate their competitors.” Conflicts can be systematized or characterized as follows: 1. a contentious issue under threat (e.g. resources, self-determination); 2. performers and their characteristics (for example, state, non-state); 3. the form of the conflict (for example, latent, explicit, conflicts with or without the use of force); 4. the reasons for the conflict (for example, the acquisition or protection of tangible and intangible assets); 5. arena of origin of conflict (for example, local, international, river basin, forest land). Violence is used here to describe the unauthorized use of force / influence to force or harm people. “Violent conflict” is thus a broader definition than “armed conflict”, during which force / influence can be applied at the level of the individual, organization or at the level of structural decisions. And finally, the term Environment will be used hereinafter when referring to the natural resources and ecosystems on which the survival of humankind depends, for example, freshwater systems, terrestrial ecosystems, seas, oceans, atmosphere and biodiversity. Non-renewable resources are included in this analysis only when their use leads to environmental degradation (Peluso and Lund, 2011).

Conflicts Arising On An Ecological Basis

Two research groups in the 1990s were at the fore when research began on the environment, which has caused serious conflict. The Environment and Conflict Project (ECP), called the POSCS team, led by Gunther Beichler and Kurt R. Spillman and the Toronto team led by Thomas Homer-Dixon. Interestingly, both groups achieved similar results, even though they used slightly different formulations and research methods. POSCS group defined environmental conflicts as follows: "Environmental conflicts are political, social, economic, ethnic, religious or territorial conflicts, conflicts over natural resources or national interests, or any other type of conflict. These are common conflicts caused by environmental degradation. Environmental conflicts are characterized by the fundamental importance of degradation immediately or gradually in the following circumstances: 1. excessive use of renewable natural resources; 2. excessive stress on the absorption capacity of the ecosystem (environmental pollution); 3. depletion of the habitat. Thomas Homer-Dixon and the Toronto team used the following definition: "Environmental conflicts are serious conflicts that are caused by environmental scarcity when a variety of, often situational, contextual factors interact with each other. Environmental scarcity comes in three forms: a demand-driven deficit (that is, a deficit resulting from an increase in demand caused, for example, by an increase in population); shortages resulting from a lack of provision (that is, a deficit resulting from the overall reduction in the use of certain resources due to degradation or depletion) and a deficit in structure (that is, a deficit resulting from unequal distribution or access to resources)."

Although both research groups have paid great attention to the causal relationship between the environment (renewable resources) and serious conflicts, the difference between the two definitions lies in the term - degradation instead of scarcity. John Martin Trolldalen used a definition that does not focus on serious conflicts, but rather focuses on the use of interstate natural resources: "Interstate environmental conflicts are conflicts of interest that result from the use of natural resources in one country and have negative environmental consequences for another country or a group of countries."

Typology of Environmental Conflicts, The POSCS group draws a distinction between the following types of environmental conflict, which often overlap in reality. i) Central Peripheral Conflicts often arise around large-scale work projects such as dams or irrigation projects. The benefits of such projects mainly fall to the central government, often linked to a globalized market. People in the periphery, often living on a minimum of livelihoods, do not receive adequate payments, for example, when they are forced to move out of the "flood zone" to prepare a site for a reservoir. If these people are not compensated and disconnected, they can oppose the state. The erroneous orientation of ethno-political conflicts goes (often superficially) into ethnic differences. Ethnicity is used as an identification and mobilization mechanism to bring people together, thus unanimously expressing personal demands and grievances regarding the environment. As the conflict escalates and becomes more prolonged, ethnicity as a factor may become more important than the original issue of natural resource use. Mohammed Suleiman drew attention to this phenomenon and called it "conflict inversion", analyzing environmental conflicts in Sudan.

ii) Internal and International Conflicts related to migration are the result of voluntary or forced displacement, one of the most frequent consequences of environmental degradation. Often such conflicts over migration are caused by relative overcrowding associated with poverty and political instability. In 2000 at the World Water Forum in The Hague, Ismail Serageldin, Chairman of the International Commission on Water Resources, drew attention to the fact that: “the land and water crises in river basins have contributed to the total number of environmental refugees, which stood at 25 million last year, surpassing the number of refugees from the war for the first time. By 2025, the number of environmental refugees may quadruple.” As soon as displaced people arrive in a new area, conflict with those who are already there can arise if the needs of different groups of the population are not adequately addressed.

iii) Interstate Water-Related Conflicts can arise in river basins that cross national borders. Conflict often arises between upstream and downstream users: especially if the costs and benefits of water used in hydropower or irrigation are distributed asymmetrically. Another example is the consequences of upstream pollution on downstream areas. Finally, the POSCS group identified global environmental conflicts. Failure to negotiate internationally on global issues such as climate change can indirectly lead to serious conflict, for example, people are forced to migrate from an island in the South Pacific, as they are at risk from rising sea levels. The Toronto group distinguished between two processes of environmental and social impacts on each other that could lead to serious conflict, namely “resource grabbing” and “environmental marginalization”. Resource capture describes the process by which powerful groups in society seek to control the access and distribution of scarce resources to their advantage. The scarcity of renewable resources, the growing population that depends on these resources, and the inequitable distribution of these resources can force people migrate to socially immature ecosystems, a pattern of interaction referred to by the Toronto group as ecological marginalization.

