



## INTEGRATIVE NEGOTIATION FOR SUSTAINABLE WATER MANAGEMENT

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**ABSTRACT. Integrative Negotiation for Sustainable Water Management.** Sustainable water management relies on efficient negotiation among stakeholders. The importance of the water on all the aspect of the lives and activities of people – private, economic, social etc – and the complexity of the problems related to it require carefully planned negotiated agreements over water. Imposed solutions may determine people not to comply and to make the water resources overused, polluted and degraded. Instead, negotiated decisions among the stakeholders with interests in water issues strengthen the quality of the agreements, of the commitment on complying with them and of the practical implementation. The paper focuses on the relationship between the skills to design, facilitate and participate in multi-stakeholder negotiations, to conduct them according to a win-win strategy and the objective of reaching fair, effective and sustainable solutions and thus improving water management.

**Keywords:** integrative negotiation, sustainable water management, conflict, interests, win-win solutions.

### 1. INTRODUCTION

The watersheds of the world's 261 transboundary rivers cover almost half of the land surface of the Earth (Wolf et al. 1999, apud Wolf, 2000). Clean freshwater is a resource for which there is no substitute, which becomes scarcer every day, while the demand for it increases rapidly, which is protected and managed through a poorly developed international legal frame compared to the needs. Under these circumstances, there is no wonder that the water is one of the most feared and powerful conflict sources in the world, which draws more and more attention and requires increasing efforts to be prevented and settled. Sustainable Water Management is a wise way to diminish and avoid the water conflicts.

Sustainable Water Management means, briefly, to manage the water resources while taking into account the needs of present and future users. Sustainability in water management requires sound knowledge from various fields: geography, biology, engineering and may others. Only the integration of all the necessary competences into a common effort can lead to the sustainable results expected. Such multidisciplinary approach includes negotiation skills, too. While the

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legitimacy of the natural or engineering sciences is never contested, the necessity of the expertise from other fields, like negotiations, is, sometimes, less obvious. Throughout this paper we will try to highlight the necessity and importance of a professional negotiation, with a win-win approach for reaching the results demanded by a sustainable water management.

Negotiation is omnipresent; it is not exclusively related to business, or assigned only to business-men, but it exists in any field of our life: cultural, political, environmental, personal etc. A negotiation is an interactive communication process that may take place whenever we want something from someone else or another person wants something from us; during a negotiation, some interests are shared and some are opposed.

“Negotiations proceed through a form of prudently cooperative communication. And negotiations commonly follow a recognizable four-step path: preparation, information exchange, explicit bargaining, and commitment... (The negotiators) gather in their conference rooms and run through their carefully scripted openings... They discuss the issues, then usually ask for more and offer less than they expect to settle for in the end... From here, people get down to the business of making concessions and establishing commitments. Negotiation is, in short, a kind of universal dance with four stages or steps. And it works best when both parties are experienced dancers.” (Shell, 2005, p. 6-7)

Negotiation is not a battle and is not a competition for scoring points, but it is the most powerful alternative dispute resolution, which enables people with competing interests to engage in dialogue that leads to mutually beneficial outcomes. Negotiation is not just arguing, is not manipulation, but it explores mutual interests. Negotiating does not require aggressiveness, but assertiveness. Negotiation is not a quick fix, but it requires time and effort (Wachtel, D., 2011).

## 2. INTEGRATIVE NEGOCIATION FOR SUSTAINABLE SOLUTIONS

The way a negotiation is conducted depends on the strategy used. There are two main strategies for negotiation: distributive and integrative. The *distributive* one usually takes the form of a *win-lose negotiation*. This is a zero-sum game, where the gain of one part means the loss of the other, where the “fixed pie” mentality dominates the negotiation. The win-lose negotiators determine what they want, raise that 10 or 15 percent, and then engage in a series of compromises to obtain a result. The effort is on the position they take, and getting as much of that position for themselves as possible. Their mission is not to get a satisfactory deal for both parties. It is only to win for themselves. The distributive strategy will not support long-term relationships and does not create sustainable solutions, so, with almost no exception, it will not be suitable for a water negotiation.