There are similarities between the category of “migration conflicts” proposed by POSCS and the process of environmental marginalization proposed by the Toronto group, as well as between the category of central-peripheral conflicts and the process of resource grabbing. There are also similarities in terms used in the Syndromic approach. The syndromic approach, pioneered by the German Advisory Council for Global Change (GCC), involves different models of negative human-environment interactions. Research project NCCR North-South on “Mitigating the Syndromes of Global Change” develops the syndromic approach further by analyzing groups of underlying problems and how they act on each other. In the terminology of the syndrome, a central-peripheral conflict or seizure of a resource resembles the “Aral Sea Syndrome” - that is, environmental damage as a result of large projects. The category of “migration conflicts” and the process of ecological marginalization are similar to the “Sahel Syndrome”, that is, the overuse of unproductive land. The data obtained from both scientific Research groups from Toronto and the POSCS agree that ecological scarcity and degradation do not directly lead to serious conflicts; rather they appear as secondary conditions, sometimes necessary, but very rarely sufficient for a serious conflict to arise. Socioeconomic and political factors are contextual factors that

influence both degradation and scarcity, and ultimately either lead to serious conflict or not. Features of serious environmental conflicts include:

1. They are multi-causal. The environment only causes conflicts when it interacts with certain economic and political factors.
2. There is a tendency to an increase in the inversion of the conflict: Sources of conflicts are signs by which people are grouped and identified. Ethnicity is an example of this. As the conflict escalates, the sources of origin may become a more important cause than the original environmental cause - i.e. inversion takes place.
3. The arena of conflict is usually determined by the physical environment, not just political boundaries. The clash between "natural" and "political" boundaries is often at the heart of the problem. The largest 260 rivers, which cross interstate borders and cover approximately 45% of the earth's surface, are mainly managed at the national level.
4. The long-term nature of environmental changes and their significance for society do not correspond to the political time frame. The impacts of environmental change on society are usually also not linear, rather they are characterized by marginal values, after which the damage may be irreversible. Environmentally sustainable development is a form of conflict prevention.
5. Serious environmental conflicts tend to constrain developing countries. Often people are directly dependent on renewable resources for their livelihoods, and such countries are also having a hard time adjusting to growing scarcity. The edge of conflict is often between modern technological and traditional forms of resource use, i.e. small fishing vessels versus large fishing trawlers, or between farmers,
6. Leading subsistence farming and nomads isolated from large-scale mechanized farming.
7. Participants from non-state actors are often involved. The most serious environmental conflicts are intra-ethnic conflicts. Indeed, this is true of all major conflicts today: of the 25 major armed clashes in 2000, all but two were internal, according to the Stockholm International Peace Research Institute. Environmental conflicts often affect various sectors of society from government to the lowest levels.

Three groups of critical analysis are available. A critical analysis of this part of the study regarding the relationship between ecological scarcity and serious conflict can be systematized into the following sections: (a). Methodology and theory. (b). A critical analysis of the importance attached to the environment as a factor. (c). A critical analysis of the importance attached to conflicts rather than other consequences of environmental degradation.

Critical Remarks On Methodology And Theory

The methodological notes are not unique to this area, but rather a continuation of the same debates arising within the social and natural sciences. Nils Gleditsch notes that the case studies conducted by the Toronto and POSCS teams were selected without an independent variable, environmental scarcity, or a dependent variable, conflict, while

remaining publicly available. Thus, this kind of connection was guaranteed from the very beginning. Thomas Homer-Dixon responds with a defense of methods that are not only quasi-experimental, because many real-life problems cannot be explored in this way. He argues that the “process monitoring method,” that is, detailed step-by-step analysis is an effective way to understand how scarcity can lead to serious conflict in the second phase of the study of environmental conflict by accepting some of this methodological criticism thus trying to give more flexibility dependent variable. This latest study also mainly looked at cases where environmental scarcity led to cooperation, rather than examples that led to serious conflict, such as the research projects of ECOMAN and ECONIL. To complement the obvious and consistent evidence that environmental conflicts are multi-causal, the “Syndrome Approach” has also begun to be applied in the study of environmental conflict, for example, in the North-South NCCR project: “Research Collaboration to Mitigate the Syndromes of Global changes.”

A Critical Analysis Of The Importance Attached To The Environment As A Factor.

There is optimism based on the fact that the environment is not as bad as everyone says, that there is a scientific and technical solution to every problem, and that market forces will regulate the demand for scarce resources through price combinations. However, the human health analogy shows that this optimism is misplaced. According to the World Health Organization (WHO), about 4 million people die each year due to dirty drinking water, lack of hygiene and poor sanitation. The technology to solve the problem exists, but it is not being used due to poverty. Where privatizations have taken place in developing countries, the poor often feel worse than before, as the legal framework is imperfect and the needs of the poorest are not adequately protected. In other words, the problem is not the lack of technology or the privatization of property, but the lack of a suitable policy and legal framework for using these mechanisms. However, this form of criticism gives us an understanding of tremendous potential for problem solving if the political framework is adequate. The International Institute for Water Management, for example, estimates that in 2025, half of the additional demand for water in the world can be met by improving irrigation efficiency. In addition to stating that the environment is not as bad as the Doomsday prophets predicted, this section of the critique also attaches great importance to factors other than the environment that cause conflict, for example, ethnic, economic or ideological. Of course, this should be taken into account depending on the circumstances. In the study of conflict, however, there is always the danger of falling into the trap of a mono-causal relationship, regardless of the very factor that may be.

A Critical Analysis Of The Importance Attached To Conflicts Rather Than Other Consequences Of Environmental Degradation.

This points to the many consequences of environmental degradation other than conflict, such as internal and international migration, poverty, disease or unemployment. Although they are often less dramatic and therefore less publicized, their contribution to human suffering is enormous. As noted earlier, there are more environmental refugees than war refugees. Facing the choice of fight or flight, flight appears to be more common when it comes to decreasing renewable resources. It also suggests that environmental degradation and scarcity can often cause even greater conflict sometime in the future - when the environment, as a cause, is no longer evident. Indeed, this long-lasting and often invisible nature of many of the impacts of environmental degradation may be the reason why the environment is not given higher priority in policy and public opinion (see Government Accountability and Sustainable Development). Despite the huge number of non-conflict-related causes of human suffering, this is a rather serious reason for using human experience in environmental expert assessment and in general conflict resolution: the opportunity costs of a truly humane way of studying conflicts are very high. In 1994, the International Institute for Game Programs estimated annual total military spending at \$ 1 trillion. Further, they estimated that 25% of this will be enough for global programs to prevent soil erosion, stabilize populations, stop deforestation, stop ozone depletion, provide safe, clean energy, prevent global warming, prevent acid rain, eradicate illiteracy, address health issues, provide for refugees, eliminate the debts of developing countries, ensure the safety of clean water, and eliminate hunger and malnutrition. When everyone compares annual military spending on a global scale with annual spending on programs to eliminate some of the main sources of human suffering, the need for non-violent conflict resolution is evident. In addition, there is a credible hypothesis that one of the root causes of migration, poverty, etc. is the lack of shared resources. In other words, it requires a shift in focus from the environment, as the cause of the conflict, to the environment, as a problem in the joint management of the conflict.

Resolving Conflicts Related To The Environment

Environmental conflict resolution refers to all kinds of conflict interventions over the use of renewable resources and environmental degradation in order to solve problems as perceived by the parties involved, transforming the hostile relationship between them into cooperative relationships, as well as increasing environmental sustainability. This section, firstly, examines the difference between the causes and influencing factors in the conflict, and secondly, the features of the settlement of the general and environmental conflict, and finally the section ends with a brief overview of international environmental conflicts and a comprehensive study of efforts to resolve the conflict in the Nile Basin.

Distinguishing Between Cause And Influencing Factors

To address the issue of conflict resolution, there must be a shift in attention from the causes of the conflict, which may no longer be so obvious, to the factors influencing the conflict at the moment. Note the difference between the above definition of environmental conflict resolution and the definition of “exploiting” environmental conflicts, where no causal relationships are assumed, and the definition in the first section regarding environmentally induced conflicts. If anyone imagines science, as a cycle of understanding and conceptualizing data (for example, basic research), followed by a period of recommendations and problem solving (for example, applied research), then research focusing on conflicts caused by the environment can be attributed to the first stage, while research on whether how to resolve these conflicts can be attributed to the second stage. Despite the fact that there are debates about the environment as the cause of the conflict, there is a need to solve the problem, that is, an understanding of how such conflicts can be settled. Likewise, while the controversy over the causes of climate change continues, the pragmatic position is that humanity must change its polluting lifestyles, because by the time climate change is proven to be human caused, it will be too late to do anything. To resolve the conflict, it is necessary to know the factors that influence the dynamics of the conflict and these influencing factors may not always be the same as the root causes of the conflict. The feature of the inversion of the conflict, typical of environmental conflicts also points to the fact that perceived and actual causes of conflict can change over time. Thus, it is necessary to concentrate on the factors that are essential at the moment to influence the dynamic conflict. Friedrich Glasl compares the conflict to a burning house. A fire starts, for example, because they forget about a cigarette. The house, however, burned down because it is made of wood. The tree is not the reason of the fire, but only an influencing factor on how the fire develops. Glasl thus focuses on the obvious problems in the conflict, as pointed out by the parties to the conflict, rather than on root causes that can no longer be identified, or may even be insignificant when the conflict rages on. Knowledge of the root causes is of course essential to prevent future conflicts. By focusing on the influencing factors, in the end, they look at the existing obvious causes of the conflict, perceived by the participants involved, as well as the impact of third-party intervention in the conflict: the subject of conflict resolution.

Features Of The General Settlement Of The Conflict

General conflict resolution can be subdivided into: conflict resolution with the use of armed force (for example, peace enforcement, peacekeeping operations) and non-violent resolution, which in turn can be divided into two main areas of study: that which deals with legal and institutional structures, and that which implies joint negotiations and conflict resolution through dialogue. The latter approach directly considers the interests of the parties involved and the dynamics of the conflict, and also cooperation affecting the relationship between them. Three forms of conflict resolution: military, legal and based on the principles of cooperation, attach the greatest importance, respectively, to the aspects of force, law and satisfaction of interests, i.e. elements that are present in all conflicts. Military

intervention is necessary in extremely aggravated conflict situations, during which mutual destruction can be avoided only through external intervention. Since this form of exacerbation of the situation is extremely rare

for international conflicts related to the environment, the form of settlement with the use of armed force will not be discussed here. Research lines that focus more on law and politics will also not be considered here, as they will be considered in other chapters of this book, such as, for example, policy guidelines for sustainable resource use (see Institutional and Policy Options for Achieving Sustainable Development). However, it should be noted that the various forms of conflict resolution are complementary. After constructive changes in communication means of communication and preparation of a solution that takes into account the various interests of the participants, the issues of agreement should be formulated in a legal document and turned into a legal relationship. In a trans-boundary river basin, for example, a transitional and non-legally binding form of cooperation has been transformed into a trans-boundary river legal commission. "Multilateral Diplomacy", "Alternative Dispute Resolution", "Informal Conflict Resolution", "Conflict Transformation" and "Agreed Problem Resolution" are some of the titles found in literature describing various aspects of this area of joint conflict resolution. The main question is not who is right or wrong, and not who is more influential, but whether there are ways to transform conflicting relationships and find "win-win" solutions that satisfy the interests of all parties. The term "Alternative Dispute Resolution" (ADR) was defined by Gale Bingham, Aaron Wolf and Tom Wahlgenant to refer to "a wide variety of consensual approaches by which parties to a conflict voluntarily strive to reach a mutually acceptable agreement" (Bingham et al., 1994). ADR is often used in a domestic context, especially in the West, and refers to an "alternative" to traditional, official, legal, or force-based methods of conflict resolution. The term "Multilateral" is less antagonistic and is more commonly used in an international context; it refers to different areas of development or strata of society that may be involved in the analysis and resolution of the conflict. Some of the basic principles of these non-antagonistic approaches to conflict resolution are summarized below. Despite the overall agreement on most of the following approaches, they are not accepted by all researchers and proponents of proactive measures, and the relative importance attached to the relevant principles is also still debated: Multilateral conflict resolution focuses on successful joint efforts to resolve the conflict between the official authorities (first party) and informal representatives of society (second party), and efforts at the level of the lowest strata of society (third party). Benefits of each direction are used to develop and implement decisions that are accepted by all sectors of society. Informal experts who meet each other in an informal setting are often more flexible about developing and seeking creative ideas on settlement options, as they do not need to advocate for firm official policies. Conflict resolution provides for: non-competing structures; analytical approach; and a course to solve the problem. The use of threats is considered unacceptable. The minimum requirement for resolving a conflict is recognition of the adversary's right to exist. The less asymmetry between the parties, and the greater the desire of the parties to cooperate, the more chances that negotiations will lead to success. Conflict transformation seeks to enable