A totally different approach has the *integrative negotiation*, which is mostly found under the form of *win-win negotiation*. A win-win strategy supposes that both parts win and the gain of one doesn't translate into a loss for the partner. In other words, the participants try to “expand the pie”, to explore each part's interests and to



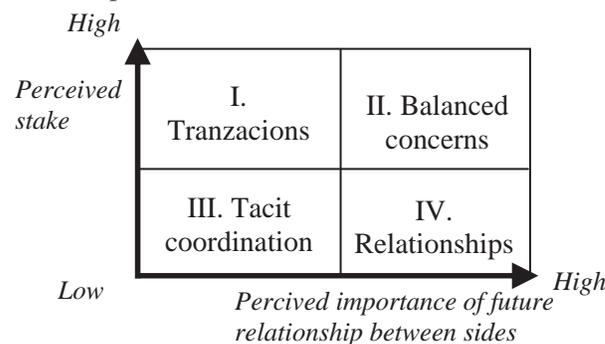
find creative solution to fulfil them. The win-win negotiators are committed to meeting their needs, acknowledge that the other party has needs that must be met too and invest their efforts in finding the best solution for both parties. They believe such innovative solution (and negotiation strategy) will bring more value to them than any other.

### 3. STRUCTURED APPROACH FOR AN EFFECTIVE NEGOTIATION

Like in any other activities, a sound preparation, a clear vision of the process and a deep understanding of the interests in stake are *sine qua non* conditions for an effective negotiation.

Negotiation is not a simple haggling, a mere exchange of demands and concessions, but includes other activities – before, during and after this exchange. We can observe three main stages of the negotiation: pre-negotiation, negotiation itself and post-negotiation, each having various sub-stages.

*Pre-negotiation* is the stage when the negotiators collect as much information as possible about the partner, the context of negotiation etc. Among others (like the best alternative to negotiation, the sources of power etc), there are two elements that must be always assessed in relation with a negotiation: the stake (along with the potential of conflict) and the importance of the future relationship with the negotiation partner (Shell, 2005, p. 172). The stake represents the importance of the subject which will be negotiated (Petrescu, 2007, p.171). When we evaluate these two factors on a scale from low to high and compare them to each other, we obtain four situations, which can be represented on a situational matrix (Fig. 1; Shell, 2005, p. 172-180):



**Fig. 1. Situational matrix**  
*Source: after G. R. Shell, 2005, p. 172*

Negotiations focused on water issues are usually located in the “Balanced concerns” area because both the stake and the relationships are highly important for achieving a sustainable agreement. This is the most complex and challenging situation of all four. The win-win strategy is the only adequate one. Here, we must have a balance between getting favourable prices, terms, imposing bearable obligations for each part etc and maintaining a trusting relationship. This is



important because sustainability is the final goal and, by its nature, this implies cooperation, which, at its turn, is possible only through good relationships. In most cases the water issues are very sensitive, they have a high conflict potential. Good relationships and the concern for maintaining a balanced coverage of all parts' interests represent the prerequisites for neutralizing the conflicts and preventing them from damaging the agreement (either future or already closed).

*The negotiation itself* is the stage when the sides meet to exchange information, to bargain, to put into practice the strategy, the tactics. *Post-negotiation* comprises all the activities following the signing of the agreement and which are related to it: implementing the agreement, complying with the provisions of the agreement, writing press releases, analysing the negotiation process, consolidating the relationship. In water negotiation, the post-negotiation must never be left aside because it is the time when all the efforts made so far come into life. The implementation of the agreements is sometimes more difficult than to be signed because: the timeframe until finalization may be large, the factors that can affect it are numerous – changes in political, administrative, natural, economical, social environment –, the resistance to change of the parts involved can be high, elements that were not foreseen may appear and so on. The press releases are sometimes not only recommended, but compulsory, because the decisions taken during negotiation affect many stakeholders that did not take part to the negotiation process and they must be informed. The consolidation of the relationship among the participants should be of high concern for them because this is the foundation for a good implementation of the agreement reached and for future collaborations.

#### **4. DISTRIBUTIVE VS INTEGRATIVE NEGOTIATIONS. CASE STUDIES – ARAL SEA; WATER OF DRYLANDS**

A distributive negotiation is supported by a competitive style and a zero-sum mentality. It is not an option for water negotiations and it doesn't create viable and beneficial solutions, as it shows the following example about the Aral Sea (source: R. K. Paisley, *The Challenge of International Watercourse Negotiations in the Aral Sea Basin*, apud Dore, Robinson and Smith (Eds), 2010, p. 31).