the parties involved to express and fight for their interests, while at the same time ensuring that each other is recognized and the interests of other parties are legitimate. The conflict is transformed from a hostile to a joint form of cooperation thanks to changing perceptions and relationships between the parties involved. - Interactive conflict resolution builds on an experience that gives freedom of creative energy as people interact with each other in a collaborative manner: the phenomenon of brainstorming. In addition, the conflicting parties should directly participate in the formation of a joint solution, because they know the situation better than anyone else, and they will more quickly adhere to the agreements in the creation of which they took an active part. Conflict resolution involves a distinction between positions, interests and needs. Positions clearly articulate priority interests that are often mutually incompatible for conflicting parties (eg position A and B: "the reservoir is mine"). Regardless, clarification of core interests paves the way for finding mutually compatible settlement options (eg Interest A: "I want to use the reservoir for my cattle." Interest B: "I want to use the reservoir for fishing."). Needs are at the core of interests and, more addition are compatible. The Human Needs Analysis approach confirms that conflict ultimately cannot be resolved without satisfying basic human needs (such as food, security ... etc). "Win-win" solutions are mutually acceptable solutions where the interests of both parties A and B are fully satisfied. Legal solutions to a conflict often result in solutions in which one of the parties loses. Situations in which one party loses are often the result of extremely aggravated conflicts in which mutual defeat is preferred to the recognition of the other side. The help of an experienced third party is needed when the conflict escalates above the minimum level. The third party acts as a guarantor of trust and facilitates joint interaction between the parties. The type of third party intervention depends on the level of aggravation, ranging from prevention and containment, continuing with aid and mediation, to peace enforcement and peacekeeping in extremely escalated conflict situations. Such conflicts are easier to manage, less likely to exacerbate, and are shorter in duration. People respond to stress and adversity in both conflict and joint action. Conflict resolution seeks to maintain and strengthen the naturally existing collective nature of human relations. The subjective perception of the conflict by the parties involved is also a "reality" that influences the conflict, and differently from "objective" problems. These last two issues are explored more deeply, as they are a key element of psychological theories of conflict. This sets them apart from other sociological theories, which are often based on assumptions about "rational" human behavior. In order to survive, the ways of responding - fighting / arguing or hasty flight - have evolved over the course of evolution. Another form of behavior, more modern in evolution, is the ability to cooperate within a "circle of people with a common interest" in the face of adversity, a characteristic of many animals living in social groups. Collective behavior, therefore, is not only a subject of cultural study, but also part of the survival system of mankind, developed in the process of evolution. Sigmund Freud expressed this in his statement that "Hatred, as a relation to an object, is older than love," that is, reptiles cannot cooperate, and mammals can work together in a group to ensure the survival of the group. Conflicts clearly demonstrate emotional, at times irrational elements in human behavior, both negative in the form of destructive contradictory behavior and in a

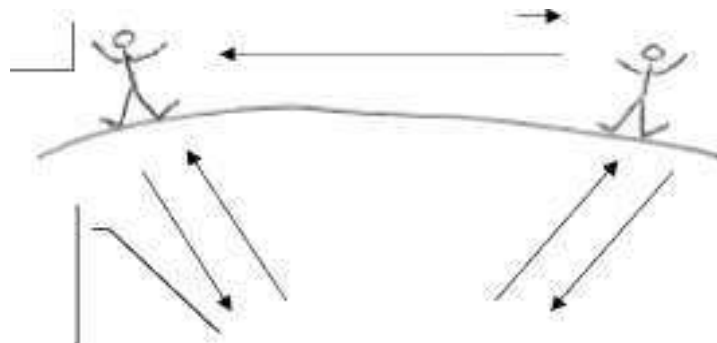
positive form of creative cooperation. Despite great disagreements (for example, Nelson Mandela, who, after leaving prison, sought reconciliation, not revenge), Kurt R. Spillmann and Kati Spillmann describe the psychological dynamics that can occur in a conflict situation as follows: "We can predict that under stress, fear, and threatening conditions, previous emotional arousal and reflexive responses will become sharper responses, and will dominate over very recently developed, culturally shaped behaviors such as prudence, psychoanalysis and the ability to understand the essence of the matter (Spillmann & Spillmann, 1991). Our thinking abilities at this time are turned off, and more primitive and habitual models of behavior based on perception are included in the work, i.e. a situation comparable to a rider who has lost control of his horse and is forced to simply go where his horse is leading. Outwardly, however, this is not always noticeable, in other words, even an extremely emotional or biased reaction to the alleged adversary can be presented very intelligently. Is here one of the main factors influencing a person's personality in conflicts? If so, how can the settlement of the conflict contribute to the collective nature of behavior that has recently developed in our psyche? It also includes feelings of empathy for the "other" group, in addition to common sense, psychoanalysis and understanding. Based on the assumption of the importance of psychoanalysis, one of the biggest problems in conflict resolution does not address the economic or mathematically accurate allocation of scarce natural resources, just in the words of Spillmann and Spillmann: "the preservation of human relations ... during conflicts" (Spillmann & Spillmann, 1991). This is also confirmed by the words of the World Bank Advisor on International River conflicts: "10% is in water, 90% is in politics".

Peculiarities Of Conflict Resolution Related To The Environment

Environmental conflict resolution is still lacking in experience and is often characterized by the application of general conflict resolution principles to environmental conflict. There are, however, some important differences. One of the main differences is the importance of incorporating both the "unstable elements" of human behavior and the interactive ones, along with the "hard facts" of the physical environment. Environmental conflicts occur with partial of the coincidence of human and ecological systems, while general conflicts occur only in the human "system" (= society). A minimum of two participants are required to trigger a normal conflict. An environmental conflict, however, always has three "parties involved," the environment is often an unrepresented third party. In the model "Triangle of Human Interaction with the Environment" (HDTV) is represented by the triangle of the people participating in the conflict (or a group of participants) and the ecological system involved in their conflict (see diagram below). Modeling the human system separately from the ecological system is, of course, a consequence of the influence of the "Judeo-Christian-Islamic" cultural trend, which considers God as the creator, and people as caretakers of nature. It should be noted that there are other ways to observe nature. We emphasize that the model pays great attention to the role of the anthropogenic factor in the environment; and that the main issue is still well-being and human survival. The direction in which ecology harms society is understood as a physical consequence, and not

as an "action" motivated by some invisible desire of nature, that is, "retaliation by nature." However, the ecological system can affect society or respond to the actions of people, regardless of their efforts to manage it. This independence allows her to be used as a "third actor" involved in environmental conflicts. Time, space and physical dimensions in which people harm the environments are often different from those in which society is affected by the environment. In this way, rivers are governed by policy rather than within river basin boundaries as politicians are on duty for few years, while forests and land take hundreds or thousands of years to recover, and the capital paradigm tends to be the continuous growth on a physically finite planet. In this sense, the HDTV model is in line with strict environmental sustainability, i.e. renewable resources must be reserved for future generations. They cannot be directly converted into economic assets. Participating parties A and B designate a group of participants, for example two countries, which share a trans-boundary river basin. A and B try to resolve the conflict over the use of the environment directly in the human system (top of the diagram) through coercive means, in a legal and institutional framework, or through joint negotiations.

Human-Environment Interaction Triangle (HDTV) Participant "A" aims at Human-Human Interaction: defending one's positions, coercive, legal based on interests and needs, dependent on his ("A") needs.



Power and perception is Participant "B" and Participant "C". Participant "C" often influences participants A and B (= human habitat). Human interaction with the environment regardless of their efforts to sustain the environment is often incompatible in controlling this time, space or physical dimensions of Participant C: environmental System (Freshwater systems, seas, oceans, atmosphere, terrestrial ecosystems, and biodiversity) scheme, which make up the triangle of human interaction with the environment. Participants "A" or "B" represent individuals or a group of actors, such as a country (Mason, 2003). Their interaction is influenced by their positions, interests and needs, as well as the economic, political, geographic situation and military strength at their disposal, as well as the perception of each other and the environment. Participants A and B, in addition, are also indirectly linked through the ecological system, on the basis of which the conflict arose. Participant A may consume more water, for example, leaving less for B. Due to the complexity of the human-environment interaction; it is generally easier to share the costs and benefits of using a particular resource rather than the resource itself. The costs and benefits of a hydroelectric

plant, for example, are easier to share than the amount of water in a river. Based on the HDTV model, the following hypotheses can be formulated, the HDTV hypotheses: Environmental conflict resolution is successful when participants focus on interests and needs rather than positions; when the costs and benefits of using the resource are fairly distributed, and not directly the resources themselves; when negotiation and legal and institutional structures are used rather than coercive means; when the difference in power between participants A and B is not too great; when the perception ability of the participants is taken into account, i.e. parties (subjective reality), and when ecological systems (objective reality) are managed taking into account a long-term period of time, in appropriate spatial units and within the constraints of the (relative) potential capacity of ecological systems. There are too many variables to prove or disprove these hypotheses. However, this is not the goal. The purpose of the HDTV hypotheses is to structure the analysis of environmental conflict and present their assumptions based on conflict research and sustainable development principles that are open to controversy. Some features and problems a joint approach to resolving environmental conflicts has are as follows:

- a. Time dimensions: A long term time perspective is needed to be able to solve sustainability problems. Trees take a hundred years to grow, and politicians are elected for four years. The timescale for elected politicians or groups of people struggling to survive does not match the long-term timescale for sustainability.
- b. Spatial dimensions: National boundaries usually do not correspond to the boundaries of the ecological system. Settlement is only effective if the boundaries of the ecological system are taken into account, since the negative side effects of economic and social activities affect the whole ecological system and are not limited by political boundaries.
- c. Inclusion of “undeniable” and “unstable” elements: It is difficult to formulate a general definition of the problem, as scientific data and their interpretation are questionable. Fact-finding and technical analysis should not be separated from mainstream negotiation efforts, or the “volatile elements of conflict, such as the capacity for understanding and the relationship between the parties, since the best technical solutions can only be implemented if people accept and support them.
- d. Participation of stakeholders (interested parties): Numerous participants and delegations are represented in the negotiations. As many legal representatives as possible should be involved.
- e. Complex issues: The contentious issues are not limited to environmental issues, but cover economic, social, cultural and political aspects.
- f. Institutionalization: Decisions obtained in the negotiation process must be institutionalized. The above list of problems is rather daunting. However, according to Escobar (2006), mediation has a higher success rate in resolving resource conflicts (70% chance of success) than other types of mediation, conflicts (disputes over ethnicity: 66.7%; disputes over ideology: 50.4%; disputes over sovereignty: 44.7%; disputes over security: 40.7% chance of success). What does such a settlement effort

look like in practice? Who is acting as a third party? The next section attempts to answer these questions.

Resolving International Environmental Conflicts: An Overview

Some examples of international conflicts over freshwater and their resolution are given in Table 1, conflicts related to fisheries – in Table 2. These are discussed briefly, followed by a more detailed analysis of the Nile Basin using the HDTV model presented above.

Table 1 International Conflicts Over Freshwater

		Parties to the conflict							Conflict Resolution Measures				Success / Failure		
Name (period of the studied conflict)	Countr y	Political Rights Index	GNP per Capital in the United States \$	State position on Convention	Interests of the environm ent				Conflict issues (not related to the environm ent)	Date and measures to resolve the conflict	RIGHT	MPOs	State Party	Negotiation	Very Successful
AFRICA															
Nile Basin(1959 - 1999 - 2002)	Burundi, D.R.	7	160	A	Egypt: Irrigation Sudan: Sudan: Irrigation, Flood Control, Sediment, Reduction, HPP4, Ethiopia: Irrigation, Erosion Minimization , HPP4	Ethiopia, Sudan, Egypt: end of international support due to domestic resistance	Sudan-Egyptian agreement on the Nile (1959), not accepted by other downstream countries				X		X		
	Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, Uganda	6 5 6 4 6 6 7 6 6 (1990)	150 870 180 110 240 140 270 160 190 (1994)	g A b A A b A F A F A b			Nile River Basin Initiative: Nine Countries (1999). Eritrea has expressed a desire to join the IBN (2001). IBN is		X		X		X		

							supported by the International Bank, UNDP, CIDA							
AMERICA														
Minerali zation problem Colorad o River (1960s – 973)	Mexi co USA	5 1 (197 2)	1'480 8'170 (1975)	F F	Mexico: irrigation water that is not very salty USA: discharge of drainage into the Colorado River		A long-term and definitive solution to the International River Mineralization Problem Colorado" (1973)				X	X		