The shrinking of the Aral Sea has been called “one of the planet's worst environmental disasters” (\*\*\*, 2010, *Daily Telegraph*). The Aral Sea – once the fourth largest inland body of water in the world – has been steadily shrinking and by 2007 was reduced to 10% of its original size and split into four lakes. Since the 1950 the two rivers that feed the Aral Sea – Amu Darya and Syr Darya – have been losing most of their waterflow due to intensive use in agriculture and hydroelectric plants, so less and less fresh water gets into the Aral Sea. The Aral Sea region is now also heavily polluted, creating serious public health problems. The old prosperous fishing industry has been destroyed, bringing unemployment and economic hardship. The whole area is plagued by salinization and is contaminated; the retreat of the sea has also caused local climate change, with summers becoming hotter and drier, and winters colder and longer.



The water demand is increasing, the supply is declining and the nations repeatedly fail to work together. One of the most acute disagreements over resource sharing concerns the “energy-agriculture” trade-off between upstream countries (Kyrgyzstan and Tajikistan) and downstream countries (Kazakhstan, Uzbekistan, and Turkmenistan). The international conflicts related to the transboundary resource sharing are caused mainly by inadequate national policies and practices, that lead to an excessive use of water (Bosnjakovic, 2003, p. 30).

The negotiations on water-related issues in the Aral Sea basin have suffered from the legacies of the Soviet times, such as an inward-looking bureaucratic approach, top-down control, lack of inter-sectoral communication and coordination, no participation of the local government or of non-governmental actors in the decision process, limited knowledge of the modern international water law, general rivalries between the States, and lack of skills and understanding about how to reach win-win solutions. Each country approached the problem as a zero-sum game and attempted to increase its control over water and energy, often to the detriment of the others. The relatively little consultation over most of the projects on building new reservoirs and dams or to expand irrigation intensified suspicions between states. Moreover, the tense climate of Central Asia made the countries imply they are willing to defend their interests by force if necessary (Bosnjakovic, 2003, p.24).

The countries of the region have frequently expressed their good intentions to work together, but they have not yet developed a clear and consistent concept for effective cooperation. The water sector is a striking example of fragmentation, confusion, and duplication of transboundary cooperation. In the course of recent years, several regional institutions have been established in the hopes of solving environmental as well as socio-economic problems in the Aral Sea region. Together with help from other institutions and countries, some success was achieved, but the enforcement is difficult and the progress is slow. The main problem of the misuse of water that led to this disaster is far from being solved. Cooperation of all stakeholders is still needed. Also, an organization charged with the long-term development of the river basins as a cooperative effort should function and deal with issues such as: duties of the basin states with regard to unilaterally planned water utilization, identification of pollution sources, pollution abatement, monitoring water quality, responsibilities of states in case of floods, drought, or emergency situations, environmental impact assessment in the transboundary context, public information and participation, liability regime for damage, dispute settlement mechanism (Bosnjakovic, 2003, p. 17-18).

In the Aral Sea basin, much effort is still needed to overcome old visions and practices and shift from the win-lose approach to a win-win one, that would integrate all interests – of all states and of all sectors (economical, political, social, environmental). Competition for water is constantly increasing, cooperation is hampered by disagreements over who has rights to scarce water and how it should be used, and tensions will continue to rise unless better mechanisms are put in place to manage the problems. The basic requirement for resolving upstream–



downstream water-related conflicts of interest and to redirect toward a wiser water management is the political will and ability to negotiate win-win solutions.

While the win-lose mentality wasn't successful in the Aral Sea case, the win-win strategy is working very well for centuries for Berbers and Bedouin, as described in the following case (source: reproduced after Wolf, 2000).

The Berbers of the High Atlas Mountains and the Bedouin of the Negev Desert have lived in drylands for centuries and more and they had to find a way to share one of their most precious resources – the fresh water. Their negotiation skills refined over time through the need of finding lasting solutions and of getting maximum value from limited and common resources; so, they developed integrative solutions, which allowed them to survive and which are a precious lesson to be learned by many of us for our modern water negotiations. The key points of their win-win agreements are presented hereinafter.