	Parties to the conflict				Interests of the environment	Conflict issues (not related to the environment)	Date and measures to resolve the conflict	Conflict Resolution Measures				Success / Failure		
Name (period of the studied conflict)	Country	Political Rights Index	GNP per Capital in the United States \$	State position on Convention				Right	MPOs Participant	State Party	Negotiation	Very Successful	Partially Effective	Unsuccessfully
ASIA														

Arab Sea (1991-1999) j, k	Afghanistan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Iran	7657761993	-1'3804702707207102'3001997	AbF-AbAbAF	E Kyrgyzstan, Tajikistan: HPP4 and irrigation Uzbekistan, Kazakhstan, Turkmenistan: irrigation. Future challenges: - clean drinking water (groundwater is toxic); - conventional fishing is becoming an important industry.	Oil and Oil Transportation	Agreement on Cooperation in the Management, Use and Protection of Interstate Waters resources (1992)				X			X
							Nukus Declaration (1995) with UN support, Alma-Ata Declaration (1997), Ashgabat Declaration (1999)		X		X		X	
River system Ganges (1955-1982) g	Bangladesh, India (China, Nepal, Butane	421974	200190(1975)	FA	India: reduce siltation in the Hooghly and Kolkata rivers port Bangladesh: Ensure Sufficient Runoff During Dry Season		Interim Agreement (1975)				X			X
							Five-year agreement (1977) on water resources of the Ganges, with the support of the UN		X				X	

Name (period of the studied conflict)	Parties to the conflict				Interests of the environme nt	Conflict issues (not related to the environme nt)	Date and measures to resolve the conflict	Conflict Resolution Measures				Success / Failure		
	Countr y	Political Rights Index	GNP per Capital in the United States \$	State position on Convention				Right	MPOs Participant	State Party	Negotiation	Very Successful	Partially Effective	Unsuccessfully
Indus River (1947- 1970)	India Pakistan (China)	2 3 197 2	110 170 (197 0)	A A	Access to water for irrigation. Pakistan worries about India obstructing water flow		Sovereignty over Kashmir	Agreement (1960) on water resources Indus, with the assistance of the World Bank			X			X
Mekon g river basin (1970s- 2000) c	Cambodi a China Laos Myanmar Thailand Vietnam	7 6 7 7 3 7 (19 85)	200 410 290 - 2'13 0 170 (199 3)	F Ag F Ab F F	Thailand: water resources; wants to buy energy from Laos Laos: HPP4 Cambodia: Fisheries Vietnam: Reduce salt water penetration		Mekong River Commission (1995) (China and Myanmar are not active members)					X		X
EUROPE														
Danub e River, Gabcik ovo Nagim arosa Dam a (1977- 1997)	Czech Republic Hungary Slovakia	1 1 2 (19 85)	3,55 0 3,88 0 2,54 0 (199 4)	F F F	Hungary: HPP4 prevents environmental degradation, shipping Slovakia: cheap HPP4 energy, shipping		London Protocol (1992) between Slovakia and Hungary, mediated by the EU			X				X
							Judgment of	X						X

							the International Court of Justice of the United Nations from 1997								
	Parties to the conflict				Interests of the environm ent	Conflict issues (not related to the environm ent)	Date and measure s to resolve the conflict	Conflict Resolution Measures				Success / Failure			
Name (period of the studied conflict)	Countr y	Political Rights Index	GNP per Capital in the United States \$	State position on Convention				Right	MPOs Participant	State Party	Negotiation	Very Successful	Partially Effective	Unsuccessfully	
EUROPE															
Rhin e Basi n (195 0 - 2002	Austria	1	23'6	F	Everything: shipping, renaturation. Holland, Germany: pollution reduction, flood control. Downstream countries: keeping costs to a minimum.		International Commission for the Protection of the Rhine Against Pollution (1950): - Convention on the Chlorine Content (1976)				X				
	Belgium	1	00	A											
	France	1	22'2	A											
	Germany	1	20	F											
	Holland	1	22'6	F											
	Italy	1	00	F											
	Liechtenst ein	1	24'6	F											
	Luxembou rg	1	70	F											
	Switzerlan d	1	22'4	-											
		199	10												
		2	19'9												
			50												
			-												
			40'4												
			20												
			37'1												
			30												
			199												
			3)												
						Action Program for the Rhine (1987)				X	X				

Middle East

Basi n of the Euph rates - Tigri s river s a (198 0- 1990)	Iran Iraq Syria Turkey	5 7 6 3 (19 85r)	3'52 0 2,40 0 1,67 0 1,32 0 (198 5)	F - F Ag	Syria, Turkey, Iraq: irrigation water Turkey: HPP4	Iraq, Turkey: Kurdish problem Syria, Iraq, Turkey: regional dominanc e	Joint Technical Commission (1982): Iraq, Syria, Turkey				X			X
							Protocol on Matters Relating to Economic Cooperation (1987): Turkey, Syria				X	X		

		Parties to the conflict				Interests of the environment	Conflict issues (not related to the environment)	Date and measures to resolve the conflict	Conflict Resolution Measures				Success / Failure		
Name (period of the studied conflict)		Country	Political Rights Index	GNP per Capital in the United States \$	State position on Convention				Right	MPOs Participant	State Party	Negotiation	Very Successful	Partially Effective	Unsuccessfully
Jordan river (1967 - 1994)	Israel Jordan Lebanon Syria	2556 (1990r.)	11'490 1'120 1'340 980 (1991)	A F A b F	Israel and Jordan: fresh water supply	Jordan: Historical Land Title Israel: self-preservation	Peace Treaty (1994): Jordan and Israel, mediated by the United States			X			X		

Table 2 International conflicts related to fisheries

Name (period of the studied conflict)	Parties to the conflict				Interests of the environme nt	Conflict issues (not related to the environme nt)	Date and measures to resolve the conflict	Conflict Resolution Measures				Success / Failure		
	Countr y	Political Rights Index	GNP per Capital in the United States \$	State position on Convention				Right	MPOs Participant	State Party	Negotiation	Very Successful	Partially Effective	Unsuccessfully
Cold War (1974 1976)	United Kingdo m Iceland	1 1 197 5	15'18 0 23'15 0 (198 9.	A F Ab F	Iceland: expanding the exclusive economic zone, protecting its fish resources and avoiding resource depletion England: ensuring safety of fish	Iceland: Public Opinion Against Military Bases NATO in Iceland	UN Security Council Mediation (1975)				X			X
							Mediation by NATO and Norway (1976)				X	X	X	
Exclusive Economi c Zone (EEZ) between Greenlan d andJan May 1977- 1993)	Denmar k Norway	1 1 198 5	23'4 30 25'4 70 (199 0r.)		Denmark, Norway: expand the EEZ by 200 nautical miles. Distance between Greenland (Danish) and Yang Mei Ying Island (Norwegian) where the fish was found is less than 400	National security	Negotiations led to a total fishing ban in 1982 and 1983.					X		X

					nautical miles.										
							Denmark starts negotiations with the UN ICJ, this resolves the conflict, recognized by both parties (1993)	X				X			
Morocco and Spain: Fisheries Rights a fishing (1995)	Morocco Spain (EU)	21 (1995)	1,120 14,370 (1995)	Morocco: conservation of fish resources Spain (EU): access to fish resources	Morocco: securing an expanding local industry Spain: faced a similar problem in Canada, resulting in serious financial losses		Euro-Mediterranean Conference (1995): Morocco, EU, Mediterranean States		X			X			

Name (period of the studied conflict)	Parties to the conflict				Interests of the environment	Conflict issues (not related to the environment)	Date and measures to resolve the conflict	Conflict Resolution Measures				Success / Failure		
	Country	Political Rights Index	GNP per Capital in the United States \$	State position on Convention				Right	MPOs Participant	State Party	Negotiation	Very Successful	Partially Effective	Unsuccessfully

Pacific Salmon Agreement (1985-1999)	Canada USA	1 1 (1990)	19'80 0 23'56 0 (1990)		Protection of salmon fish, fishing quotas		I Pacific Salmon Agreement (1985)				X		X	
							Multilateral negotiations: II Pacific Salmon Agreement (1999)					X	X	
Trawl fishing in Southeast Asia (1960s-1980s)	Indonesia Malaysia Myanmar Thailand Vietnam	5 3 7 3 7 1975.	810 3'190 - 2'130 170 1993		Protect your own small fishermen in the 3 km coastal area, expand large-scale trawling by invading foreign 3 km coastal area.	Tense ethnic relations between Chinese immigrants and local Malays or Indonesians	Malaysia introduces measures to ban trawling, partial ban (1980s)	X						X
							Indonesia: total ban on trawling in Java and Sumatra waters 1980	X						X
War over Halibut (1995)	Canada Spain	1 1 1995	19'88 0 14'37 0 (1995)		Canada: Protecting Halibut Spain: Opportunity to fish in the Grand Bank		Agreement adopted by the Northwest Atlantic Fisheries Organization		X		X	X		

In order to reduce the “choice bias”, all freshwater conflicts from Volumes II and III of the POSCS case studies of KCO and Barandat 1997, as well as all conflicts related to fisheries from Meider 2001 and Suleiman 1999, and all "other" conflicts from Trolldalen 1992 were included in Tables 1-2. The choice was made according to the criteria that all

cases deal with renewable resources, and are of regional importance between states and include measures for a non-coercive or legal settlement of the conflict. Actions settlement includes legal action (international or domestic) taken by a third party or independently negotiated. Of the 32 settlement efforts listed in Tables 1-2, four cases (12%) sought assistance through domestic or international courts; three of these court appeals were categorized as fishing conflicts and are listed in Table 2. Thirteen of the 32 settlement attempts (41%) involved international or regional organizations. Only in three cases was success achieved through the mediation of a foreign state (the United States in the Jordan dispute, Norway in the "crash war" and Djibouti in the Ogden war). Sixteen of these 32 efforts (50%) were bi- or multilateral negotiations between the stakeholders involved, and eleven of these are categorized as conflicts over freshwater. In three cases, two types of efforts were used simultaneously, the third party involved is the IGO, and the third party involved is the state and / or negotiation. Eight of these 32 efforts were highly successful (25%), sixteen were partially effective (50%), and eight were unsuccessful (25%). Three out of four court appeals were successful or partially effective. Thirteen out of 15 attempts with a third party (87%) and eleven out of sixteen self-conducted negotiations (69%) were very successful or partially effective. Obviously, a different choice of cases would lead to different results, and that decisions about "effectiveness" are influenced by subjective factors. However, the idea here is to create an initial overview ideally, highly effective settlement measures would have a positive impact on three levels: international, domestic and environmental. It turns out that third-party negotiations or legal action in general are more successful than self-negotiated negotiations.

The preponderance of legal regulation in international fishing conflicts compared to international freshwater conflicts suggests that the legal framework is less developed in relation with regard to the freshwater settlement. This is unlikely to change soon. Of the eleven international river basins, only one (the Colorado River) has achieved that all basin countries are in favor of the 1997 convention under the law on the "non-navigational use of international water courses". In other words, the agreement is unlikely to resolve river conflicts because at least one member from most major basins abstained, was absent or voted against it. However, the agreement can help to clarify what points need to be discussed based on the "basin principle", taking into account the specifics of each.

"Freedom House" political rights and the "Gross National Product" per capita index have been included to clarify the importance of the political and economic context. Interestingly, according to these examples, there is not much difference in the effectiveness of settlement efforts in the environment of economically developed and politically "free" countries, compared with those undertaken in less developed countries.