1) Allocate time, not water. Berber water management quantifies water in units of time rather than in units of volume. International water treaties generally tend to allocate a fixed amount (divided equally or by specific volume) to each state. Those that do not designate one state to receive a fluctuation in water supply simply serve the excuse of the hydrologic reality of a fluctuating river. Allocating by time allows for two benefits. The first is that it spreads the risk of the fluctuations of the river as broadly as possible – to the individual user. For example, when one has rights to one hour of irrigation, the irrigator himself plans for greater and lesser supply at the most local level. The alternative method of allocating a set volumetric amount would concentrate risk among those users selected to bear the burden of fluctuation. In a prior appropriation setting, for example, risk would be concentrated among the most-recent irrigators; in an international arrangement, all of the risk would fall to the users of one country. The second benefit of time (over volume) allocations has to do with the potential of water markets. Allocating by the clause to “use or lose” that water that was allocated to you, provides no incentive for a user to conserve. However, if one is able to save a part of that water that was allocated to him and sell it for a greater price than the cost of conservation, it is argued that the “invisible hand” can then guide water to its most efficient use. As religious reasons didn't allow the Bedouin to sell water, selling time was an acceptable option. The shift in allocations from volume to time can be applied to the international settings not by assigning days or weeks, but by looking for other ways to share the risk of fluctuating supplies. As real-time models of watersheds are possible, an allocation based on percentages of real flow rather than firm volumes of hypothetical flow is possible, even in large, international basins. A switch to percentages would not only have the same risk-dispersion effect that a time-based system might have, allowing for management of the river's fluctuations throughout the basin, but it would also allow for markets between users even without storage facilities.

2) Assign priorities for different water uses. Along with designating one state to accept an uncertain supply, an alternative method of allocating a fluctuating supply is to work on the demand side – that is to prioritize the use or user. Often,



the priority was set by giving progressively lower priority to progressively more-recent users, regardless of how the water is put to use. Berbers and Bedouin prioritize demand differently, but each provides a hierarchy of importance. This allows for less important uses to be cut off throughout a valley during low flow regimes, rather than entire down-stream villages; it also protects investments in infrastructure. For instance, for Berbers the order of importance is: drinking water for humans, followed by drinking water for animals, than irrigation water which flows through the canal system, than water to mills and so on. Unfortunately, international water treaties have prioritized use only occasionally, generally focusing instead on allocating fixed amounts. Even in those agreements assigning priorities in use, the water itself as an environment component or other environmental aspects are disregarded and requirements related to them are missing. The problem of equity can be incorporated in the international agreements in a more balanced way by prioritizing uses; thus the risk is distributed more equitably, allowing critical uses among all parties to have high priority in times of fluctuating supply.

3) Protect downstream and minority rights. In the absence of a treaty, upstream riparian states have a hydrological advantage. In the absence of political constraints to the contrary, these upstream states have occasionally abused this advantage. In order to achieve equity in sharing the water, Berbers allow only traditional diversion structures for water which, through their “inefficiency”, allow for flow to continue downstream. Bedouin concepts of equity involves honor and pride, as well as right and wrong, which helps maintaining equity in sharing the water.

4) Incorporate the tools of Alternative Dispute Resolution (ADR). Each group (Bedouins, Berbers) has sophisticated mechanisms of dispute resolution, from which modern international conflict management might benefit. Techniques include recognition of a defined water authority, “shared vision” exercises (during which the participants are asked to share their individual views of what the future might look like both if negotiations are successful and if they fail), “threat” of the best alternative to negotiation.

5) The ceremony of forgiveness. The “sulha” is followed by both Berbers and Bedouin: it is an Islamic practice of a ritual ceremony of forgiveness that can be done after a wrong has been committed. It consists of private, often mediated, negotiation of redress between the affected parties, followed by a public declaration of forgiveness and, usually, a festive meal. Once the ceremony is performed, the dispute may not be discussed, as if it never occurred. The agreement is legally binding on both the individuals and on the community. A modern version of such a practice would be the press releases or a public ceremony that would allow the community affected by a dispute to celebrate its resolution and to be more committed to the implementation of the agreement reached.



## 5. CONCLUSIONS

Water negotiations are highly challenging and win-win approach even more. Negotiation is often seen as time-consuming and frustrating, but it remains the best option to resolve the numerous problems arising out of water disputes in a way that harmonises the interests about human health and welfare, business efficiency, environmental balance. Often seen as a rightful and easier process, the hard-bargaining approach (win-lose) may lead to decisions in the short term, but it usually produces long-term results that all parties find unsatisfactory. On the contrary, win-win negotiation places greater emphasis on collaborating, valuing multiple perspectives, building consensus, integrating interests so as to reach fair, durable and effective water decisions, to strengthen constructive engagement and to obtain the actual compliance with the agreements. Furthermore, the use of the negotiation process itself, practiced with sincerity, skill, diligence and real concern for mutual benefits, motivates people to invest their trust in each other and trust fosters relationships, which are vital for implementing the agreements of negotiations. In water management field, a successful negotiation is one finalized with an agreement that covers all three dimensions of sustainability – economical, social and environmental and has all the chances to be followed up by its implementation.

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