Application Of The Hdtv Model To The Nile Basin

In order to show how environmental conflict and its resolution can be analyzed, the HDTV model will be used to investigate the transition from conflict to cooperation in the Nile Basin. The analysis time frame is between 1959 and 2002, and the area of distribution includes the watershed of the Nile Basin, with particular attention to Egypt and Ethiopia, as

examples of the extreme downstream and upstream countries, respectively. About 86% of the Nile's surface runoff contained in Aswan originates in the Ethiopian Highlands. Egypt, the most extreme downstream country in the Nile Basin, has been dependent on irrigated agriculture for thousands of years, and more than 95% of its water resources come from the Nile River, from rainfall that overflows its territory. Population growth rates in countries along the Nile are approximately 3%. About 85% of the water withdrawals in the Nile Basin are used in the agricultural sector.

This means that the plans for expanding irrigated agriculture in order to improve food security will increase the demand (demand) for water. All of Egypt and northern Sudan are in the arid zone, further south of the Nile Basin, agriculture is dominated by rainfed agriculture. However, precipitation is often uneven. In the HDTV model, Ethiopia perceives the physical flow of water from the Nile freshwater system to the "actor" Egypt as much more than the flow from the system towards it. Egypt on the other hand argues that only the withdrawal of water from the river cannot be monitored, therefore, everyone must also consider the benefits of using rainwater. In this sense, Egypt claims that the physical flow of water (rainwater) from the Nile Basin system to Ethiopia is greater.

What are the interactions between the various actors in the human system in the case of Nile Basin society? There is an agreement for the distribution of Nile water between Sudan and Egypt, starting in 1959. However, other coastal countries do not recognize it. Egypt's position is that he must adhere to this agreement. Ethiopia's position is that the agreement should be renegotiated. Egypt's interests are to have enough water to expand irrigated agriculture and habitable land. Sudan is interested in minimizing sediment coming from Ethiopia in order to expand its irrigated area and maintain and develop its hydroelectricity potential. In the same way, Ethiopia's interests are reduced to minimizing erosion, developing irrigated farming and generating hydroelectricity. These interests are already much less incompatible than positions. Hydropower generation, for example, does not consume water, and thus developments in Ethiopia and Sudan do not harm Egypt's interests. Irrigated agriculture, on the other hand, consumes water that cannot be used further downstream. However, it has been found that there is great potential for improving the efficiency of irrigation systems.

In Egypt, for example, this could save up to 30% of the water used today. There are also plans to build canals through swamps in Ethiopia and Sudan to reduce the amount of water lost in evapotranspiration and increase the total amount of water available. However, the consideration must take into account and reduce the negative side effects of this on the local population and on the environment. This can be done, for example, by including middle management and bottom-level representatives in the settlement and implementation process. (Settlement "cross rate"). Egypt, as a country located in the lower reaches of the Basin, has a geographically weak position, which, however, is partially offset by its economic and political power. On the other hand, Ethiopia is economically weak and politically unstable, but, being the source of 86% of the Nile's flow, it is geographically more significant. Thus, in the end, the difference in power between Egypt and Ethiopia is not too great. 1959 Agreement between Egypt and Sudan, which was adhered to in negotiations

between these countries did not take into account the spatial unity of the river basin, and thus, it can only be considered as partially effective in resolving the conflict. There is unanimous agreement that the basin management approach of the Nile Basin is extremely important. In 1999, the Nile Basin Initiative (INB) was launched, with 9 out of 10 riparian countries active participants in this intermediate forum without any legal obligation. For the first time in history, Ethiopia has become an active member of the wider basin initiative. Eritrea expressed its desire to become an active member at the 2001 IBN meeting. Thus, in the case of INB, the criteria for applying for resource management to its boundaries of the natural system are given.

INB shows that cooperation is possible even when legal differences remain. For example, Egypt, Sudan and Ethiopia have agreed on joint “win-win” projects, in particular for the generation of hydropower. The International Bank, UNDP and the Canadian International Development Agency (CIDA) act as facilitating third party. Unlike the Aral Sea Basin, this political and financial support was coordinated by the IBN from the very beginning, thereby increasing its effectiveness. Frequent meetings between the participants helped to change attitudes and relationships. Visits by water ministers to various countries have also helped change plans for the future by “standing in another man's shoes.” Civil society participation is made possible in part by the annual “Nile Conferences 2002”, where scientists, politicians, journalists, etc. meet at a conference in an informal setting. Some of the criteria for the HDTV hypotheses were contested. Politicians willing to cooperate, however, still have to work hard to achieve legitimate results and tackle problems, including civil society and the environment, in the long term.

CONCLUSION

The lack of international cooperation between states on the sharing of environmental resources usually does not lead to military conflict, but rather leads to a lack of sustainable development. This, in turn, can lead to poverty, migration and serious conflicts at the domestic level. While the political environment and economic conditions do not appear to have much of an impact on the effectiveness of certain settlement efforts, in reality they have a huge impact on the impact of these conflicts in society, because poor and fragile states are less resilient. Both the examples listed in the tables and the example of the Nile Basin Initiative show that International Governmental Organizations play an important role in acting as third-party mediators in international environmental conflicts, and that they are often more effective than countries tried to resolve conflicts on their own. Consequently, regional IGOs need to expand their conflict resolution capabilities. This includes considering, for example, facilitating efficiency gains, demand side management, interest-based negotiation, and focusing on the allocation of costs and benefits from the use of the resource, rather than the actual resource. In doing this, IGOs must provide support to the parties involved, without the right to share in the process or in the aftermath - difficult equilibrium (balance). Precautions are also required during the shift of problems from the international to the national level. This involves a “cross-track” settlement, that is, activities to liaise the government with middle managers and the lowest level. This article focuses on

short- and medium-term factors that may be influenced by a collaborative settlement effort. Force-based interactions still prevail, and long-term structural problems lie at the heart of most environmental conflicts. However, these few examples show that humans can collaborate on scarce natural resources, and - according to Malkon Rifkind take a step closer to peace and a “sustainable” future for all of humanity.

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